KAUNAS UNIVERSITY OF TECHNOLOGY PANEVĖŽYS INSTITUTE
BANK OF FINLAND
KOCAELI UNIVERSITY
PANEVĖŽYS SCIENCE AND TECHNOLOGY PARK
KURSAN NATIONAL UNIVERSITY
St. CYRIL AND METHODIUS UNIVERSITY
UNIVERSITE DU QUEBEC A MONTREAL

CHANGES IN SOCIAL AND BUSINESS ENVIRONMENT

PROCEEDINGS OF THE 3rd INTERNATIONAL
CONFERENCE

Selected papers

November 4-5, 2009
Kaunas University of Technology,
Panevėžys Institute, Lithuania

TECHNOLOGIJA
KAUNAS • 2009

CONFERENCE IS ORGANIZED BY

Kaunas University of Technology Panevėžys Institute Faculty of Management and Administration (Lithuania); Department of Financial Markets and Statistics, Bank of Finland (Finland); Kocaeli University (Turkey); Kursan National University (South Korea); St. Cyril and Methodius University Business Start-up Centre (Macedonia); Universite du Quebec a Montreal (Canada).

ORGANIZING COMMITTEE

Conference Chairperson
Assoc. Prof. Dr. Asta Valackienė, KTU Panevėžys Institute, Lithuania

Deputy Chairpersons
Assoc. Prof. Dr. Rasa Glinskienė, KTU Panevėžys Institute, Lithuania
Assoc. Prof. Dr. Tuncay Guloglu, Kocaeli university, Turkey
Harry Leinonen, Bank of Finland
Dr. Donatas Bakšys, KTU Panevėžys Institute, Lithuania

Scientific secretary
Assoc. Prof. Dr. Diana Lipinskienė, KTU Panevėžys Institute, Lithuania

SCIENTIFIC COMMITTEE

Chairperson: Dr. B. Stanikūnienė, KTU Panevėžys Institute, Lithuania
Members:
Prof. Dr. B. Ceylan-Ataman, University of Ankara, Turkey
Dr. L. Eul-Teo, Kunsan National University, South Korea
Assoc. Prof. Dr. R. Glinskienė, KTU Panevėžys Institute, Lithuania
Assoc. Prof. Dr. A. Keser, Kocaeli university, Turkey
Assoc. Prof. Dr. A. Lubloy, Corvinus University of Budapest, Hungary
Prof. Dr. R. Polenakovik, Ss. Cyril and Methodius University, Macedonia
Assoc. Prof. Dr. A. Repečkienė, KTU Panevėžys Institute, Lithuania
Prof. Dr. E. Segev, University du Quebec a Montreal, Canada
Prof. Dr. M. Seppä, School of Business and Economics, University of Jyväskylä, Finland
Prof. Dr. I. Tomas Lopes, Polytechnic Institute of Santarem and University of Coimbra, Portugal
Assoc. Prof. Dr. Daiva Žostautienė, KTU Panevėžys Institute, Lithuania

CONFERENCE IS SUPPORTED BY
Lithuanian State Science and Studies Foundation

All papers were reviewed.
The style and language of authors were not corrected. Only minor editorial corrections have been carried out by Publisher.

PREFACE

The transformations in the political, economic, social and cultural spheres of activity place the complicated challenges for the science and research institutions, business and public organizations that strive for the ever growing effectiveness. Therefore, the development of the favourable investment environment has to be based on the advancement of modern technologies and innovative activities, the fostering of lifelong learning concept, the educating the competent employee and knowledge society. These issues call for the attention of both the researchers and scientists and the practitioners.

The dynamic environment of changes opens the possibilities for Lithuanian organizations to enter the international contexts that ensure the wider markets for products and services, the better life quality, the emergence of innovative ideas and the exchanges of human resources. With the aim to maintain their competitiveness, the organizations tend to integrate new management philosophies and concepts, implement the information technologies and telecommunications, search for the best practice and initiate the partnership on the international level.

The goal of the 3rd international scientific conference "Changes in Social and Business Environment" organized by Kaunas University of Technology Institute of Panevėžys Faculty of Management and Administration is to bring closer the science and the world of activity by highlighting the theoretical concepts and the practical insights, by evaluating the global tendencies and the peculiarities existing in the local contexts. It is aimed to explore and develop the idea of life-long learning consequently promoting knowledge sharing between scientists and people involved as well as learning from others' experience gained by carrying out theoretical and practical research in the field of social science. Special consideration is paid to the context of becoming a learning society. The following topics are revealed during the conference: business, economical, marketing and educational problems in the context of changing environment; identification and interpretation of social phenomena; learning organization and learning society; human resources management under the conditions of changes; innovations and their implementation. The topics of the international scientific conference were presented in six conference sessions: education and educational management; finances, economics and marketing; knowledge management and inovations; human resource management, business and labour market issues; social phenomena; management and public administration.

The conference proceedings embrace the research findings of different countries' scholars and practitioners on the contemporary business, economics, marketing, education and social life issues. Scholars from Estonia, Finland, France, Lithuania, Latvia, Slovakia, Sweden, Turkey and the United States of America presented their findings in the conference.

Kaunas University of Technology Panevėžys Institute as an organizer of this international conference has two fold purpose: first, to present Panevėžys City as the potential business and science attractive city in Aukštaitija Region; and second, to gain new research and practical knowledge, to get information on new tendencies and strategies in the international business and social environments, to make contacts with the international science institutions.

Contents

SOCIODEMOGRAPHIC FACTORS THAT IMPACT COGNITIVE ABILITY OF YOUNG PEOPLE

Dalia Antinienė, Rosita Lekavičienė
Kaunas University of Technology, Lithuania

Abstract

The article presents the research of Lithuanian school and university students' cognitive ability. The cognitive ability of research participants was assessed using an original research methodology that consists of five structural parts: attentiveness, logical thinking, numerical thinking, two-dimensional spatial thinking, and arithmetical calculation assignments. Criterion and construct validity as well as reliability of the presented methodology are sufficient. The relation of the said cognitive abilities to some social and demographical characteristics of subjects such as gender, domicile, socioeconomic status of the family, education level and the like have been revealed. Nearly on all scales young men performed better than young women, residents of major cities performed better than those that came from small towns and villages, young people from two-parent families performed better than those from single-parent families, children from afluent families performed better than those from needy families.

Keywords
Cognitive ability, social and demographic factors.

Introduction

Recently, adequate selection of students and emploees has become topical. Usually, selection to the establishment of higher education is done based on secondary school graduation results. However, students of certain universities and academies (e.g., Art, Sports, Military, etc.) must possess some specific abilities. Analogical situation is observed in labour market: traditionally, eployees are selected from candidates based on submitted documents: diploma that certifies an appropriate level of education, additional course attendance certificates, available experience, etc. However, there are spheres of professional activity that require selection of the best from a big number of candidates of the highest caliber, as the very future activity of the said candidates requires comprehensive high intellectual ability: abstract thinking, mathematical and spatial ability, fast response, good concentration, etc. Therefore, in such cases it is expedient to apply an additional selection instrument that enables to grope the said peculiarities and range candidates based on the level of expression of cognitive ability. Methodologies used for this purpose – Raven Progressive Matrix Test, Amthauer Test and other – because of relatively easy access to every interested party may not always be used for exceptionally important selection.

The purpose of the present applied research that was commisioned by one of Lituhuanian state institutions was to prepare methodology that measures some cognitive abilities and test it using test theory and psychometric statistics. Afterwards, using present original methodology a large scale study was conducted in various level educational institutions: instrument standardazation was performed and cognitive ability correlation with social and demographic characteristics of subjects was sought.

Purposes of the present paper – first, briefly present cognitive ability assessment methodology, its validity, reliability and other parameters; second, show how cognitive ability of students (dependent variable): attentiveness, logical, numerical, spatial thinking, quality of arithmetical calculations correlates with some factors (independent variables): education level, academic achievement, gender, domicile, family income, etc.

Theory

Cognitive ability, general mental ability, and intelligence are fairly close concepts that in science sometimes are treated as synonyms. However, in a wider context, cognitive ability construct is not identical to the ones mentioned here. Cognitive ability may be defined as ability tu use certain ability functions: attention, logical, spatial thinking, etc. Cognitive ability is considered to be high when a person is capable to use the mentioned components of intelligence system and successfully solve problems. However, cognitive ability is not just ability to successfully solve mental tasks, but also to solve the said tasks fast. Therefore, the second vector of cognitive ability is the "rate of psychological processes". H. J. Eysenck (1987), P. C. Kyllonen (1993), A. C. Neubauer (1997), A. Fink (2005), and many other scientists are actively trying to prove that intellectual operation speed and general intelligence are smoothly related.

Two traditions – holistic and structural – may be clearly distinguished in the general mental ability concept. Nearly one hundred and fifty years ago, i.e. in 1869, F. Galton analyzing individual personality characteristics observed that cognitive abilities of people may be common, but, on the other hand, the said abilities consist of separate components. Therefore, F. Galton (1892), C. Spearman (1923), A. Jensen (1998) and other scientists emphasize the importance of the generalized factor g. Others, e.g., R. B. Cattell (1971), J. P. Guilford (1967), H. Gardner (1983) and R. J. Sternberg (1985), emphasize the variety of specific mental abilities. The said two approaches in science are still being debated: first, it has been established that various cognitive ability task performance results correlate positively (Carroll, 2003); second, general ability often comprises more specific abilities: verbal, spatial, mathematical (Snow, Kyllonen, Marshalek, 1984); third, even though intellectual abilities correlate, each type of intelligence

still is autonomous, therefore, a single measure, such as g factor, is not sufficient to describe abilities of a person (Gardner, 1983). Recently, independent of affiliation to structural or holistic approach, a common conclusion was made that mental ability is related to a wide spectrum of life events and circumstances that have an impact on the said ability: educational and professional achievement, level of education, socioeconomic status, mental health, etc. (Hernstein, Murray, 1994; Gottfredson, 2004).

For many the concept of *cognitive ability* is associated with ability to learn (Cianciolo, Sternberg, 2004) . Therefore, this link is being widely studied (Kuncel, Hezlett, Ones, 2004; Spinath, Spinath, Harlaar, Plomin, 2006). It has been established that general intelligence and educational achievement correlation usually varies around 0.50 (Gustafson, 1996). However, studies are available, in which correlation has been observed as high as 0.80 (Deary, Strand, Smith, Fernandes, 2007). High correlation between educational achievement and menatl ability is often viewed as one of the most significant validity arguments of the research instrument.

In 1994 R. J. Herrnstein and C. Murray in their book The Bell Curve raised the issue of relation between a person's ability and socioeconomic status. Research that aims to determine correlation between cognitive ability and socioeconomic status of a person: level of education, prestige of position, amount of income, etc. does not produce unambiguous results (Gottfredson, 2004; Schmidt, Hunter, 2004). Some scientists maintain that relation between individual's intelligence and economical success is "far greater than established by psychological studies" (Schmidt, Hunter, 2004), however, other scientists maintain that cognitive ability "is not an important factor that determines economical success of an individual" (Bowles, Gintis, 2002). Attention is paid to the fact that general intellectual ability of a person is also related to the economical-financial "foundation" provided by parents" (Bowles, Nelson, 1974). Therefore, cognitive ability is related to not just to the economical success of an individual, but with to economical status of the entire family as well.

General and specific intellectual ability gender differences are also widely analyzed in the scientific literature, however, sometimes they are obviously overestimated (Jacklin, Maccoby, 1974). It has been proven that differences between general intellectual ability of men and women are not great, however, some specific mental abilities differ significantly (Johnson, Bouchard, 2007). Of all cognitive abilities the greatest differences are observed in spatial ability (Halpern, 1997; Kaufmasn, 2007).

The problem of factors that determine general mental ability is important in social sciences. If these factors were known it would be possible to create conditions stimulating the said ability and thus increase intelligence of students.

Cognitive ability is being thoroughly researched. The begining of this research may be related to A. Binet. At present various tests are used for cognitive ability assessment, e. g., CAT1; CAT2; CAT3; etc. In foreign countries – western Europe, U. S. A. – the said tests are used both for student profiling and for professional selection. In Lithuania cognitive ability and intelligence

tests for a long while were mostly used for diagnostics, in other words, for diagnozing of mental disability. Therefore, practical interest for development of such methodologies emerged fairly recently.

Results and analysis

Subjects. Survey of subjects was conducted in academic year of 2006-2007. 226 respondents were surveyed. The target group consists of university (N=88), college (N=59) and higher education school (N=20) students, secondary school (N=39) and gymnasium (N=20) students. Respondents were surveyd selecting groups qualitatively. Various factors were considered when selecting slots, e. g., the aim was to survey students of greater science field variety, various study levels, studying at universities of varying prestige, young people studying at colleges and higher education schools, etc.

Subjects selected for research are characterized by various socioeconomic attributes. The average age of subjects – 19,8 years, standard deviation – SD=3,71 years. 119 women and 107 men were surveyed. Most of subjects are secondary school and university students from major Lithuanian cities (Vilnius, Kaunas, Klaipeda, Shiauliai, and Panevezhis) – N=130. About one quarter of subjects is from small towns and villages – N=56.

Summarizing survey sample characteristics it may be maintained that by variety of slots, sample size, and socioeconomic characteristic match to the statistical parameters of population the sample may be considered as relatively representative and conforming to survey requirements.

Method of the survey. As has been mentioned, the survey was conducted at educational institutions of different levels. It was conducted in groups of 10 subjects. Each subject had to dedicate for the survey about two and a half hours. The subjects were given: a) original cognitive ability assessment methodology (test); b) questionnaire designed for groping of biographical and demographical parameters of respondents; c) Raven Progressive Matrix Test; d) Verbal Sophistication Test (author G. Merkys). 475 variables comprise a matrix line of one subject, thus altogether 107,350 variables were input into the matrix.

Cognitive Ability Assessment Test prepared by a group of scientists (R. Lekavičienė, D. Antinienė, consultant G. Merkys) should not be regarded as intelligence test – these are separate groups of tasks aimed at some cognitive ability (thinking, attention, etc.) assessment. The methodology consists of five structural parts: attentiveness, logical thinking, numerical thinking, two-dimensional spatial thinking, and arithmetical calculation tasks. Also, the answer sheet form, overall survey methodology instruction, and separate task instructions have been developed.

Structural parts of cognitive ability test stimulus material.

Attentiveness tasks. Sixty tasks have been developed, that need to be solved in five minutes. When time allocated for solutions runs out solutions are stopped. Task sample is shown in Fig. 1. The subject has to memorize a certain combination of symbols and out of four poossible solutions select one that corresponds to the previously memorized combination and check it in the answer sheet.

	A. 1?68/8?6
1?86/8?6	**B.** 1?868/?6
	C. 1?86/8?6
	D. 18?6/8?6

Figure 1. Sample of Attentiveness Assessment Task

Logical thinking tasks. Thirty colour graphical assignements have been developed, for solution of which ten minutes are alotted. Three shapes turned in a certain logical sequence are presented in each assignment (see Fig. 2).
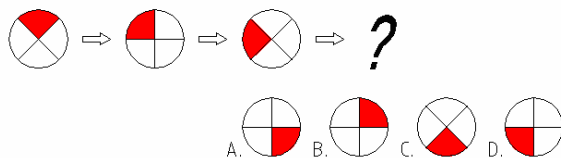
Figure 2. Logical Thinking Task Sample

The task of the subject is to correctly check in the answer sheet logically appropriate shape selecting out of four choices: A, B, C or D.

Numerical thinking tasks. Thirty assignments have been developed, for solution of which seventeen minutes are alotted. Three numeric diagrams that are related to a certain arithmetical calculation logical sequence are presented in each assignment (see Fig. 3). The task of the subject is to select and correctly check in the answer sheet the fourth diagram, which would be generated following the same calculation sequence.

Figure 3. Numerical Thinking Task Sample

Two-dimensional spatial thinking tasks. Twenty colour assignments are presented, for solution of which five minutes are alotted. Task sample is shown in Fig. 4. The subject out of four given choices has to select the one, which, attached to the cut piece of a flat shape would create the whole figure. In other words, a fragment of the figure that matches the pattern and the form must be found.
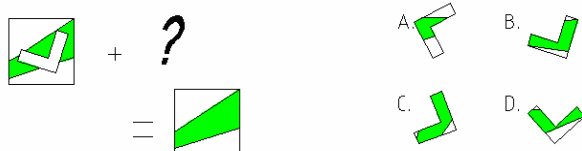
Figure 4. Two-dimensional Spatial Thinking Task Sample

Arithmetical calculation tasks. Sixty assignments are developed, for solution of which eight minutes are alotted. The subject must perform by heart relatively simple arithmetical operations, select one answer out of four choices and check it in the answer sheet. Task sample is shown in Fig. 5.

	A. 18
0,3 x 6	**B. 0,18**
	C. 1,8
	D. 18,18

Figure 5. Sample of Arithmetical Calculation Task

After performing the presented tasks of five types subjects have once again to perform the mentioned (first) attentiveness task, for which now less time is alloted – four minutes. Thus this methodology consists of total six assignment groups.

Subjects of the cognitive ability assessment methodology are presented with the questionnaire that allows determining various sociodemographic characteristics of subjects: gender, age, etc. Independent variables of the survey are shown in Fig. 6.

Figure 6. Sociodemographic Variables

While investigatigating cognitive ability it is certainly important to know the individual's domicile and the school that he or she has graduated from, as these are important factors of socialization that may have, thinking hypothetically, an impact on the development of the said ability. Another important characteristic of subjects is their socioeconomic status. Knowing economic status of an individual and his or her family, relation of the said dimension to cognitive ability may be searched for. In the present survey, socioeconomic status is determined by average monthly income of the family. It may be assumed that cognitive ability of young people should be related to their social origin. Therefore, it is important to find out what is the occupation, education, and type of

activity of parents of the subjects. Also, it is certainly important to know objective academic achievement of the subjects and subjective assessment of the said achievement and determine the relation to certain cognitive abilities.

Cognitive ability test (methodology). As original research methodology was used, it was necessary, after having developed it, to check test validity and reliability. To check validity regressive analysis model has been used. Test validity was checked comparing it with Raven Progressive Matrix and Verbal Sophistication test results (averages). In the first case, the dependent variables were Raven test results (averages). After result analysis against individual scales of the methodology statistically significant correlation with Raven test was observed on three scales of the methodology that theoretically should be most related to the said test: logical thinking scale (p = 0,002); numerical thinking scale (p = 0,017), and two-dimensional spatial thinking (2D) scale (p = 0,008). Raven test score averages are not statistically significantly related to attentiveness and arithmetical calculation scales (p>0,05). Methodology validity was verified by comparing it to the Verbal Sophistication Test results (averages). After result analysis against individual scales statistically significant correlation with the Verbal Sophistication Test was observed on one methodology scale, which should theoretically be related to the said test – logical thinking scale (p = 0,001). Verbal Sophistication Test score averages are not statistically significantly related to all other scales of the methodology (p>0,05). In summary, validity of the developed cognitive ability assessment methodology may be regarded as sufficient.

When developing cognitive ability test, to check its reliability, inernal consistency (Cronbach α coefficient) of scales was assessed. It has been determined that Cronbach α coefficients of all scales are sufficiently high (vary from 0.63 to 0.94), therefore, are acceptable with regards to the test theory. Reliability was also checked assessing Spearman and Brown coefficient. All obtained coefficients were greater than 0.5, therefore, it may be maintained that reliability of the methodology is sufficient.

Solution of methodology tasks. After calculation of cognitive ability assessment methodology scale descriptive statistics, specifically, task solutions, it emerged that both scales and assignments within an individual scale are of different complexity and are solved very unequally. There was not a single task in the methodology that would have been solved 100%. The highest solution score was 99% (observed in attentiveness (1) and arithmetical calculation scales). The lowest solution percentage was observed in two-dimensional spatial thinking scale: 15%. The lowest maximal solution percentage – 94% – was also observed in the said scale. In summary, it may be maintained that minimal solution percentage of assignments on all six scales of the methodology is 15–30%, whereas maximal solution percentage on individual scales varies from 94% to 99%.

Calculations of solution averages on each scale showed that attentiveness tasks were performed best: on attentivenes scale (1) general percentage of solutions was 81.7%, whereas on attentiveness scale (2) the said

percentage was 78.7%. Somewhat poorer results were obtained on arithmetical calculation (77.0%), logical thinking (62.7%), and spatial thinking (60.3%) scales. The lowest percentage of task solutions was observed in numerical thinking scale was it was only 50.8%.

The performed dispersion analysis (ANOVA) allowed comparing scale averages of the investigated slots. Selecting the level of significance α = 0.01 all p = 0.000. Consequently, zero hypothesis about average equality is rejected (i. e. not all averages are equal) as all p < α. In other words, ability average scores in different slots on all scales are different, i. e. the methodology well differentiates subjects of different levels.

Relation of methodology data to the major social demographic characteristics. Data of the students that participated in the survey show that performance on cognitive ability test is related to the type of school that students have graduated from, the year of study, and the form of studies: day or distant learning, financed or paid studies. As it could have been expected, mtehodology performance results were better of those students who graduated from gymnasia, were studying at day department and whose studies were financed by the state.

After applying Mann and Whitney criterion (U) and comparing test solution percentage of all subjects (both university and high school students) according to gender, it emerged that young men on cognitive ability test performed better than young women (p≤0,05). Only on attentiveness scale no gender differences were observed. However, on logical, numerical, spatial thinking, and arithmetical calculation scales young men performed better (p≤ 0,001).

After having divided subjects into three age groups (16–18, 19–21, and 22–35) and applied Kruskal and Wallis criterion, it has been established that the middle age group performed best on all scales: attentiveness scale – p≤0,05, on other scales – p≤0,001. As N. Brody (1985) has observed, high school seniors perform well on cognitive ability tasks, but university students perform far better. The middle age group members of subjects consisted mostly of day department university students, distant learning university students comprised the most senior age group. The performance of the latter was the poorest.

When analyzing test solution percentage by the domicile of the subjects, it was established that best performance on cognitive ability test (on all sclaes), as it could have hypothetically been expected, was of subjects from the major cities of the nation, the worst – those of rural origin (p≤0,01). The obtained data just confirm general mental ability differences between city and rural residents observed in 1966 by J. S. Coleman and colleagues (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, York, 1966).

Applying Kruskal and Wollis criterion, it was established that higher solution percentage of the methodology was of those subjects from two-parent families and the lowest of those subjects that were raised in orphanages, by relatives, etc. (p≤0,01). It was established that best performance on all scales was of subjects whose father (p≤0,01) and mother (p≤0,001) also have university

education. The worst performance was of those university and high school students whose parents have only secondary school education or even has not acquired such education. The said results confirm the concept of R. B. Zajonc and G. Markus (it is known as "intellectual climate of the family" (Zajonc, Markus, 1975)), which emphasizes the idea that parents of higher intelligence create for their children intelligence stimulating conditions, in other words, home environment supports development of general and specific mental abilities of children.

Solution percentage of cognitive ability methodology (overall on all scales) with respect to family income was the highest of those subjects whose family income was the greatest, i. e. exceeded 4,000 litas per month. The poorest prformance was in the group of the lowest family income, i. e. up to 1,500 litas per month (p $\leq$ 0,05). The obtained results fully confirm the standpoint of scientists (Strenze, 2007; Schmidt, Hunter, 2004) that there exists relation between cognitive ability and socioeconomic status of the individual.

Comparison of high and low education group results. As the obtained data have shown that slot results differ distinctly, two large groups of subjects were created based on educational achievement. The following slots of subjects were assigned to the first, high education, group: universities, in which students have selected sciences and one of prestigious areas of studies, academy that trains statutory officers, and gymnasium. The following slots of subjects were assigned to the second, low education, group: secondary school, college, and school of higher education. Comparative descriptive statistics is presented in Table 1.

Table 1

Comparative Descriptive Statistics of Low and High Education Groups

Scale	Average and Mode	Low Education	High Education
Attentiveness scale average	average	0,76	0,88
	mode	0,90	0,93
Logical thinking scale average	average	0,51	0,76
	mode	0,53	0,73
Numerical thinking scale average	average	0,42	0,61
	mode	0,30	0,60
Spatial thinking scale average	average	0,52	0,70
	mode	0,55	0,65
Arithmetical calculation scale average	average	0,67	0,87
	mode	0,68	0,97
Attentiveness scale average	average	0,72	0,86
	mode	0,85	0,90

When results are transferred to the Z scale, differences between low and high education groups become even more obvious (see Fig. 7).
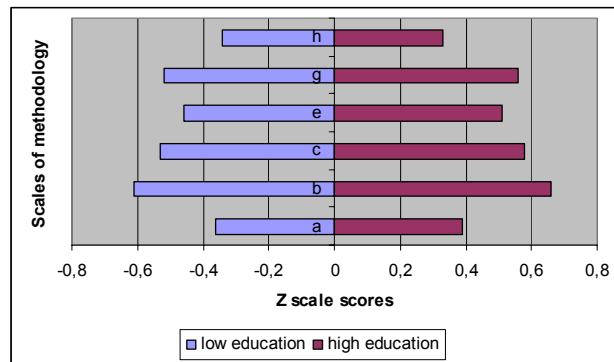
Figure 7. Comparison of low and high education group results on Z scale: h- attentiveness (2); g - arithmetical calculations; e - spatial (2D) thinking; c - numerical thinking; b - logical thinking; a - attentiveness (1).

Correlation of methodology data with subjective assessment of their own knowledge by subjects. Subjective assessment of their own knowledge by subjects was performed. The subjects in a questionnaire had to assess in points their knowledge of Lithuanian, foreign language, history, biology, mathematics, informatics, physics, and chemistry in five-grade scale from "excellent" to "poor".

The existance of statistically significantly correlating variables was checked using Kaiser, Meyer, and Olkin measure (KMO). The said measure was 0.67. As KMO measure is not high, factor analysis method is viewed as satisfactory in this case. After orthogonal turning, VARIMAX, three factors were obtained: the first one combines sciences, the second – languages, and the third – other sciences related to information memorization and narration, i. e. history and biology (see Table 2).

Table 2

Components of the Turned Matrix

Initial variables	Components		
	Sciences	Languages	Other Sciences
Knowledge of mathematics	0,92		
Knowledge of sciences	0,89		
Knowledge of physics	0,86		
Knowledge of chemistry	0,64		
Knowledge of informatics	0,56		
Knowledge of foreign languages		0,84	
Knowledge of humanities		0,80	
Knowledge of Lithuanian		0,75	
Knowledge of history			0,75
Knowledge of biology			0,68

Three components explain 67.8% of the overall dispersion (the first one – 32.0% of the overall dispersion, the second – 20.7% of the overall dispersion, the third – 15.1% of the overall dispersion).

Also, factor internal compatibility (internal consistency), which is described by degree of intercorrelation link expression was calculated determining the Cronbach α coefficient. It has been established that sciences Cronbach α is 0.85, language – 0.74. Cronbach α

coefficient of the third factor has not been calculated as the said factor contains two variables.

After having applied regressive anglysis model, overall cognitive ability (all test scales) result relation to subjective assessment of knowlege of sciences was established. Set correlation coefficient of the model was established as r = 0.51, determination coefficient $r^2 =$ 0.03, reliability of regression model p = 0.001.

Methodology data relation to objective assessment of knowledge of the subjects. In the research data not only on subjective assessment of knowledge, but also on objective knowledge, i. e. on the latest results (averages) of high school/university semester, exam session were collected. Pearson correlation of the said results and research data on individual methodology scales have been calculated (see Table 3).

Table 3

Correlation Matrix of High School/University Semester, Exam Session Result Averages (N=226)

Scales	High school/university semester, exam session result average
Attentiveness (scale average)	0.29 p = 0.00
Logical thinking (scale average)	0.21 p = 0.00
Numerical thinking (scale average)	0.27 p = 0.00
Spatial thinking (scale average)	0.16 p = 0.02
Arithmetical calculation (scale average)	0.38 p = 0.00
Attentiveness (scale average)	0.33 p = 0.00

Table 3 shows that the strongest statistically significant relation is between arithmetical calculation scores and high school/university semester , exam session result averages.

In summary, it may be maintained that some information on university and high school student cognitive ability and factors that impact the said ability that can be theoretically meaningfully interpreted has been obtained; this original methodology of cognitive ability assessment that was presented in the article can help solve the problem (regarding to the lack of psychological assessment methodologies) raised in the introduction of the article because it is a special selection instrument that enables to grope the differences among subjects and to range the candidates according to the level of expression of cognitive ability.

Conclusions

1. Original cognitive ability methodology application to analize attentiveness, logical, numerical, and two-dimensional thinking as well as quality of arithmetical calculation has been justified. It has been established that methodology validity is sufficient. Reliability tested with Spearman and Brown coefficient is also sufficient. Internal consistency of the methodology is good. The methodology well differentiates subjects of different levels.

2. Some social and demographic variables have an inpact on cognitive ability test results: gender, age, domicile of subjects, education of their parents, socioeconomic status of the family, and other. Nearly on all scales young men performed better than young women, residents of major cities performed better than those that came from smals towns and villages, young people from two-parent families performed better than those from single-parent families, children from afluent families performed better than those from needy families. Methodology performance was better of those university students who after graduating from gymnasia chose day time studies and whose studies are financed by the state.

3. Rather big cognitive ability differences between subject groups of low and high education have emerged. Cleraly better results on all cognitive ability scales were observed in the group of subjects of high education level.

4. Subjective assessment of their own knowledge by subjects has demonstrated relation of all cognitive ability scales (attentiveness, logical, numerical, and spatial thinking, and arithmetical calculation) to the subjective assessment of knowledge of sciences.

5. Objective knowledge of subjects, i. e. high school/university semester, exam session result averages are statistically significantly related to all cognitive ability scales, but most strongly with arithmetical calculation scale.

References

1. Bowles S, Gintis H. The inheritance of inequality // Journal of Economic Perspectives. – Vol. 16, 2002, p. 3-30.
2. Bowles S, Nelson V. I. The „inheritance of IQ" and the intergenerational reproduction of economic inequality // Review of Economics and statistics. – Vol. 54, 1974, p. 39-51.
3. Brody N. The validity of tests of intelligence // Handbook of Intelligence (p. 353-389) / ed. B. B. Wolman. - Wiley, New York, 1985.
4. Carroll J. B. The higher-stratum structure of cognitive abilities: Current evidence supports g and about 10 broad factors // The scientific study of general intelligence: tribute to Arthur R. Jensen (p. 5-21) / ed. H. Nyborg.- Pergamon, Amsterdam, 2003.
5. Cattell R. B. Abilities: Their structure, growth, and action. - Houghton-Mifflin, Boston, 1971.
6. Cianciolo A. T., Sternberg R. J. Intelligence: A brief history. - Blackwell Publishing, Oxford, UK, 2004.
7. Coleman J. S., Campbell E. Q., Hobson C. J., McPartland, Mood J., Weinfeld F. D., York R. L. Equality of educational opportunity. - Government Printing Office, Washington, DC, 1966.
8. Deary I. J., Strand S., Smith P., Fernandes C. Intelligence and educational achievement // Intelligence. - Vol. 35 (1), 2007, p. 13-21.
9. Eysenck H. J. Speed of information processing, reaction time, and the theory of intelligence // Speed of information-processing and intelligence (p. 21-67) / ed. P. A. Vernon. - Ablex, Norwood, NJ, 1987.
10. Fink A., Neubauer A. C. Individual differences in time estimation related to cognitive ability, speed of information processing and working memory // Intelligence. - Vol. 33 (1), 2005, p. 5-26.
11. Galton F. Hereditary genius. – Macmillan, London, 1892.
12. Gardner H. Frames of mind: The theory of multiple intelligences. - Basic Books, New York, 1983.

13. Gottfredson L. S. G, jobs and life / The scientific study of general intelligence: tribute to Arthur R. Jensen (p. 293-342)/ ed. H. Nyborg. - Pergamon, Amsterdam, 2003.
14. Gottfredson L. S. Intelligence: Is it the epidemiologists' elusive „fundamental cause" of social class inequalities in health? // Journal of Personality and Social Psychology. – Vol. 86, 2004, p. 174-199.
15. Guilford J. P. The nature of human intelligence, McGraw-Hill, New York, 1967.
16. Gustafson J. E., Undheim J. O. Individual differences in cognitive functions // Handbook of educational psychology (p. 186-242) / eds. D. C. Berliner; R. C. Calfee. – Simon & Schuster Macmillan, New York, 1996.
17. Halpern D. F. Sex differences in intelligence: Implications for education // American Psychologist. – Vol. 52, 1997, p. 1091-1102.
18. Herrnstein R. J., Murray C. The bell curve. - Free Press, New York, 1994.
19. Jacklin C. N., Maccoby E. E. The psychology of sex differences. - Stanford University Press, Stanford, CA, 1974.
20. Jensen A. The g factor. - Praeger, Westport, CN, 1998.
21. Johnson W., Bouchard T. J. Sex differences in mental ability: A proposed means to link them to brain structure and function // Intelligence. – Vol. 35 (3), 2007, p. 197-209.
22. Kaufman S. B. Sex differences in mental rotation and spatial visualization ability // Intelligence. – Vol. 35 (3), 2007, p. 211-223.
23. Kuncel N. R., Hezlett S. A., Ones D. S. Academic performance, career potential, creativity, and job performance: Can one construct predict them all? // Journal of Personality and Social Psychology. – Vol. 86, 2004, p. 148-161.
24. Kyllonen P. C. Aptitude testing inspired by information processing: A test of the four-sources model // The Journal of General Psychology. – Vol. 120, 1993, p. 375-405.
25. Neubauer A. C. The mental speed approach to the assessment of intelligence (p. 149-174) // Advances in cognition and education practice: Reflections on the concept of intelligence / eds. J. Kingma W. Tomic. - JAI Press, Greenwich, Connecticut, 1997.
26. Schmidt F. L., Hunter J. general mental ability in the world of work: Occupational attainment and job performance // Journal of Personality and Social Psychology. – Vol. 86, 2004, p. 162-173.
27. Snow R. E., Kyllonen P. C., Marshalek B. The topography of ability and learning correlations (p. 47-103) // Advances in the Psychology of Human Intelligence / ed. R. J. Strernberg. - Erlbaum, Hillsdale, NJ, 1984.
28. Spearman C. The nature of intelligence and the principles of cognition, Macmillan, London, 1923.
29. Spinath B., Spinath F., Harlaar N., Plomin R. Predicting achievement from general cognitive ability, self-perceived ability, and intrinsic value // Intelligence. – Vol. 34 (4), 2006, p. 363-374.
30. Sternberg R. J. Beyond IQ: A triarchic theory of human intelligence, Cambridge University Press, Cambridge, England, 1985.
31. Strenze T. Intelligence and socioeconomic success: A meta-analytic rewiew of longitudinal research // Intelligence. – Vol. 35 (5), 2007, p. 401-426.
32. Zajonc R. B., Markus G. Birth order and intellectual development // Psychological Rewiev. – Vol. 82, 1975, p. 74-88.

Dalia Antinienė, Rosita Lekavičienė

Sociodemokrafiniai faktoriai įtakojantys jaunų žmonių pažintinį gebėjimą

Santrauka

Šiuo straipsniu – pristatomas, Lietuvos universitetų ir aukštųjų mokyklų studentų pažintinio gebėjimo, mokslinis tyrimas. Pažintinis gebėjimas buvo įvertintas naudojant pirminius tyrimo metodus, kurie susideda iš penkių struktūrinių dalių: dėmesingumo, loginio mąstymo, skaitmeninio mąstymo, dviejų dimensijų erdvinio mąstymo ir aritmetinio skaičiavimo užduočių. Konstrukcijos ir kriterijų pagrįstumas yra toks pat pakankamas kaip patikimos metodologijos. Paminėtų pažintinių gebėjimų ryšys su subjektų socialinėmis ir demografinėmis charakteristikomis tokiomis kaip: lytis, nuolatinė gyvenamoji vieta, šeimos socialinis ekonominis statusas, išsilavinimo lygis ir t.t. atsleisti šiame straipsnyje. Daugelyje pakopų jauni vyrai pasirodė geriau nei jaunos moterys; gyventojai, pagrindinių mūsų šalies miestų, pasirodė geriau nei iš mažų miestelių ir kaimų; jauni žmonės iš pilnų šeimų, kur yra du tėvai, pasirodė geriau nei iš šeimų, kuriose vienas tėvas; vaikai iš turtingų šeimų pasirodė geriau nei iš vargingų šeimų. Metodologiją atliko geriau tie studentai, kurie baigė gimnazijas ir dienines studijas bei kurie buvo finansuojami valstybės.

About the authors

Dalia Antinienė – PhD in Social Sciences (Sociology), associate professor of the Department of Psychology at the Faculty of Social Sciences of Kaunas University of Technology. Research interests**:** the issues of national identity, social networks, problems of socialization of disabled people. E-mail: dalia.antiniene@ktu.lt
Rosita Lekavičienė – PhD in Social Sciences (Psychology), Head od the Department of Psychology at the Faculty of Social Sciences of Kaunas University of Technology, associate professor. Research interests: social personality and organizational psychology; issues of social intelligence, problems of social competency. E-mail: rosita.lekaviciene@ktu.lt

FIRM PERFORMANCE AND MANAGER SATISFACTION: AN EMPIRICAL STUDY

Fahri Apaydın

Yalova University, Turkey

Abstract

In this paper, a manager satisfaction model based on the concept of manager satisfaction and performance evaluation is proposed. Manager satisfaction is explained, and its correlation with firm performance is examined in this model. My purpose is fourfold: 1. to conceptualize manager satisfaction, 2. to make the difference between performance measurement and performance evaluation clear, 3. to clarify four standards managers use when they evaluate firm performance and to use them in the same model, and 4. to develop and test a model to explain manager satisfaction. Regression analyses are carried out to test the relationships between concepts.

Introduction

The term satisfaction has been a core subject of many studies and received high interest from researchers in marketing literature. We can reach a number of studies based on customer satisfaction, job satisfaction, and employee satisfaction when the literature is reviewed. However, to my knowledge, that manager satisfaction has been overlooked and thus has not been researched reveals a void in the literature. Marketing managers are focal members of the firm in the firms and make vital decisions concerning the main marketing strategies and activities of firms. That is why capturing how marketing managers make decisions is of great significance. To be able to examine how marketing managers make decisions, manager satisfaction should be examined thoroughly. This research, conceptualizing manager satisfaction for the first time to my knowledge, is an attempt to contribute literature related to manager satisfaction.

Manager satisfaction

There isn't a general agreement on how satisfaction should be defined though it is accepted as a significant facet of marketing and received so many researches (Ha and Perks, 2005). Satisfaction is a central issue in marketing realm, and it is a major outcome of marketing activities and serves to connect processes of decision making and evaluation of performance results (Miller, 1987; Spreng et al., 1996; Yılmaz et al., 2005). Perception is subjective and impacts people's evaluation of their environment. Perceived performance directly influences satisfaction, and satisfaction has cognitive and emotional components, so the performance perception of marketing managers affects these components (Brown and Peterson, 1994).

According to the classic expectancy disconfirmation model, customer satisfaction with consumption experiences depends on expectations, performance, and disconfirmation (Smith and Balton, 2002; Smith et al., 1999). Likewise, manager satisfaction depends on their expectations of their activities and decisions, the performance of the firm, and dis/confirmation of expectations. In this research, this theory is used to explain manager satisfaction in that marketing managers have expectations about the results of their activities and decisions. Thus, they measure the performance of their firms to see how much their expectations are met. The more their expectations are met, the more satisfied they are.

Oliver (1989) typifies satisfaction in five groups and I believe that this typification helps to measure the concept of satisfaction. These five groups are:

1. Contentment (with its primary affect of acceptance or tolerance)
2. Pleasure (a positive reinforcement state that involves the evocation or enhancement of a positive, well-liked experience and a primary affect of happiness)
3. Relief (a negative reinforcement state occurring when an aversive state is removed)
4. Novelty (expectations of the unexpected that yield a primary affect of interest or excitation)
5. Surprise (a primary affect of either delight or outrage as occurs when the product performs outside the range of expectations)

There are several views explaining satisfaction. One of them is confirmation / disconfirmation of preconsumption according to which product standards determine satisfaction (Oliver, 1996). Confirmed standards cause high satisfaction, while disconfirmed standards lead to dissatisfaction. Another one is predictive expectations, which is based on the attribute performance of the product (Tse and Wilson, 1988; Liechy and Churchill, 1979). The view of desires, which suggests that consumers have desires about the features and benefits of products, also explains satisfaction. The more they are met, the more satisfied consumers are (Westbrook and Reilly, 1983; Smith and Wagner, 1999). According to the equity expectations view, consumers compare price with the benefits of the products (Oliver and Swan, 1989). If they perceive that products' benefits are more than the costs, they are more satisfied. Experience-based norms view posits personal experience and information play a great role in the formation of satisfaction (Cadotte et al., 1987). People having prior experience judge the information they receive and develop some level of satisfaction. Balancing paradigm also explains the construct satisfaction. This view stems from the sociocultural character of owning and using technologies (Fournier and Mick, 1999). This paradigm considers all

the other views and suggests that people in the age of technology people are satisfied with what they have related to technology. An aspiration level in individual decision making has been explained as a "reference point that is psychology neutral" (Kameda and Devis, 1990) or as "the smallest outcome that would be deemed satisfactory by the decision maker" (Schneider, 1992). All in all, the aspiration levels the managers hold determine the level of satisfaction. When literature is reviewed, it is seen that researchers have made use of the findings of other studies about different types of satisfaction in their studies related to the satisfaction type (job satisfaction, consumer satisfaction, and life satisfaction) they explore (Fournier and Mick, 1999; Kernan and Lord, 1991; Wirtz and Mattila, 2001; Churchill and Suprenant., 1982; Geringer and Hebert, 1991). Therefore, such studies are referred to explain manager satisfaction in this research. Fournier ve Mick (1999) describe the features of satisfaction in general as follows:

1. Satisfaction is an active and dynamic process.
2. Satisfaction has social dimension.
3. Meaning and affect are the dimensions of satisfaction.
4. Satisfaction forms in the context.

Marketing managers develop some expectations related to performance results (Oliver and Swan, 1989; Brouthers and Xu, 2002: 657-678). After they measure performance, they evaluate the results to see whether their expectations are met or not. To do so, they compare the results with some performance standards they have chosen beforehand. Performance results become meaningful after the comparison of them with the standards. During this process, marketing managers develop some feelings and ideas about the results. Manager satisfaction is defined as the attitude of managers based on the feelings and ideas resulting from comparison of the current performance results with some other performance standards (Apaydın, 2009). Some researchers suggest that satisfaction and attitude are different concepts though they are similar. LaTour and Peat (1979) make distinction between attitude and satisfaction since attitudes form prior to an action, whereas satisfaction forms after an action. Nonetheless, as manager satisfaction determines some of the actions to be taken, I consider it as an attitude in this study.

Performance

The performance of firms has been a significant part of empirical research in the management field. Measuring the performance of firms is an important component of strategic marketing management (Chakravarty, 1986). Performance measurement systems have a fundamental role in providing marketing managers with necessary information so that they are informed about marketing activities of the firms and can make decisions regarding marketing strategies (Epstein and Roy, 2005). That is why firms have been placing increasing importance on the development of performance standards to generate better information to measure and manage corporate performance. Performance measurement systems have to consist of leading indicators that give insight into the

firms' ability to make their competitive position better and are predictors of future performance. In effect, performance measurement and performance evaluation processes are paying attention to both internal and external environment (Pelham and Lieh, 2004). Marketing managers use the measurement systems to follow the changes in the external environment not to stay behind the competition.

In the literature, I recognized that measurement and performance evaluation are confused with each other and used interchangeably. Nevertheless, they are distinct concepts in that performance measurement is an activity of describing performance results with figures, while performance evaluation is the activity of comparing performance results with some standards chosen by managers and judging and interpreting them (Tekin, 1993; Smith and Bolton, 2002; Wirtz and Mattila, 2001). Performance evaluation requires comparison of the performance results, obtained after measurement, with some standards, and managers develop some ideas and feelings during the evaluation process. These ideas and feelings determine the level of manager satisfaction. Two different marketing managers might perceive the same performance result in completely different ways due to some factors such as psychology, perception, knowledge level, tenure, etc. The distinction of these two concepts is vital to operationalize manager satisfaction, and thus creates the opportunity to investigate and do researches about manager satisfaction.

Performance measurement is done in various methods and ways as an ongoing activity in firms and marketing managers and owners of the firms consider the results as an indicator of the success level (Kennerley and Neely, 2003; Bourgeois, 1980; Coşkun, 2006; Geringer and Hebert, 1991). In the literature, performance measurement is scrutinized in a range of studies. In these studies, researchers have utilized different performance standards as comparison standard. Main comparison standards used in such studies are past performance of the firm (Johnston and Kim, 1994; Greve, 1998), target performance of the related term (Kernan and Lord, 1991; Johnston and Kim, 1994), performance of the main competitor/s (Pelham and Lieh, 2004), and/or average performance of the industry (Brooks and Coleman, 2003; Greve, 1998: 58-86; Piercy et al., 1998; Hansen and Wernerfelt, 1989; Dess and Robinson, 1984: 265-275). However, none of these standards have been used in the same model or research. This research paper could be the first in the literature to use these four standards in the same model.

The theory of aspiration level supports the idea of using past performance results as comparison standards (Greve, 1998). The recent performance history of the firm can be used to set an aspiration level that holds differences among firm constants. This is especially used to track the changes in the firms. Control theory is concerned with the manner in which individuals collect and process environmental information to achieve and maintain some desired referent or goal (Kernan and Lord, 1991). This theory supports that marketing managers evaluate the actual performance results of the firm with the target performance. Goal approach (Etzioni, 19664), which assumes that firms pursue ultimate and identifiable goals

and defines performance in terms of goal attainment, also supports using target performance results of the firm as comparison standards. Social comparison theory proposes that individuals compare the performance of similar others, so this theory supports using both performance of the competitors' and average industry performance as comparison standards for firms' performance evaluation (Greve, 1998). Wirtz and Mattila (2001) summarize the standards, which support the standards used in this research, as follows;

1. Predictive expectations (e.g., Liechy and Churchill, 1979)
2. Ideal performance (e.g., Sirgy,1984)
3. Needs and wants coined as value-perception (e.g., Westbrook and Reilly, 1983)
4. Experience-based standards (e.g., Woodruff et al., 1983)
5. Comparison with social norms (e.g., Swan, 1983)
6. Multiple standards (Sirgy, 1984)

Proposed model of manager satisfaction and hypotheses

Four main independent variables, which are comparison of current performance with past performance of the firm, target performance of the related term, performance of the main competitor/s, average performance of the industry, are used, and the manager satisfaction is the dependent variable in manager satisfaction model (Figure). Cumulative performance satisfaction forms during the evaluation process of the performance results with these four different performance evaluation standards. It is necessary to test which of these performance standards plays a bigger role in the cumulative performance satisfaction. Marketing managers make decisions about strategies and main firm activities. I posit in this research paper that marketing managers develop a satisfaction level after comparing the firm's performance results with various performance standards. This level has great impact on marketing managers' decisions. Based on the conceptualization, my hypotheses are:

H1: Having better current performance than past performance has positive effect on manager satisfaction.
H2: Having better current performance than target performance has positive effect on manager satisfaction.
H3: Having better current performance than competitor's performance has positive effect on manager satisfaction.
H4: Having better current performance than average performance of the industry has positive effect on manager satisfaction.
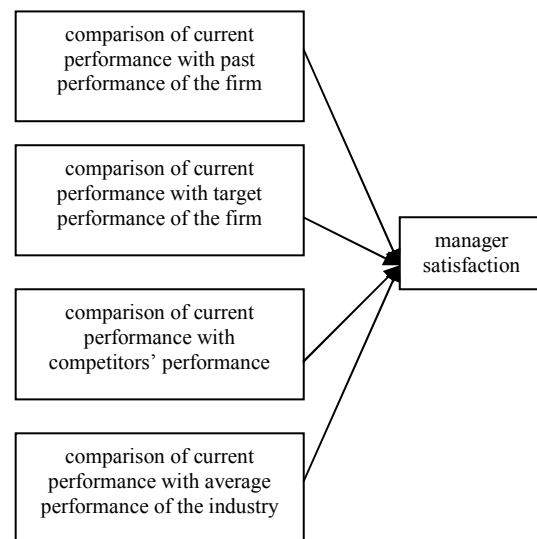
Figure 1. Manager Satisfaction Model

Methodology

The sample

A random sample of small and medium sized firms which are members of İstanbul Chamber of Commerce was drawn. Small and medium sized firms are chosen because most of the companies in Turkey are put into this category and they play a significant role in the industry. To be able to make generalization, firms were chosen from a variety of industries including finance, retailing, wholesaling, manufacturing, etc. This is relevant because the researched subject is not restricted to any industry. The owners or the senior marketing managers who are believed to have enough knowledge about the marketing activities and strategies to answer the questionnaire and are the decision makers in the firm are chosen as the respondents. The answers were obtained with face to face interviews. 400 Firms were chosen but some of them either could not be reached or rejected to answer the questionnaire. After reviewing the answered questionnaires, 337 of them were decided to be used in the analysis. The response rate is 84%, which is satisfactory to carry out the analysis. To test non-response bias, independent t-test to compare early and late respondents was carried out and no significant difference was found.

Measures

The measurements had been standardized and validated by other researchers. Measures were pilot tested using marketing managers. The questionnaire was also reviewed by some other academicians. All measures were tested with three item scales. I assessed the reliabilities of the scales using Cronbach's Alpha and Table 1 shows the reliabilities of the scales, which are all above 0.70 that is recommended and the used value in most researches. I used 5-point Likert scales to measure the variables (1 = strongly disagree, 5 = strongly agree).
I asked the marketing managers to compare the current performance of their firms with performance standards

above. The dimensions of performance standards I asked the marketing managers to compare are return on investment, increases in sales, and overall performance evaluation. These dimensions are used in the scales developed by Dess and Robinson (1984), Pelham and Lieh (2004), Brouthers and Xu (2002), and Miller (1987). The reliability of comparison of the current performance with past performance is 0.75. The reliability of comparison of the current performance with the target performance is 0.79. The reliability of comparison of the current performance with competitor performance is 0.82 and the reliability of comparison of the current performance with industry performance is 0.82.

I developed 3-item scale to measure manager satisfaction based on the study done by Oliver (1989) and other scales measuring satisfaction (Wirtz and Mattila, 2001). I asked the respondents to compare their current performance results with past performance of the firm, target performance of the related term, performance of the main competitor/s, average performance of the industry. I asked marketing managers how satisfied they were, how much their expectations were met, and to what extend their desired performance was realized. The reliability of the scale is 0.80.

Table 1

The reliability of the measures

Measures	Cronbach's Alpha
comparison of current performance with past performance	.75
comparison of current performance with target performance	.79
comparison of current performance with competitor performance	.82
comparison of current performance with industry performance	.82
manager satisfaction	.80

Findings and discussion

Correlation

Descriptive statistics related to the constructs in the model are shown in Table 2. There is a high correlation between the constructs as expected. In the research, links between marketing manager satisfaction and comparison of the current performance with past performance, target performance, competitor performance, and industry performance are investigated. Manager satisfaction has a high correlation with comparison of the current performance with past performance (r=0.59, p<0.01). Manager satisfaction has the highest correlation with comparison of the current performance with target performance (r=0.71, p<0.01). This is probably because managers mainly focus on the target performance determined in their plans and managers' success is usually evaluated with it. There is a weak correlation between manager satisfaction and comparison of the current performance with competitors performance (r=0.38, p<0.01), although it was expected higher. Manager satisfaction correlates with comparison of the current performance with industry performance at a medium level (r=0.49, p<0.01).

Regression analysis

Regression analysis is used to test the research model. The results are summarized inTable 3.

Table 2

Descriptive statistics

Means, standard deviation and correlation among constructs							
	M	**SD**	**1**	**2**	**3**	**4**	**5**
1. comparison with past per.	3,60	0,99	1				
2. comparison with target per.	3,19	1,02	,66**	1			
3. comparison with competitor per.	3,48	0,89	,31**	,42**	1		
4. comparison with industry per.	3,24	0,93	,44**	,55**	,66**	1	
5. manager satisfaction	3,39	1,01	,59**	,71**	,38**	,49**	1
** P<0.01							

The overall fit of the model was good. The model is significant at 0.00 level and R square is 0.545. The independent variables, which are comparison of current performance with past performance of the firm, target performance of the related term, performance of the main competitor/s, average performance of the industry, explain 54.5% of the variance in the dependent variable manager satisfaction, which is very high. The correlations are high among the independent variables, indicating the multicollinearity problem. To get rid of the effects of multicollinearity caused because of the linear relationship among the explanatory variables, I applied variance inflation factor. H1 (beta value=0.19, sig=0.00) and H2 (beta value=0.51, sig=0.00) are accepted. H3 and H4 are rejected, since the significance levels are higher than the acceptable level which is 0.05.

Table 3

Regression results

	St. Beta Coefficients	**t-Value**	**Sig. Level**
Constant		3,08	0,00
Independent variables	Com. past per.	0,19	4,04
Independent variables	Com .target per.	0,51	9,64
Independent variables	Com. competitor per.	0,03	0,75
Independent variables	Com. industry per.	0,09	1,80
Dependent Variable: Manager satisfaction			
R Square = 54.5%, significant at 0.00 level			
F value = 101,63 df = 4 residual = 332			

Conclusions

The results on manager satisfaction may be the most important contribution of this paper. Results demonstrate

that comparison of current performance with past performance; target performance, competitor performance, and average industry performance and manager satisfaction are strongly related positively. However, manager satisfaction forms mainly from comparison of the current performance with past performance results and target performance of the term. A reason for this might be because it reveals how much they have achieved and the results are at their hands. Especially in an industry where there are so many actors, it might be difficult for the marketing managers of small firms to reach necessary information about the competitors and the industry. That is why in the model comparison of current performance results with both competitors and average performance result are not significant. That the environment is not constant and fluctuates so much might also force marketing managers to focus on target performance when they are evaluating their success. In the fluctuating environment, it might be sometimes difficult to compare a firm's current performance with past performance results. Nevertheless, marketing managers should take into account not just only current performance results of the firm but also the industry and the competitors as well as the past performance of the firm. Otherwise, they may fall behind the race and lose their competitive advantage. Furthermore, just focusing on the target performance results may be misleading for both the owners and the marketing managers.

Manager satisfaction is a concept which deserves so much attention as it influences the decisions and activities of marketing managers. To be able to understand the reasons of the marketing managers' decisions and behavior, their way of performance evaluation should be examined carefully.

This study has some limitations. As the sample is small, it is difficult to generalize the results. Further researches should be done with a greater sample. Another limitation is that I didn't use any control variables to make alternative explanations. Some control variables such as size of the company, age of the company, tenure of the marketing manager, etc. might be used as control variables to see their effects on the dependent variable in the further studies. This research is done while there is a very heavy global economic crisis in the world, so the performance results might be affected from it. Thus, marketing managers may have answered the questions under a great strain.

In this research, the sample was drawn from different industries to make generalization, so in the future some researches should be carried out based on specific industries to see the differences among the industries. Furthermore, researchers should investigate the effects of the kind of comparison standards marketing managers use on their decisions about different activities they carry out in the firms. In the literature, different types of performance standards are used in various studies, but none of them has looked into which one is more effective on managers' decision making process. Thus, this should be examined in the further researches as well.

References

1. Apaydın, F. (2009). 'Performance Evaluation Standards and Innovation: An Empirical Investigation.' Paper presented at ICBEMM 2009: "International Conference on Business, Economics, Management and Marketing", June 24-26, in Paris.
2. Bourgeois, L. J. III (1980). 'Performance and Consensus.' *Strategic Marketing Journal,* 1(3): 227-248.
3. Brooks, W. K. & G. D. Coleman, (2003). 'Evaluating Key Performance Indicators Used to Drive Contractor Behavior at AEDCQ Engineering.' *Management Journal,* 15(4): 24-39.
4. Brouthers, L. E. & K.Xu (2002). 'Product Stereotypes, Strategy and Performance Satisfaction: The Case of Chinese Exporters.' *Journal of International Business Studies,* 33(4): 657-678.
5. Brown, S. P. & R. A. Peterson (1994). 'The Effect of Effort on Sales Performance and Job Satisfaction.' *Journal of Marketing*, 58(2): 70-80.
6. Cadotte, E., R. Woodruff , & R. Jenkins (1987). 'Expectations and Norms in Models of Consumer Satisfaction.' *Journal of Marketing Research*, 24(August): 304-14.
7. Chakravarty, B. S. (1986). 'Measuring Strategic Performance.' *Strategic Management Journal*, 7(5): 437-458.
8. Churchill, G. A. Jr. & S. Carol (1982). 'An Investigation into the Determinants of Customer Satisfaction.' *Journal of Marketing Research,* 19(4): 491-505.
9. Coşkun, A. (2006). 'STK'ların Stratejik Performance Yönetiminde Yeni Bir Yaklaşım: Performans Karnesi.' *Sivil Toplum*, 4(15): 103-117.
10. Dess, G. G. & R. B. Robinson (1984). 'Measuring Organizational Performance in the Absence of Objective Measures: The Case of the Privately-held Firm and Conglomerate Business Unit.' *Strategic Management Journal*, 5(3): 265-273.
11. Epstein, M. J. & M. Roy (2005). 'Evaluating and Monitoring CEO Performance: Evidence from US Compensation Committee Reports.' *Corporate Governance*, 5(4): 75-88.
12. Etzioni, A. (1964). *Modern Organizations*. Englewood Cliffs, N. J.: Prentice-Hall.
13. Fournier, S. & D. G. Mick (1999). 'Rediscovering Satisfaction.' *Journal of Marketing,* 63(4): 5-23.
14. Geringer, J. M. & L. Hebert (1991). 'Measuring Performance on Their International Joint Ventures.' *Journal of International Business Studies,* 22(2): 249-264.
15. Greve, H. R. (1998). 'Performance, Aspirations, and Risky Organizational Change.' *Administrative Science Quarterly,* 43: 58-86.
16. Ha, H. & H. Perks (2005). 'Effects of Consumer Perceptions of Brand Experience on the Web: Brand Familiarity, Satisfaction, and Brand Trust.' *Journal of Consumer Behaviour,* 4(6): 438-452.
17. Hansen, G. S. & B. Wernerfelt (1989). 'Determinants of Firm Performance: The Relative Importance of Economic and Organizational Factors.' *Strategic Management Journal,* 10(5): 399-411.
18. Johnston, W. J., & Kim, K. (1994). 'Performance, Attribution, and Expectancy Linkages in Personal Selling.' *Journal of Marketing,* 58(4): 68-81.
19. Kameda, T. & J. H. Davis (1990). 'The Function of the Reference Point in Individual and Group Risk Decision Making.' *Organizational Behavior and Human Decision Processes*, 46: 55-76.
20. Kennerley, M. & A. Neely (2003). 'Measuring Performance in a Changing Business Environment.' *International Journal of Operations and Production Management*, 23(2): 213-229.
21. Kernan, M. C. & R. G. Lord (1991). 'An Application of Control Theory to Understanding the Relationship between Performance and Satisfaction.' *Human Performance*, 4(3): 173-185.
22. LaTour, S. A. & N. C. Peat (1979). 'Conceptual and Methodological Issues in Consumer Satisfaction Research.' In *Advances in Consumer Research*, William L. Wilkie, ed. *Association for Consumer Research*, 432-437.

23. Liechy, M. & G. A. Churchill (1979). *Conceptual Insights into Consumer Satisfaction with Services*. In N. Beckwith (Ed.) Educator's Conference Proceedings, Series 94: 509-515. Chicago: American Marketing Association.

24. Miller, D. (1987). 'Strategy Making and Structure: Analysis and Implications for Performance.' *Academy of Management Journal*, 30(1): 7-32.

25. Oliver, R. & J. E. Swan (1989). 'Consumer Perceptions of Interpersonal Equity and Satisfaction in Transactions: A Field Survey Approach.' *Journal of Marketing,* 53(April): 21-35.

26. Oliver, R. (1989). 'Processing of the Satisfaction Response in Consumption: A Suggested Framework and Research Propositions.' *Journal of Consumer Satisfaction/ Dissatisfaction and Complaining Behavior,* 2: 1-16.

27. Pelham, A. M. & P. Lieh (2004) Differences between Presidents' and Sales Managers' Perceptions of the Industry Environment and Firm Strategy in Small Industrial Firms: Relationship to Performance Satisfaction.' *Journal of Small Business Management*, 42(2): 174-189.

28. Piercy, N. F., A. Kaleka, , & C. S. Katsikes (1998). 'Sources of Competitive Advantage in High Performing Exporting Companies.' *Journal of World Business,* 33(4): 378-393.

29. Schneider, S. L. (1992). 'Framing and Conflict: Aspiration Level Contingency, the Status Quo, and Current Theories of Risky Choice.' *Journal of Experimental Psychology, Learning, Memory, and Cognition*, 18: 1040-1057.

30. Sirgy, M.J. (1984). 'A Social Cognition Model of Consumer Satisfaction/Dissatisfaction: An Experiment.' *Psychology and Marketing*, 1: 24-77.

31. Smith, A. K. & R. N. Bolton (2002). 'The Effect of Customers' Emotional Responses to Service Failures on Their Recovery Effort Evaluations and Satisfaction Judgments.' *Academy of Marketing Science,* 30(1): 5-23.

32. Smith, K. A., N. B. Ruth, & J. Wagner (1999). 'A Model of Customer Satisfaction with Service Encounters Involving Failure and Recovery.' *Journal of Marketing Research,* 36(3): 356-363.

33. Spreng, R. A., S. B. MacKenzie, & R. W. Olshavsky (1996). 'A Reexamination of Determinants of Consumer Satisfaction.' *Journal of Marketing,* 60(3): 15-33.

34. Swan, J.E. (1983) *Consumer Satisfaction Research and Theory: Current Status and Future Directions.* In R.L. Day and H.K. Hunt (Eds*).* International Fare in Consumer Satisfaction. 124-129. Bloomington: Indiana School of Business, Indiana University.

35. Tekin, Halil (1993). *Eğitimde Ölçme ve Değerlendirme.* İstanbul: Yargı Publishing.

36. Tse, David K. & P. C. Wilton (1988). 'Models of Consumer Satisfaction Formulation: An Extension.' *Journal of Marketing Research,* 24(August): 204-12.

37. Yılmaz, C., L. Alpkan, & E. Ergün (2005). 'Cultural Determinants of Customer- and Learning-Oriented Value Systems and Their Joint Effects on Firm Performance.' *Journal of Business Research*, 58: 1340-1352.

38. Westbrook, R. & M. D. Reilly (1983). 'Value Perception Disparity: An Alternative to the Disconfirmation of Expectation Theory of Consumer Satisfaction.' *Advances in Consumer Research,* 10: 256-70.

39. Wirtz, J. & A. Mattila (2001). 'Exploring the Role of Alternative Perceived Performance Measures and Needs-congruency in the Consumer Satisfaction Process.' *Journal of Consumer Psychology,* 11(3): 181-192.

40. Woodruff, R.B., E.R. Cadotte, & R.L. Jenkins (1983). 'Modeling Consumer Satisfaction Process Using Experienced-based Norms.' *Journal of Marketing Research*, 20: 296-304.

Fahri Apaydın

Firmos našumas ir vadovo pasitenkinimas: empirinis tyrinėjimas

Santrauka

Šiame moksliniame straipsnyje vadovo pasitenkinimo modelis yra išvystytas vadovo pasitenkinimo ir našumo įvertinimo koncepcijų pagrindu. Vadovo pasitenkinimo sąvoka yra apibūdinta ir tarpusavio ryšys su firmos našumu yra detaliai išnagrinėtas šiame modelyje. Grįžtamojo ryšio analizė padaryta, tam kad pamatyti ryšį tarp koncepcijų. Nustatyta, kad vadovo pasitenkinimo formos daugiausia lyginamos su esamu našumu bei buvusio našumo rezultatais ir planuojamu našumu nustatytu laiku.

About the author

Fahri Apaydın, Ph. D., Assist. Prof., Marketing, Yalova University. E-mail: fapayadin1@yahoo.com, 09 0 542 416 80 56

THE RELATIONSHIP BETWEEN INTEREST RATES AND INFLATION IN DEVELOPING COUNTRIES: THE TURKEY CASE

Ahmet Cuneyt Armagan

Yalova University, Turkey

Abstract

The main task of central banks the world over is to keep inflation under control. The underlying basic theory that the central banks use in this task is commonly known. They raise interest rates when inflation is poised to increase and vice versa. The theoretical arguments for this are generally strong, at least for developed economies. The claim of this paper is that, in at least some developing countries, not only does this theory (and practice) fail to bring down inflation but that it slows down the economy and increases inflation. This paper analyzes the basic relationship between interest rates and inflation for developed and developing economies. It provides the theoretical explanation and provides some empirical results to support its claim.

Introduction

In the first section is a summary of the approaches of the two basic schools of thought on the effects of monetary policies on inflation. In the second section is a look at Turkey's high inflation problem. In the third section is the theoretical argument of this paper. In the fourth section are the empirical results to support the arguments in the third section.

Monetary policy

Just like in politics, there are two main camps in economic theories. They are the conservatives and the liberals. These camps have various numbers of subdivisions among themselves. For simplicity, we are going to ignore those subdivisions and we are only going to talk about the general approaches of these camps. For the purposes of this paper we are going to call the conservatives as "the Classicals", and the liberals as "the Keynesians".

Classical economists look at the relation between Money Supply and inflation through the quantity theory of money. This theory centers around the equation of exchange:

$$MV=PQ$$

where   M= Quantity of Money
     V= Velocity
     P= Price Level
     Q= Quantity of real goods sold

With this equation, the Classicals (as Keynes called them) had assumptions: They believed that Velocity remained constant (or changes very slowly through time) and that Q was independent of the money supply. So, this meant that a change in M would change P by equivalent percentages. Of course, the other assumption was that this causality would go from M to P and not the other way around.

In the Keynesian view, the monetary sector and the real sector are connected; the interest rate is determined in the monetary sector, and that interest rate affects the real sector. In the classical model, the interest rate is determined in the real sector. It reflects real not monetary forces.

Monetary policy in the Keynesian model:

When the FED decreases the Money Supply, it increases the interest rate. This decreases the quantity of investment. This in turn decreases income and output[1].
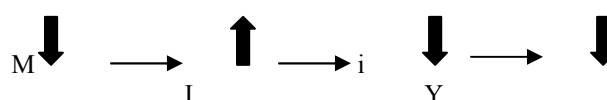
In short though, both camps believe that the interest rates and inflation are inversely related. That is, when interest rates increase, the economy starts to slow down and inflation falls. Alternatively when interest rates fall, the growth rate starts to pick up and the inflation rate is more able to increase.

The Turkish economy

The Turkish government implemented an IMF backed economic program in 2000. The main aim of the program was to bring down the high inflation rate that was plaguing the Turkish economy for more than 20 years. In the first few months, the program was going smooth. With expectations that the program would be successful, interest rates had dropped substantially. Then, some problems started to materialize. The government was backtracking on its privatization program and more importantly Turkey's current account figures were deteriorating fast. Consequently, in November, some banks lost hope in the economic program and they started buying foreign exchange in large amounts. Interbank interest rates skyrocketed. I was working in the finance department of a company back in those days and if my memory doesn't fail me, on the Reuters screen, I remember seeing simple yields on overnight rates in the market of more than 1,000 percent. In the following days the IMF came to the rescue and promised some loans.

---

[1] David C. Colander, <u>Economics</u> (Homewood: Irwin, 1993), 320-330.

The hysteria in the market subsided comparatively for a few months. But in February, following an exchange of rows between the Prime Minister and the President, the crisis erupted again and the government was forced to release the cap on the value of foreign exchange and the market devalued the Turkish Lira.

If we look back at the reasons of this crisis;Turkey has been implementing a tight monetary policy for about 22 years now, since 1987, in order to combat high inflation. The objective of this policy was to bring down the inflation rate by tightening the money supply, like it is done in developed countries. Ironically this policy has resulted in the increase of the inflation rate. The annual inflation rate was around 30-40 percent prior to 1987 but just in 1988 it shot up to around 80 percent and it stayed at those levels until just a couple of years ago. (Figure-1[1]). This was the major reason for the party in government to take a serious blow in the elections in early 1989. Also, the growth rate of the economy has been lower than it was prior to the implementation of this policy. The common tool to combat inflation in a somewhat successful way in developed countries has had the adverse effect in Turkey.

Starting with the implementation of this policy, the Turkish Lira started to gain value vis-à-vis foreign currencies. The result was the deterioration of Turkey's current account numbers. By the end of 1993, it was seen that Turkey's imports were twice the exports. This prompted the rating agencies to drop Turkey's credit ratings. Since Turkey was running comparatively huge trade deficits at the time, it was highly dependent on international capital inflows. The downgrading of Turkey's ratings resulted in the devaluation of the Turkish Lira vis-à-vis foreign currencies first in January and then in April in total of around 180 percent (Figure-2[2]).

After the devaluation, the U.S. Dollar stabilized around 1$=35,000.TRL but with the pressure from banks, the government issued bonds with sky-high rates. It was said at the time that the reason for this move was to bring back confidence in the Turkish Lira. The real reason, in our opinion, was to "please" the banks that realized big losses because most of their assets were denominated in the Turkish Lira and part of their liabilities in foreign currencies. In Turkey, at the time, governments could not dare to confront the banks because most media companies were either directly owned by banks or the media companies were under the influence of banks through advertising. Although the trade figures improved substantially in 1994, the inflation rate shot up to around 150 percent yearly and the economy contracted by about eight percent in that same year (Figure-1). In our opinion, if the government had not raised interest rates to such high levels in foolishly trying to protect the Turkish Lira, inflation would not have been so high and the economy would not have contracted by such a degree. In spite of such developments in the Turkish economy, banks experienced a huge increase in revenue and profits for the year 1994. The obvious reason for this fact was, in our opinion, high interest rates.

Governments continued to have a tight monetary policy right after the "crisis" and in the following years. Having stabilized at a level after the devaluation, the Turkish Lira started to gain value again in the following years. Not only did the governments not take any lessons from the crisis but also they insisted in continuing to do the same mistake. As a result, by the end of 1999, the Turkish Lira again was overvalued vis-à-vis foreign currencies. With the implementation of a new economic program in 2000, the Turkish Lira continued to gain value at a faster pace. The result was the crisis in November 2000.

Contrary to some opinion, the crisis in November 2000 was not artificial. Artificial crises don't go on for weeks and market conditions don't deteriorate so heavily. During earthquakes, well-built structures continue to stand tall but poorly built structures crumble down or they get heavily damaged. If the macroeconomic figures of Turkey were not so bad, the crisis would not have been so heavy and it would not have continued for such a long time. The main reason for the crisis, in our opinion, is the deterioration of Turkey's foreign trade numbers as a result of the tight monetary policy. When Turkey implemented a tight monetary policy, this resulted in the appreciation of the Turkish Lira vis-à-vis foreign currencies. This caused the foreign trade numbers to deteriorate. In 2000, Turkey's foreign trade numbers were following a similar trend to that of 1993, which caused the crisis in 1994. Some banks foresaw that development and the rest is history.

The theory

Developed countries' academicians construct most major economic theories with, understandably, the developed countries' economies in mind. Although there is a lot of mathematics involved, economics is still a social science. That is, it's not a positive science. Math is a positive science for example. 2x2 is 4, here today. It was 4 Djibouti a thousand years ago for example and if we don't have a day of judgment by then(!), it will be 4 in India after 50 years from now. That is to say that because it is a positive science, Math doesn't change with respect to time and geographic location but economics is not like that. Economics is a social science. Economic problems and their possible remedies change with respect to time and place. As far as we know, 500 years ago, unemployment was not a big problem for many economies in the world but it's one of the major problems of all economies of the world in varying degrees, of course.

In a similar fashion, although Japan's economy is facing troubles for almost 20 years now, most countries would love to have Japan's problems rather than their own. That is to say, economic problems of countries even in the same time frame differ substantially. Japan is pursuing a very easy monetary approach to prop its economy and would love to have some inflation but Turkey's economy had been facing a high and chronic inflation-between 30 to 150 percent yearly-for more than 15 years. To combat

[1] Central Bank of Turkey, http://tcmbf40.tcmb.gov.tr/cgi-bin/famecgi?cgi=$cbtweb, 23.05.2003.
[2] Central Bank of Turkey, http://tcmbf40.tcmb.gov.tr/cgi-bin/famecgi?cgi=$cbtweb, 23.05.2003.

inflation, Turkey has been pursuing a tight monetary policy for about 22 years now but up until a few years ago, it didn't have much luck in bringing down the inflation rate. Turkey's inflation actually increased when it adopted the tight monetary policy and we will try to analyze the reason for that from the perspective of tight monetary policy in particular.

A tight monetary policy is used to combat inflation in developed economies. We will try to explain why that policy was not effective in Turkey.

Keynesians see inflation as an institutional phenomenon; Classicals see it as a monetary phenomenon. Once the economy reaches its potential output, both Keynesians and Classicals see inflation as an excess demand phenomenon: too much money chasing too few goods. The differences in opinions occur when the economy is not at its potential output. Keynesians believe inflation is still possible; Classicals believe it is not. In developed countries central banks raise interest rates when the inflation rate seems to be creeping up. This interest rate hike has two effects[1].

Firstly, for consumers, the opportunity cost of consumption increases. Although there are some who don't believe in the effect[2], it is generally believed that this induces people to save an increased portion of their income instead of spending it because interest rates have increased[3]. This helps to bring back consumption to production levels.

The other effect is that higher interest rates encourage firms to cut back on their investment expenditures. If firms choose to finance their investments with borrowing, the higher interest rate raises the cost of their investments and this forces them to decrease their investment expenditures. Alternatively if firms choose to use their own funds to finance their investment expenditures, higher interest rates increase their opportunity cost of their investments. This induces them to allocate more of their funds to saving than to spend it as investment. This is to say that higher interest rates have a downward effect on inflation because they tend to combat inflation by bringing down aggregate demand[4].

Like Turkey has been experiencing for the last 22 years, that policy might not work in the same way in all countries, especially in developing countries. If we look at the matter from the consumption point of view:

Higher interest rates will not induce consumers to cut back on their consumption. In developed countries when consumers are faced with higher interest rates they cut back on their consumption that is not essential. For example, they can delay buying their second car or renewing their current one. This doesn't happen in developing countries because most of the consumption

expenditures are either essential or they are made for the first time (e.g. buying a car). So, higher interest rates will not have the desired effects in cutting back consumption expenditures.

If we analyze the matter from the corporate point of view, we can see that higher interest rates have the adverse effect. This is primarily because, unless the interest rates are at sky-high rates, the expected return of investments is too high to miss. This is characteristic of developing countries' economies. Rate of return is higher because the (especially consumption) market is not saturated in many respects. The main point concerning the firms is the cost side of higher interest rates.

In developed countries, comparatively, capital is abundant but labor is scarce. This is the reason why firms are highly responsive to wage rates, which is the cost of labor. Some of the most widely followed statistics in the developed countries' financial markets are the ones that show the changes in wage levels. Labor is scarce and it does not have too many alternatives. The price of labor has effects in two ways. First of all, because the laborers have more income to spend, this will put more pressure on the inflation rate from the demand side. Secondly, higher wages will place upward pressure on the costs of firms and they will have to pass on that cost increase to the goods and services they sell. That is, it will shift the supply curve of firms to the left.

In developing countries, the situation is the other way around where capital is scarce and labor is abundant with respect to developed countries. Capital is scarce and it does not have too many sources. The increase in the price of capital (higher interest rates) induces firms to act in two ways. Primarily, firms increase the price of the goods and services that they produce. This has a direct effect on the inflation rate. As we stated earlier, because consumption is not saturated, there is not much resistance to this price increase. Secondly, firms cut back on their production. This has an adverse and in a way, a spiral effect on inflation, which is supply not being able to meet demand. Both effects point out to the fact that higher interest rates put an upward pressure on inflation.

One of the most important difficulties of managing the economies of developing countries, in our opinion, is to control demand. Because a majority of the population has income levels that are well below the income levels of most of the developed countries' populations, these people are not satisfied from a consumption point of view. That is, there is a long list of items that they are waiting to buy that most people in developed countries have long been enjoying the benefits of. So, trying to combat demand to try to bring down inflation is a foolish attempt. A common characteristic of developed countries is their lack of capital. It is this lack of capital that makes the companies of these countries quite vulnerable to the price of this resource, the interest rate. An increase in the rate of interest causes a dramatic decrease in aggregate supply. Classicals have claimed that aggregate supply has decreased in developed countries because of high taxes, thereby resulting in an environment of high inflation and low rates of (if not negative) growth. The cause of high inflation and comparatively low growth in Turkey has

---

[1] Colander, 320-330.

[2] Congress. Joint Economic Committee. Taxes: supply-side theory revisited Hearing before the Joint Economic Committee, 99th Cong., 1st session., 17 September 1985, 4.

[3] K. Evans, The truth about supply-side economics (New York: Basic Books, 1983), 111.

[4] Both camps generally agree with these ideas.

also been a decrease in aggregate supply in our belief but it has operated in a different way. Aggregate supply has decreased because of high interest rates, resulting in a high inflation rate and comparatively lower growth.

The empirical results

There are many reasons for inflation. Budget deficits, increasing energy prices, inflationary expectations can be a few of them. For the purpose of this paper, only the affect of interest rates on inflation have been analyzed. The U.S. has been chosen to characterize a developed country and it has been compared with the developing country in question, Turkey. Many regressions have been run but one example has been given for each of the two countries. The regressions have been run with several periods of lags. The regressions have been made with the Shazam software.

    a.   The U.S. regression

The regression for the U.S. has been done for the periods between Feb, 1973 and Apr, 2003 with a total of 363 periods (months). The inflation data used is the monthly percentage change in the consumer price index (cpi). This data has been collected from the website of the Department of Labor[1]. The Federal Funds rate has been used as an indicator for interest rates and it has been collected from the Federal Reserve website. According to the FED, the Federal Funds Rate is the cost of borrowing immediately available funds, primarily for one day. The effective rate is a weighted average of the reported rates at which different amounts of the day's trading through New York brokers occurs[2]. The model for the U.S. is:

$$\theta Y_1 = \beta + \delta_0 X_{10} + \delta_1 X_{11} + \delta_2 X_{12} + \delta_3 X_{13} + \delta_4 X_{14}$$

Y_1: The monthly percentage change in the consumer price index (cpi) in the U.S.

X_{1i}: The lagged monthly change in the expost real interest rate starting with the present month.(i=0,1…)

The Shazam command used for the above model is:

|_ols cpi interest(0.4) / anova

The R^2 and variance estimate figures are:

  R-SQUARE = 0.3002   R-SQUARE ADJUSTED = 0.2903
  VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.87905E-01

This means that about 30 percent of the variation in the dependent variable can be explained by the regressor variables. This is a good percentage taking into account that only one of the factors is analyzed.

The estimates of the coefficients are given in Table 1. The results are in line with conventional theory. There is an inverse relationship between the change in real interest rates and the percentage change in the cpi . Note that the p-values for all of the variables are below the α=.05 level.

Furthermore, a Granger-causality test was made to determine the relationship between Y1 and X1i. The null hypothesis that the interest rate does not granger-cause the cpi was rejected because the p-value turned out to be: 0.000. However the null hypothesis that cpi does not granger-cause interest barely missed to be rejected at the α=.05 level with a p-value of: 0.050. This means that the real interest rate changes cause the change in cpi but the change in cpi doesn't cause the real interest rate change(barely in fact).

Overall, this means that the conventional theory is correct for the U.S. and that there is an inverse relationship between the change in the change in real interest rates and the percentage change in the cpi.

    b.   Turkey Regression

The regression for Turkey has been done for the period between Feb, 1990 and May, 2003 with a total of 160 periods (months). The inflation data used is the monthly percentage change in the consumer price index (cpi). The monthly weighted average overnight rate recorded at the interbank market has been used as an indicator for interest rates. All the data for Turkey have been collected from the website of the Central Bank of Turkey[3]. The model for Turkey is:

$$\rho_2 Y_2 = \mu + \gamma_1 X_{21} + \gamma_2 X_{22} + \gamma_3 X_{23} + \gamma_4 X_{24} + \gamma_5 X_{25}$$

Y_2: The monthly percentage change in the consumer price index (cpi) in Turkey.

X_{2i}: The lagged monthly change in the expost real interest rate starting with the previous month.(i=1,2,…)

The Shazam command used for the above model is:

ols cpi interest(1.5) / anova

The R^2 and variance estimate figures are:

  R-SQUARE = 0.1009   R-SQUARE ADJUSTED = 0.0707
  VARIANCE OF THE ESTIMATE-SIGMA**2 = 7.1301

The percentage of the variation in the dependent variable which can be explained by the regressor variables is

---

[1] Department of Labor,
http://data.bls.gov/servlet/SurveyOutputServlet,
21.05.2003.
[2] Federal Reserve,
http://www.federalreserve.gov/releases/h15/data/m/fedfund.txt,18.05.2003.

[3] Central Bank of Turkey,
http://tcmbf40.tcmb.gov.tr/cbt.html, 23.05.2003.

much lower in Turkey than it is in the U.S. Many factors join together to make an inflationary environment. It is claimed that one of the major reasons(if not the major one) of inflation in Turkey is the inflation expectation itself. So, just taking the interest rate into account brings the above result.

The estimates of the coefficients are given in Table 2. The results are generally inline with our expectations. All of the coefficients are positive. The reason for them being smaller than the coefficients for the regression in the U.S. could be because of the fact that the inflation rate (yearly around 60-70) and consequently the interest rates are high. Compared with the U.S., when interest rates are high, the changes in their levels are also much higher in absolute terms but much lower in percentage terms. Only the p-value for the 5th lag variable coefficient is higher than the $\alpha=.05$ or .10 level. This might be due to the fact that the cost effect of interest rates is starting to diminish through time.

Furthermore a Granger-causality test was made to determine the relationship between Y2 and X2i. The null hypothesis that interest rates do not granger-cause cpi was rejected because the p-value turned out to be: 0.001. Also, the null hypothesis that cpi does not granger-cause interest was not rejected at the $\alpha=.05$ level with a p-value of: 0.634. This comfortably means that the real interest rate changes cause the change in cpi but the change in cpi doesn't cause the real interest rate change.

Overall, the regression supports our claim that interest rates do not prevent inflation but are a cause of it. That is, there is direct relationship between the change in the real interest rates and the percentage change in the cpi. Many

other regressions have been made and their results are mostly in line with the regression presented here.

Conclusions

It is very hard for developing countries like Turkey to combat inflation with high interest rates. Ironically higher interest rates cause inflation to increase by way of putting higher costs on firms. This is the reason why Turkey increased the inflation rate when it was trying it to decrease it 22 years ago. The only way that chronic inflation can be cured in Turkey is by way of increasing production and that can be achieved by lower interest rates. The tight monetary policy also resulted in the appreciation of the Turkish Lira vis-à-vis foreign currencies. This caused the trade figures of Turkey to deteriorate and thereby bringing financial and economic crises at least two times within the last 22 years.

In summary, while inflation and growth tend to move in the same direction at the same time in developed economies, in developing economies (like Turkey) the converse is true and growth and inflation move in opposite directions at the same time.

More studies need to be made to get a more detailed and thorough understanding of this relationship between interest rates and inflation. The empirical results presented here support the basic claim of this paper. Also, similar empirical analyses need to be made for the more recent period not covered by the analysis in this paper and for other developing economies.

TABLES

Table 1

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 353 DF	PARTIAL	
				P-VALUE	CORR.
INTEREST	-0.056440	0.004667	-12.09	0.000	-0.541
INTEREST	-0.042554	0.005385	-7.902	0.000	-0.388
INTEREST	-0.029124	0.005568	-5.231	0.000	-0.268
INTEREST	-0.018549	0.005431	-3.416	0.001	-0.179
INTEREST	-0.009336	0.004735	-1.972	0.049	-0.104
CONSTANT	0.399110	0.015650	25.5	0.000	0.805

Table 2

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 149 DF	PARTIAL	
				P-VALUE	CORR.
INTEREST	0.000772	0.000300	2.575	0.011	0.206
INTEREST	0.001523	0.000382	3.983	0.000	0.31
INTEREST	0.001343	0.000400	3.354	0.001	0.265
INTEREST	0.000950	0.000382	2.485	0.014	0.199
INTEREST	0.000444	0.000300	1.48	0.141	0.12
CONSTANT	4.486700	0.214500	20.92	0.000	0.864

FIGURES

Figure-1: Some Macroeconomic Figures of Turkey
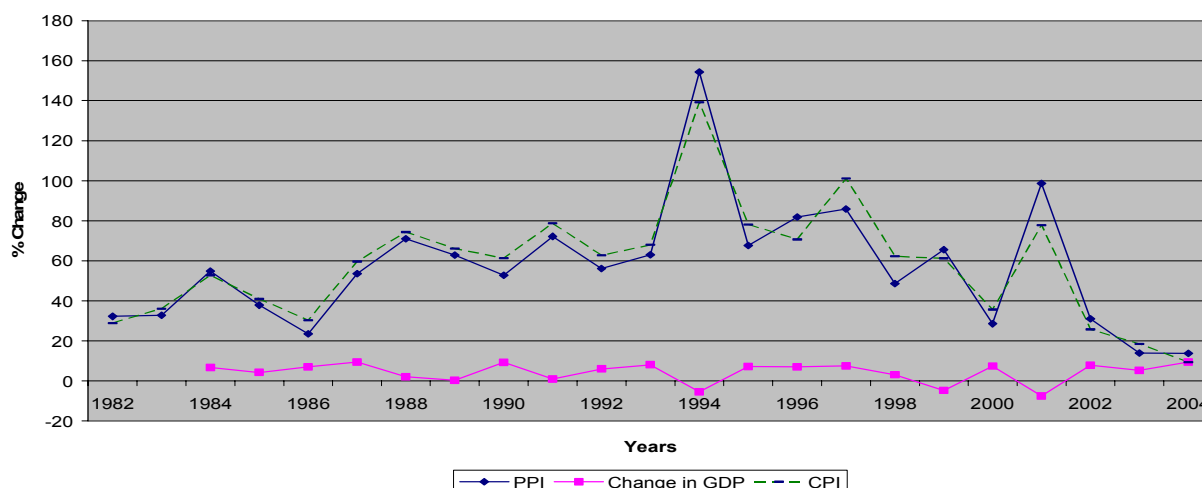
Figure-2: Foreign Exchange Basket Change
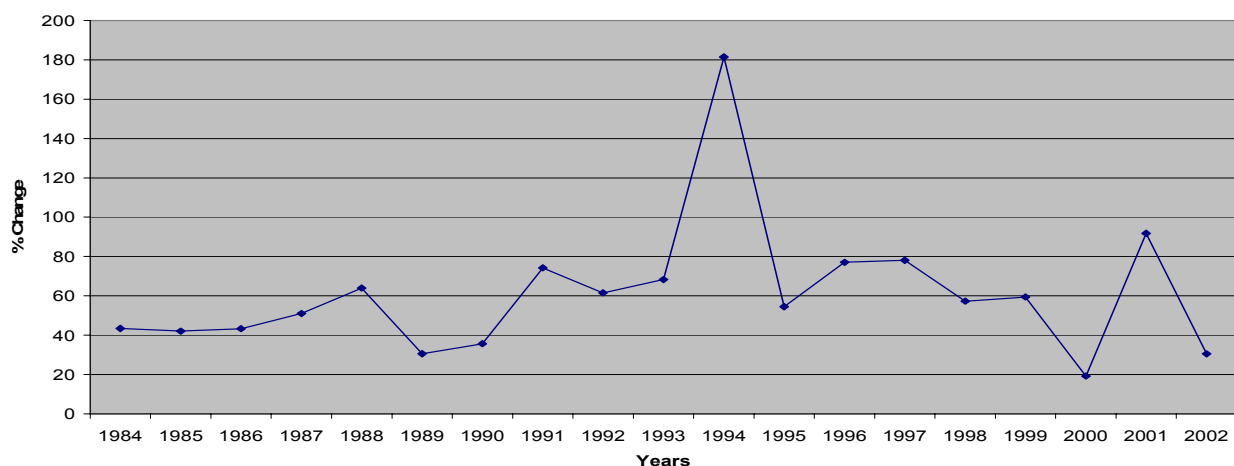
References

1. Central Bank of Turkey, http://tcmbf40.tcmb.gov.tr/cgi-bin/famecgi?cgi=$cbtweb, 23.05.2003.
2. Central Bank of Turkey, http://tcmbf40.tcmb.gov.tr/cbt.html, 23.05.2003.
3. Colander, David C. Economics. (1993) Homewood: Irwin.
4. Department of Labor, http://data.bls.gov/servlet/SurveyOutputServlet, 21.05.2003
5. Evans, Michael K. (1983) The truth about supply-side economics. New York: Basic Books.
6. Federal Reserve, http://www.federalreserve.gov/releases/h15/data/m/fedfund.txt,18.05.2003.
7. U.S. Congress. Joint Economic Committee. Taxes: supply-side theory revisited: Hearing before the Joint Economic Committee. 99th Cong., 1st session., 17 September 1985.

Ahmet Cuneyt Armagan

Santykis tarp palūkanų normos ir infliacijos besivystančiose šalyse: Turkijos atvejis

Santrauka

Infliacijos kontrolės misijoje, pirmasis įrankis, kurį centrinis bankas naudoja yra palūkanų norma. Palūkanų norma pakeliama, kad būtų apsisaugoma nuo infliacijos ir atvirkščiai. Šis pagrindinis priartinimas prie infliacijos yra pasidalinamas pausauliniu mastu. Šiame straipsnyje tvirtinama, kad tik kai kuriose besivystančiose šalyse, ši teorija ne tik (praktika) padeda sumažinti infliaciją bet ir padeda atskleisti šalies ekonomiką ir padidinti palūkanų normą. Tvirtinimai bandomi įrodyti teoriškai ir empiriškai .

About the author

Ahmet Cuneyt Armagan, ph.d candidate, macroeconomics, Yalova University. E-mail: ahmetarmagan@gmail.com, tel.: 90-537-981-7397. Research interests: monetary policy, population aging, labor process theory

THE CYCLICAL PROBLEMACY OF SMALL OPEN-ECONOMY

Andrus Aavik[1], Rasa Glinskienė[2], Gema Umbrasienė[3]

[1]*Tallinn University of Technology, Estonia,* [2, 3]*Kaunas University of Technology, Lithuania*

Abstract

Economic volatility, business cycles as pervasive and persistent no seasonal fluctuations of the economy make negative effects to welfare of society, therefore studies and research in this field are desirable. The results of international financial and economic integration in the global world sometimes are controversial for small open-countries and urge from their governments and societies effective economic solutions. Republic of Lithuania, being one of the smallest parts of the EU and world economy, has to face all external macroeconomics challenges, but has objectively limited opportunities to deal with them. So it is necessary to create and adopt the reliable system of independent forecasts and the effective adjustment system for domestic economics politics for assurance of a supportive macroeconomic environment. The theoretical premises of that analysis are in the paper.

Introduction

Current economic crisis has shown how important it is to address the cyclicality issue efficiently and in time. Economic volatility, business cycles as pervasive and persistent no seasonal fluctuations of the economy makes negative effects to welfare of society, therefore studies and research in this field are desirable. Swings in the business cycle are global in nature. The links between nations have been strengthening for a long time, governments everywhere are focusing on a set of policies designed to improve economic growth. The international business cycle is emerging as a major economic force considering the free flow of goods, capital, ideas, and people at the beginning of the 21st century. In coming years, the major swings in economic activity confronting policymakers, consumers, and business will be global in scope rather than domestic (J. McNerney, 2006). We are still discussing factors contributed to the increased stability of the economies: increased size of a cyclical government sector, increased role of automatic (mainly fiscal) stabilizers, reduced frequency and intensity of financial crises , favorable fiscal (tax) policies, reduced volatility of monetary growth, greater confidence of private economic players, what suggests a role for endogenous and self-validating expectations in reinforcing positive macroeconomics trends, about the connection between the endogenous accelerator-multiplier model and exogenous models, driven by external shocks (V.Zarnowitz, 1992). The results of international financial and economic integration sometimes are controversial. Can forecasting and self-dependent countercyclical policy be possible and effective for small open-economies, like Lithuania, Estonia and Latvia?

The goal of article: to represent the problemacy of cyclicaty in small open- economy.

Working methods: the analysis of scientific literature and statictical data.

The problemacy of business cycles forecasting, prevention and managing

The economic decision making begins from choosing the time, object and the aim (in our case medium - term).

Any attempt to forecast a coming downturn in the economic cycle meets with a host of problems. Each business cycle is unique. Even after the fact, economists argue over whether a recession has occurred or, if they agree on that, they argue over when it began and ended. For the players of economy an atmosphere of uncertainty is a daunting situation. The problem is that economic forecasters don't see recessions coming until its too late. Their methods work when the economy is stable, but even the most complex econometric models often are blind to sudden turns in the business cycle.

Economic forecasting is the process of attempting to predict the future condition of the economy. This involves the use of statistical models utilizing variables sometimes called indicators. Some of the most well-known economic indicators include inflation and interest rates, GDP growth/decline, retail sales and unemployment rates. Economic forecasting is not an exact science; it remains an important decision-making tool for businesses and governments as they formulate financial policy and strategy (Investopedia). But economy is too complex to be summarized with just a few statistics. Business cycles can start and end quite quickly for reasons that an indicator may not account for. Any single indicator can't to give true signals and never fails to foresee a turning point in an economy. The set of indicators and constantly acting monitoring systems are necessary, without guarantees to absolutely correct forecast.

Besides, the Lithuania's economy can be described by political cycles (match to the Nordhaus-type opportunistic political business cycle model). Moreover, affected by pending elections fluctuations in the real GDP may also be perceived as a result of changes in the labour market as initiated by politicians. Yet it is most likely that the formation of political cycles is most affected by instruments of the fiscal policy. Also, considering the start of manipulations with the economic policy by the ruling party, i.e. eighteen months to the elections, the lags of the economic policy's effects on the domestic economy are evaluated with due competence (G.Miliauskas, A.Grebliauskas, 2007).

And the main question due to fiscal policy for rapid developing open-country with the Currency Board and as consequence restricted monetary politics.

Fiscal policy is procyclical in many developing countries because of different reasons, political, too. When voters observe a boom, they optimally demand more public goods or lower taxes, and this induces a procyclical action in fiscal policy. The empirical evidence is consistent with this explanation: Procyclicality of fiscal policy is more pronounced in more corrupt democracies (A. Alesina, F.R. Campante, G. Tabellini, 2008). Countries with more volatile output and dispersed political power are more prone to run procyclical fiscal policies.

Talvi and Vegh (2000) try to explain the way that governments in developing countries behave in a procyclical way. As it is explained, if GDP↑→T↓→ exp↑→gov. surplus $\leq$ 0 and if GDP↓→T↑→exp↓→ gov. deficit $\leq$ 0 (M.S.de Cima, 2005).

Even more, there are opinions that procyclical fiscal policy can be interpreted as a byproduct of underdeveloped fiscal systems and sovereign risk, implying that the decline in the output growth rate during recessions would tend to exceed the increase during expansions, inducing another concave association between shocks and growth. Interaction is: weak institutions + no cooperative behavior → inefficient tax system and sovereign risk → procyclical fiscal policy → concave association between shocks, investment and growth (Aizenman J., Pinto B., 2005).

Procyclical is a benign word filled with economic dynamite. It means that the world financial system, by virtue of its regulation and governance, builds deal-making institutions and activity to unprecedented levels and then, almost as if by design, blows those deals and institutions to bits (T. Corcoran, 2008). The destructive role of procyclical policies was quietly acknowledged by the International Monetary Fund in its Global Financial Stability Reports.

Some more, much of procyclity is due to psychology. People tend to recall items that were at the end on a list rather than items that were in the middle on a list. For example, they tend to build many more houses as the business cycle hits its zenith, only to see be forced to cut back doubly as the economy slows and an inventory overhang results. This double cutback effect makes a downturn more pronounced, business people become accustomed to the economic environment of an upswing and overproduce in the case of house builders or under

allocate for loan losses in the case of banks. This is one reason recessions tend to be severe (E. Harrison, 2008).

On another side, in a world of uncertainty, there are prudent motives to run a countercyclical fiscal policy. Governments do not know if shocks are going to be long term or if they are just for a limited time, so they must make some judgment calls to plan expenditure programs for the future:

1. A negative shock to demand for domestic goods can be partially offset by an increase in government demand,

2. The government will want to contract its activities during a boom period, in order to avoid an overheating of the domestic economy.

3. The social insurance component of the government is naturally countercyclical. Unemployment benefits and other programs of the kind are designed to offset fluctuations in income and therefore should be negatively correlated with the economic cycle (M.S. de Cima, 2005).

It means, it is reasonable to follow Keynesian guidelines of countercyclical fiscal policy: the government should either increase spending and/or reduce tax rates during recessions in order to stimulate aggregate demand and partially prevent the economy from under-employing resources for prolonged periods of time and to do the opposite in order to ,,cool off'' the economy and contain inflationary pressures during expansions. The government spending function should take as its basis permanent income, not current income.

Lithuanian fiscal policy is prevalent procyclical. The question is - is it a supportive macroeconomic environment for private sector of economy. Lithuania has macro economical indicators of trends and dependencies, which are not common in the EU, especially Euro area.

First of all, the coherence between GDP growth in Lithuania and Euro Area at low and business cycle frequencies (i.e. for periods lasting above 3 years) appears relatively low (during the analyzed period (1995-2007). This may come as not particularly surprising given that during this period Lithuania has first been recovering from the transitional decline in economic activity in early 1990's and later embarked on the strong growth path, which was only weakly related to developments in the euro area (P.Wozniak, W.Paczynski, 2007).
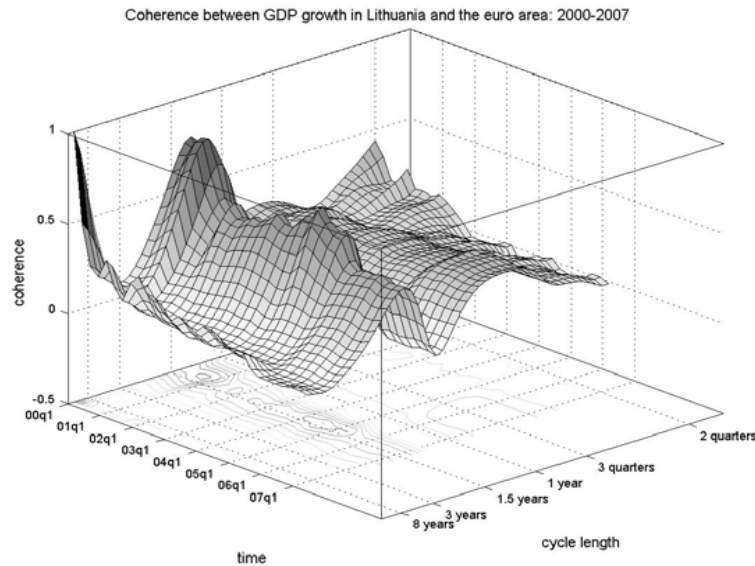
Figure 1. Apdopted from the P.Wozniak, W.Paczynski , 2007

The studying measures of output (real GDP and industrial production), the price level (and inflation), components of aggregate demand (private consumption, investment, government consumption, exports, imports), wages, employment, productivity, credit and monetary aggregates, prices, capital flows, interest rates and exchange rates in EU countries and also Lithuania 1993-2002 , some conclusions by P. Benczur, A. Rátfai (2005) were made:

a.   The private consumption in the EU is highly procyclical. The contemporaneous correlation between consumption and GDP is always positive significantly so. The main outliers are Latvia, Lithuania and Slovenia, with little persistence in consumption. Cyclicality (measured as the contemporaneous correlation between of industrial output and real GDP) of this indicator in Lithuania one of the least.

b.   Governments play a large and central role in all CEE economies: government consumption in CEE countries appears to be more volatile than in industrial countries. In addition, government spending tends to be more volatile than private consumption, and less volatile than investment in the sample. Government consumption

tends to be procyclical. Cyclicality of this indicator in Lithuania is the highest.

c.   The volatility of imports relative to GDP tends to be larger than the one for developed economies. Lithuania (and Russia) show particularly strong volatility.

d.   Private credit is dominantly lagging the cycle. In Lithuania significant negative lead correlation coefficients are followed by positive lag ones, potentially explained by the financial crisis episodes in the country.

e.   The CPI is marginally procyclical in Lithuania.

f.   Inflation is not particularly volatile in most countries.

g.   Net capital flows show very low persistence persistent, with the exception of Lithuania, they are much less persistent than net exports.

h.   Nonetheless, many countries including Estonia, Latvia and Lithuania show broadly similar cyclical behavior to developed economies (P. Benczur, A. Rátfai, 2005).

The data of the Eurostat 1996-2008 corroborates the earlier conclusions – some important cyclical indicators and tendencies are fairly different from average the EU and Euro Area.

Table 1

GDP annual percentage volume changes

	Average 1996-2000	Average 2001-2005	2006	2007	2008
Euro area 1	2.7	1.5	2.9	2.7	0.8
EU 27	2.9	1.8	3.1	2.9	0.9
Lithuania	4.7	7.8	7.8	8.9	3.0
To EU 27	1.6	4.3	2.5	3.1	3.3

Source: Eurostat

Table 2

HICP annual percentage changes

	Average 1996-2000	Average 2001-2005	2006	2007	2008
Euro area 1	1.6	2.2	2.2	2.1	3.3
EU 27	1.7	2.1	2.2	2.3	3.7
Lithuania	8.2	0.9	3.8	5.8	11.1
To EU 27	4.8	2.3	1.7	2.5	3.0

Source: Eurostat

Table 3

Unit labour costs annual percentage changes

	Average 1996-2000	Average 2001-2005	2006	2007	2008
Euro area 16	0.9	1.7	0.9	1.7	3.2
EU 27	1.7	1.9	1.0	1.9	2.6
Lithuania	7.7	1.7	10.1	10.3	10.6
To EU 27	4.5	1.1	10.1	5.4	4.1

Source: ECB calculations based on Eurostat data

Table 4

General government deficit/surplus (as a percentage of GDP)

	2004	2005	2006	2007
Euro area 1	-3.0	-2.6	-1.3	-0.6
EU 27	-2.9	-2.4	-1.4	-0.9
Lithuania	-1.5	-0.5	-0.4	-1.2
To EU 27	1.9	4.8	3.5	1.3

Source: Euro area data: CB; EU data and countries deficits/surpluses: European Commission

Table 5

General government expenditure (as a percentage of GDP)

	1995	2000	2006	2007
Euro area 1	52.8	46.3	46.7	46.2
EU 27	53.2	44.8	46.3	45.8
Lithuania	35.7	39.1	33.6	35.2
To EU 27	1.5	1.1	1.4	1.3

Source: Euro area data and EU expenditure 1995-2000: ECB

Table 6

General government debt (as a percentage of GDP)

	2004	2005	2006	2007
Euro area 1	69.6	70.2	68.5	66.3
EU 27	62.2	62.7	61.3	58.7
Lithuania	19.4	18.4	18.0	17.0
To EU 27	3.2	3.4	3.4	3.4

Source: Euro area data: CB; EU data and countries debt: European Commission

Across countries, a higher volatility of real per capita GDP growth (standard deviation of the growth rate) is associated with lower average growth rates and greater income inequality (Aizenman J., Pinto B., 2005). It means necessity of special systems of measures, solutions for Lithuanian economy so further research should be conducted in this field, especially in the unstable macroeconomic situation.

Conclusions

Due to rapid economic growth, operation of self-regulation mechanisms and alterations in the global processes, strict economic links, any change can cause a cyclical change or alter an ongoing process. In the phases of recession, with a limited period of time to make a decision turns up a necessity to ensure adequate levels of consumption and innovation, internal and external payments balance and the balance of public finances. In different countries with different economic potentials and development level, there can be various measures, including procyclical and/or countercyclical economic (fiscal, monetary) policy. Republic of Lithuania, being one of the smallest parts of the EU and world economy, has to face all external macroeconomics challenges, but has objectively limited opportunities to deal with them.

Till now Lithuania has macro economical indicators, trends and dependencies, which are not common in the EU, especially Euro area. It is therefore particular important to study patterns of co-movements between economic cycles in the euro area, to develop a well-functioning, euro-integrated forecasting of economic cyclicality, identification of interdependence between economic processes, ability to transfer forecasts to economic strategies and the effective adjustment system for domestic economics politics. Today Lithuania economy needs a coherent and credible national recovery strategy and bright vision to guide country through 2008 and future economic crises. It is necessary to create and adopt binding nominal expenditure rules, independent forecasts, to use representative to lay medium-term targets for all levels of government, constantly to observe the degree of volatility/cyclicality in government consumption, transfers, subsidies and tax revenue, to estimate the impact of government transfers to smoothing of negative (and positive too) shocks, to distinguish witch of government spending categories are most procyclical, to analyze if the benefits of spending programs, typically financed from a common resources, are equally spread among sectors and groups in the economy, and what results of possible asymmetry, to create a supportive macroeconomic environment

References

1. Alesina, A. Campante, F.R. Tabellini, G. Why is Fiscal Policy often Procycle? 2008.
Internet access: http://www.economics.harvard.edu/faulty/alesina/files
2. Aizenman, J. Pinto, B. Managing economic volatility and crises: a practitioner's guide. New York: Cambridge University Press. 2005.
3. Benczur, P. Ratfai, A. Economic Fluctuations in Central and Eastern Europe – the Facts*February, 2005. Magyar Nemzeti Bank Working paper.
Internet access: http://www.personal.ceu.hu/departs/personal/Atilla_Ratfai/data/benczur-ratfai/webpage.htm
4.Eicher, Theo S.,Schubert, Stefan F.,Turnovsk, Stephen J. Dynamic effects of terms of trade shocks: The impact on debt and growth. Journal of international money and finance.2008. Internet access : http://st.library.et2093/ summary.do?gid=1&product=WOS&SID=S1G3McGmnfn2cbPloa2 &search_mode=GeneralSearch
5. ECB Statistics. European Central Bank. Eurosystem. 2009.
6. Internet access:http://www.investopedia.com/university/conferenceboard/conferenceboard2/asp
7.Krusell, P., Mukoyama T., Sahin A.et al. Revisiting the welfare effects of eliminating business cycles. 2009. Review of economic dynamics .
Internet access : http://st.library.et2093/ summary.do?gid =1&product=WOS&SID=S1G3McGmnfn2cbPloa2 &search_mode=GeneralSearch&gid
8. Miliauskas, G. Grebliauskas, A. Political business cycles in Lithuania 1993 – 2006. LAS institute of Economics. 2007. Internet access:http://www.lb.lt/lt/leidiniai/pinigustudijos 2008_1/miliauskas.pdf.
9. Stock, J.H. Watson, M.W. Business cycle, indicators, and forecasting. Chicago: University of Chicago Press. 1993.
10. Woźniak, P. Paczyński, W. Business Cycle Coherence between the Euro Area and the EU New Member States: a Time-Frequency Analysis. 2007. Internet access: http://www.cuni.cz/pdf/gdn/RRCVI_61_paper_01.pdf

11. Zarnowitz, V. Business cycles: theory, history, indicators, and forecasting. Chicago: University of Chicago Press. 1992.

Andrus Aavik, Rasa Glinskienė, Gema Umbrasienė

Cikliškumo prolematika mažoje-atviroje ekonomikoje

Santrauka

Augant ekonomikai, veikiant savęs reguliavimosi mechanizmams, keičiantis globalizaciniams procesams, bet koks pokytis gali sukelti ciklinį pokytį arba pakoreguoti vykstantį. Didesni ekonomikų svyravimai lemia žemesnius jų augimo tempus bei didesnę pajamų nelygybę . Nuosmukio fazėse, esant ribotam sprendimų laikotarpiui, iškyla būtinumas vienu metu užtikrinti pakankamą vartojimo ir inovacijų lygį, vidaus ir išorės pusiausvyrą, subalansuoti viešuosius finansus. Atviros ekonomikos šalyse su skirtingu ekonomikos potencialu bei išsivystymu priemonės gali būti įvairios, apimančios   ir prociklinę, ir kontraciklinę ekonominę politiką. Lietuvos Respublika, būdama maža atvira sudėtine ES ir pasaulinio ūkio dalimi , susiduria su visais makroekonominiais iššūkiais, tačiau objektyviai ribotomis jų įveikimo galimybėmis. Jai būdingos netipiškos ES vidurkiams makroekonominių rodiklių priklausomybės bei tendencijos. Todėl ypač aktualu sukurti patikimai funkcionuojančią eurointegruotą ekonominio cikliškumo prognozavimo ir ekonominių procesų tarpusavio priklausomybės identifikavimo, prognozių perkėlimo į ekonomines strategijas ir savalaikio bei efektyvaus vidaus politikos koregavimo sistemą.

About the authors

Andrus Aavik, Assoc.Prof., Dr. Tallinn University of Technology.
Rasa Glinskienė, Dr.Assoc., Prof. Kaunas University of Technology Panevezys Institute Faculty of Management and Administration Department of Economics, Head of the Department, rasa.glinskiene@ktu.lt.
Gema Umbrasienė, lector Kaunas University of Technology Panevezys Institute Faculty of Management and Administration Department of Economics, gema.umbrasiene@ktu.lt.

HOW MARKETING CAN IMPROVE THE SUBJECTIVE ESTIMATION OF QUALITY OF LIFE: TWO CASES OF LITHUANIAN DEPRIVED AREAS

Liudmila Bagdonienė, Neringa Langvinienė, Rimantė Hopenienė
Kaunas University of Technology, Lithuania

Abstract

The article strives to disclose that: 1) the relation between subjective estimation of life quality and the level of development of residential place exists, and 2) impact of marketing upon subjective estimation of life quality is possible. Theoretically multidimensional aspects of life quality are analysed as well as the importance of subjective estimation of life quality is highlighted. The relation of subjective estimation of life quality and the level of the development of territories is revealed by analysing the results of the survey of the population of two deprived areas in Lithuania. The article ends with discussion how marketing activities could positively influence subjective estimation of life quality in these regions.

Keywords
Quality of life, subjective estimation, deprived area, place marketing, social marketing.

Introduction

Actuality of the paper. The governments of the EU states conceive the quality of life (QoL) of their citizens as one of central objectives. Happy people are more sociable, generous, creative, active, tolerant, healthy, altruistic, and economically productive (A well-being manifesto for a flourishing society/ New economics foundation, 2004). Satisfied and engaged people are the hallmark of a thriving society.

Lithuania as most new members of the EU pursues to improve the QoL of the people. Despite marked progress of Lithuania after independence retrieval in 1990, great and so hardly diminishing unevenness of specific regions still exist in the country. Concentration of production and services as well as investments in more developed regional centres and particularly in Vilnius, the capital of the country, increases the gap among the regions. The regions, the economical potential of which is insufficient due to weakly developed infrastructure, low possibilities to get a job, to get greater incomes and so on, lose their attraction and increase population's migration. Considering these tendencies, the Government of Lithuania in the Strategy of Regional Policy till 2013 planned to increase territorial social cohesion in the country (On Lithuanian Regional Policy Strategy till 2013, 2005). The basic goal of national regional policy is to decrease social and economical differences among and within regions as well as to promote their sustainable development. In this context the improvement of QoL is a part of regional policy. Planning, geography, sociology, economics, psychology, political science, and behavioural medicine investigate QoL as an object of knowledge. In the scientific literature more and more often a concept of QoL is related to marketing.

Thus, a ***scientific problem analyzed in this paper*** is how to improve a subjective estimation of QoL by marketing.

The aim of this paper is to disclose marketing possibilities in improving life quality in two deprived areas of Lithuania.

The object of the research is QoL of two deprived areas: Tauragė region and Visaginas.

Methods of the research are scientific literature analysis, survey, descriptive and inferential statistics.

Scientific literature analysis

QoL emerged as a concept within the Social Indicators Movement of the 1960s and questioned basic assumptions about the relationship between economics and social well-being as well as the complex nature of individual and social material and immaterial well-being (Community and Quality of Life: Data Needs for Informed Decisions Making, 2008). QoL refers to the overall level of well-being of individuals. It indicates how well people fare in several dimensions of life which reflect important societal values and goals (Quality of life in Europe. The First European Quality of Life Survey 2003).

The QoL is a very popular topic, frequently used in the daily discussions of customers and citizens about their personal needs, expectations and requirements, but very difficult to understand, lacking sense which should come from its quality definition and lacking available measurement which should come from a factual quality control process (Lepage, 2009). I. Higginson, A. Carr, P. Robinson (2003) note that there is a broad range, often overlapping, of models of QoL. These range from needs and satisfaction-based, models of live satisfaction, social well-being, etc. Concepts, theories and definitions of QoL, according to I. Higginson, A. Carr, P. Robinson (2003), are unclear and inconsistent. The complexity of conceptualizing and measuring the QoL is due to partly to its subjective nature. Despite difficulties to conceptualize and measure the QoL, the happiness, life satisfaction, life domains, social quality, and well-being are constantly on the interests of researchers and politicians. The changes in contemporary world that raises new threats and new prospects constitute a never-ending task for improving the QoL (Glatzer, Below, Stoffregen, 2004).

The goals of QoL are achieving physical, emotional and material well-being; being satisfied with life; developing positive self-concepts; enhancing personal meaning; enhancing various areas (domains) of life; enjoying life;

improving social and environmental conditions; meeting needs (Brown, Brown, 2003). It follows that QoL is complex and includes a multitude of contributory facets such as housing, education, work, environment, income and financial deprivation, health and ageing, work and the labour market, the family and social network, safety and security. A. F. Lehman (1995) notes that QoL encompasses functional status, access to resources and opportunities, and sense well-being. According to D. Felce and J. Perry (1995), the coverage of QoL may be categorized within physical well-being, material well-being, social well-being, emotional well-being and development and activity. S. C. White (2009) presents well-being as a pyramid with material, social and human at all base. She notes rising to the subjective dimensions at the apex of this pyramid. It means that people's evaluation of their QoL is subjective, changeable and depends on the circumstances they face. R.L. Schalock, D. Braddoc, M. A. Verdugo (2002) highlight the different systems and contextual factors of our life. They distinguish *microsystem* as immediate social settings (family, home, peer group, and workplace, that directly affect the person's life), *mezzosystem* (the neighborhood, community, service agencies, and organizations that directly affect the functioning of the microsystem) and *macrosystem* (the overarching pattern of culture, social-political trends, economic systems, and society-related factors that directly affect one's values, assumptions, and the meaning of words and concepts).

The QoL has an appeal as a measure of well-being of nations, communities and individuals. As it is mentioned in *A well-being manifesto for a flourishing society* (New economics foundation, 2004), promoting well-being has useful consequences for a flourishing society. The well-being at community level becomes something that happens in relationships between the collective and the individual; the local and the global; the people and the state (White, 2009). In general terms, a place as community's location consists of people plus facilities to support and sustain their needs. Functional parts include residential, commercial, industrial and administrative functions as well as recreational and social facilities, all of which are supported by infrastructure consisting of roads, railways and other transportation and communication systems, public facilities and service utilities such as water, energy and sewerage. Components include a city centre or core, residential areas, business and industry precincts each with its particular types of accommodation, amenities and infrastructure, plus educational, entertainment, recreation and lifestyle facilities (Briggs, 2009). The individual characteristics of places are vital in determining QoL. They not only have a territorial domain, but also are social constructs, shaped by human behaviour and interaction. A place is distinguished by its people, markets, governments, and institutions, as much as it is by its physical landscape and natural resources, transportation systems, buildings and boundaries (Community and Quality of Life: Data Needs for Informed Decisions Making, 2008). It means that QoL refers to citizen's satisfaction with residential environments, traffic, crime rate, employment opportunities, or the amount of open space. Character of place considers some of the same attributes as bundle of features linked to particular places. R. G. Mira, D. L Uzzell, J. E. Real, J. Romay (2005) argue that physical setting as well as the residential environment is critical for human well-being and highlight the need to study the role that housing and space play in the QoL of individuals and communities. Ch. R. Edginton, D. G. Degraaf, R. B. Dieser, S. R. Edgington (2005) note that leisure is an important social, cultural, and economic force that has great influence on the happiness, well-being, and life satisfaction of all individuals. The role of leisure professionals in society helps to improve the QoL through of quality leisure opportunities enhancing intellectual, social, physical, spiritual, and psychological well-being.

What is the relationship between QoL, marketing and places? G. Li, Q. Weng (2007) indicate the study on the QoL in the cities of both developing and developed countries is gaining interest from a variety of disciplines (such as planning, geography, sociology, economics, psychology, political science, behavioural medicine, marketing and management) and is becoming an important tool for policy evaluation, rating of places, urban planning and management. Recognizing the central role of the cities in economic and social life, nevertheless we would like to notice the growing importance in economies of other places – towns, regions, and countries. The places have had to become more entrepreneurial in an ever-increasing competitive environment, so the marketing of places is growing in scale and importance, both as a practice and as an area of academic research (Medway, Warnaby, 2008). Places marketing means designing place to satisfy the needs of its target markets. It succeeds when citizens and businesses are pleased with their communities and meet the expectations of visitors and investors (Kotler, Haider, Rein, 1993). The authors point out that the place can improve its livability by development its aesthetics quality and values, improvement and maintenance of a basic infrastructure and increasing the attractions for their own people. It is important to emphasize that local people are at the heart of their local economies. They can reinvigorate the local rural and urban economies (A well-being manifesto for a flourishing society/ new economics foundation, 2004). According to Ph. Kotler, N. Roberto, N. Lee (2002), anyone working in the area of health, safety, environment or community involvement can plan and execute more effective social marketing campaigns. Moreover, the marketing is an integral part of almost all the services that design and build the environment in which people live, work, and play (Marketing handbook for the design and construction professional: society for marketing professional services, 2000). When a place is seen as a complex, multifaceted product, the marketing concepts and processes associated with product management and innovation become relevant to managing and improving a place. Their application can be effective in improving the management of the place thereby making places more comfortable and livable for their residents and more attractive to businesses and investors. The marketing influences people's QoL in large part because it effects satisfaction in the individual life domain (Samli, 1987). M. J. Sirgy, D.J. Lee (1996) shows how marketing managers can set marketing

objectives based on the QoL concept to guide socially responsible marketing practices. P. N. Boom, G. T. Gundlach (2001) uncovered many linkages among marketing, decisions by policy makers and managers, and social outcomes. M. J. Sirgy, A. C. Samli (1995) explore the measures and methods in QoL marketing research and the impact of emerging marketing concept on policy makers. Marketing activities contribute to the social, and economic, welfare of society (Pan, Zinkhan, Sheng, 2007). For instance, marketers deliver goods and services that can satisfy unmet needs in such a way as to enhance QoL; advertising can be used for promoting desirable social aims (e.g., savings and investment, family planning), disseminating information, promoting optimistic perceptions of life, and stimulating economic activity. A wide retail network grants the consumer convenient access to commodities. To the extent to which marketing activities can be focused on social change, then marketing can be channelled toward influencing those products, services, ideas that enhance social well-being. As marketplace experiences improve or expand, QoL increases.

Thus the role of marketing can be viewed as a social change agent. But it is very important to understand the marketing variables that can or cannot influence subjective well-being. If such knowledge is available, policies can be directed toward facilitating business activities and in the same time to enhance QoL.

Research methodology

Firstly it should be noted that only **subjective estimation** of QoL was done. No objective indices describing the QoL were analysed. A survey is descriptive and a method of primary data gathering was questionnaire in written form.

Two deprived areas – Tauragė region and Visaginas – as an object for evaluation were chosen. A selection of Tauragė region and Visaginas is not based on administrative district, but more on geographical point of view. Tauragė region includes Tauragė, Šilalė, Jurbarkas, Pagėgiai. Visaginas was analysed one, as other related territories, included to the same region as Visaginas are not attributed to the deprived area.

A deprived area, referring to Lithuanian law (Lithuanian Republic Regional Development Act, 2000), *is a territory with specific social and economic problems matching the criteria confirmed by Government of the state*. Mostly deprived areas are not able to provide their residents and business units, non-commercial structures with all necessary services. Deprived areas are usually called as territories with high level of unemployment, low level of labour activity, high level of emigrating to other districts or even abroad, small part of GNP, comparing with the average of the country; high percentage of retirees, welfare recipients comparing to labouring and paying taxes, etc. (On criteria for deprived area, 2003, 2006; On deprived area, 2007). Tauragė region as an object for the research was chosen as it is a district with low level of urbanization, decreasing population; a region with high rate of shadow economics, etc. Visaginas is a town, with higher level of urbanization, comparing to Tauragė district. However, ending the existence of nuclear power station in Ignalina, the town near Visaginas, brought up a lot of problems for unemployed people and their sense of social security in the future.

Non-random selection was planned. Research sampling consisted of residents from Tauragė region and Visaginas. 385 respondents of Tauragė district and 473 of Visaginas have returned questionnaires.

Design of questionnaire was constructed taking into account that the basic premise is that evaluation of QoL is functionally related to satisfaction with all of life's domains and sub-domains. With respect to the exogenous variables – satisfaction with housing, security, transport infrastructure, education, culture level and possibilities for leisure time, relationship with government, relationship with surrounding – multiple indicators were used.

Estimation of housing involves several items (7): estimation of cleanness of living environment, estimation of living conditions, estimation of changes in surrounding area during the past several years, etc. *Estimation of security* involves the following (2): whether respondents feel safe themselves, whether various means of safety are at satisfactory level (lighting of streets, watch of policemen, etc.). *Estimation of transport infrastructure* (3) was evaluated according to public transport situation, zones of pedestrian, evaluation of all transport system in the region. *Education* (4) is described by estimation of sufficiency of schools, high schools, and the quality of educational services provided for a child, young people. Possibilities to re-qualify are estimated, too. *Estimation of culture and leisure time* involves the following items (8): estimation of sufficiency of culture units, estimation of cultural life, estimation of possibilities for active or passive leisure time, a supply of services related to free time of residents. *Relationship with government* involved the following (5): estimation of a sufficiency of information about various activities, estimation of job quality of municipality employees and their reaction to complaints of residents. *Estimation of relationship with surrounding area* is described by the following (5): advantages and disadvantages of the area identified by respondents, a prognosis for the future related to the area. The estimation of dimensions was done by three-score scale, while 1 – "bad", 2 – "fair-to-middling", 3 – "very well". The only item – a quality of municipality work was estimated in four-score scale, where 1 – "bad", 2 – "satisfactory level", 3 – "fair-to-middling", 4 – "very well".

Each block of dimensions had questions related to respondent's position about that: *who is responsible for* problems arising in the surrounding area, housing, insecurity in a region, lack of education, culture or entertainment units, etc. Who should take actions on viewpoint of respondents: *municipality, business units, or themselves*?

Demographic and socio–economic questions describing the respondents were designed at the end of the questionnaire.

Methods of the survey. Data were electronically recorded and then subsequently coded and transferred into an SPSS 13.0 file for purposes of analysis.

Two layers of analysing data were chosen – how respondents estimate their QoL depending on: 1) how

long they have been living here: longer or shorter; 2) what their general opinion about their future in relation to this area is – whether they want to relate themselves to this indicated territory, or not; whether they are going to live here further or whether they are looking for possibilities to move to other district, other region.

Hypothesis upon the two criteria were checked using chi quadrant (χ^2) criterion (Čekanavičius, Murauskas, 2000). Hypothesis upon the two independent samples variables equability were checked using Mann-Whitney criteria (Čekanavičius, Murauskas, 2002). A relation between range variables was checked upon Spearman's correlation coefficient. A relation was identified as "very weak" in case if a mean (R_s) was not larger than 0.1, "weak" in range form 0.1 to 0.4. "Fair-to-middling" coefficient was described if a value was 0.4-0.6; "strong" – from 0.6 to 0.8, "very strong" – more than 0.8. For survey of hypothesis a level of importance 0.05 was chosen. Hypothesis were rejected (differences were identified as statistically reliable ones) in case if calculated p mean was not larger as 0.05.

Findings of the survey

On the ground of the subjective estimation of the QoL of citizens of Visaginas and Tauragė, the main findings are presented below. General characteristics of respondents are presented below (Table 1).

Table 1

General characteristics of respondents, %

Feature	Group of residents	Tauragė	Visaginas
Sex	Male	29	31.2
	Female	71	68.8
Duration of living in the area, years	Under 1	0.3	1.9
	2–5.	6.0	4.3
	6–10	7.3	9.4
	Over 10	86.5	84.4
Age	16-29	18.7	21
	30-44	53	43.6
	45-64	26.3	32.7
	Over 65	1.8	2.5
Family status	Unwed	14.9	20.4
	Married	73.1	62.6
	Widow/ widower	4	4.3
	Divorce	8	12.7
Social group	Agriculturists	2.7	0.9
	Employed	72.8	80.2
	Employer	9.4	6.1
	Pensioner	3.2	4.3
	Disabled	5.1	1.1
	Student, pupil	6.7	7.4

Having performed the analysis of demographic data of the respondents of Tauragė and Visaginas regions, it was identified that two thirds of the respondents consisted of women and employed people. Most respondents are from 30 to 64 years old and have lived in these regions for more than 10 years. It is possible to state that the respondents have considerable experience and are able to disclose present QoL in the regions.

Estimations of the respondents of Tauragė and Visagnas regions differ statistically reliably in evaluating the dimensions of QoL. It should be pointed out that, when the respondents had evaluated the distinguished dimensions of QoL, it was identified that the population of Tauragė region estimate QoL worse in comparison to the respondents of Visaginas region (Figure 1).

Statistical analysis indicated that evaluation of QoL did not correspond to demographical features of the

respondents: family status, sex and age. The opinion of respondents was statistically reliably different depending on living time in the region and on general view of respondents to the native town – it is a wish to stay here or to leave as soon as possible (Table 2).
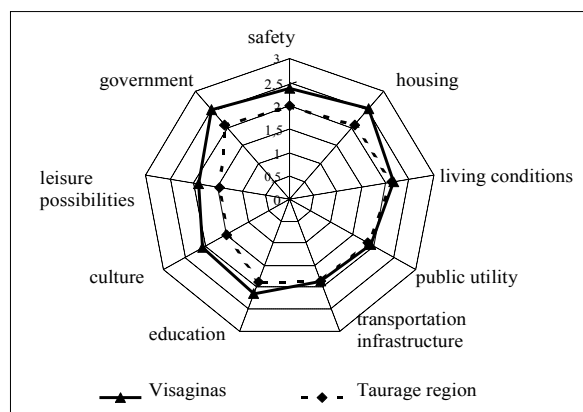
Figure 1. Means of QoL evaluation on the viewpoint of the Tauragė and the Visaginas respondents

The findings show the statistically reliable differences in evaluation of Tauragė and Visaginas exogenous variables describing the QoL.

Table 2

QoL variables valuation by the respondents of Tauragė and Visaginas, Spearman's correlation coefficients

Variables Valuation		Tauragė		Visaginas	
		Living time	General opinion	Living time	General opinion
Safety	Attitudes	0.031	**0.163****	0	0.056
	Obstacles	-0.014	**-0.097****	-0.002	-0.008
Housing	Attitudes	-0.004	**-0.100****	-0,08	**0.102***
	Obstacles	-0.01	-0.029	0.016	-0.088
Living conditions	Attitudes	0.035	**0.144****	**0.154****	**0.156****
	Obstacles	-0.024	-0,037	0.029	-0.026
Transport infrastructure	Attitudes	**-0.080****	**-0.065***	0,004	**-0.099***
	Obstacles	**-0.066***	**0.079****	-0.041	0.097
Education	Attitudes	-0,016	**0.065***	-0.088	-0.044
	Obstacles	-0,016	**0.065***	-0.004	0.012
Culture	Attitudes	-0,029	**-0.165****	-0.044	**-0.105***
	Obstacles	**-0.068****	**0.184****	0.04	**0.102***
Leisure possibilities	Attitudes	**-0.078****	**0.242****	-0.018	**0,159****
Government	Attitudes	**-0.052***	**-0.058***	0.089	-0.014
	Obstacles	-0.019	**0.082****	0.017	**0.138****
Public utility	Attitudes	-0.018	0.036	-0.035	-0.047

** Correlation is significant at the level of 0.01 (two-tailed)
* Correlation is significant at the level of 0.05 (two-tailed)

By means of the research data the level of correlations was obtained, i.e. it was p≤0.05 (p≤0.01), thus with the guarantee of 95% (in some cases 99%) it is possible to state that estimation of the QoL dimensions is statistically reliably related to the duration of the respondents' living in the region and the wish to stay to live here. The negative correlation shows that when duration of living and wish to stay to live in the region increases, the respondents see less problems, worse evaluate the dimensions determining QoL (e.g., *transport infrastructure, culture, government*), whereas the positive correlation shows that the respondents positively estimate the distinguished dimension of QoL and see less problems (e.g., *safety*).

The viewpoint of the Tauragė and the Visaginas respondents to their living area differ statistically reliably. The respondents of Visaginas more often mentioned the wish to stay and live in the region (47.5%) comparing to the Tauragė respondents (33.2%). It should be noted that 50.4% of the Tauragė respondents have not decided yet about their stay here longer. The undecided respondents in Visaginas made 36.4%. Obviously, excluded factors are not the most urgent factors for respondents taking decisions to stay to live here or not. A lot of other reasons could be taken into account: fine job place, family, no perspectives to settle in another place, etc.

In estimating the QoL variable – *security*, depending on wish to live here further, the respondents of Visaginas (45.6%) marked that they felt themselves rather safe (mean of estimation 2.37). Only 24.9% of the Tauragė respondents feel totally safe. A mean of evaluation of safety in Tauragė was 1.99 score. Thus a conclusion could be drawn that the respondents of both areas feel themselves partly safe. As the reasons for weak estimation of safety the Tauragė respondents mentioned mostly *not suitable watch of policemen* (response rate 62.3%), *rowdy behaviour of young people* (response rate 53.4%). The respondents of Visaginas feel unsafe mostly because of *poor lighting of streets* (response rate 77.7%), *not suitable watch of policemen* (response rate 66.7%), *rowdy behaviour of young people* (response rate 54.9 %).

The estimation of *housing and living conditions* by the Tauragė and the Visaginas respondents differ statistically reliably. The Visaginas respondents better evaluate *cleanness of a living area and town* (mean of estimation 2.53). The larger part of the Tauragė region's respondents (69.8%) indicates that the surrounding area is clean only fair-to-middling (mean of estimation 2.07). Main reasons why the respondents of Visaginas (response rate 90.7%) and Tauragė region are dissatisfied (response rate 83.5%) are *uncared green zones*. However the opinion because of other failings of cleanness of surrounding was different. The respondents of Visaginas were complaining about *untidy streets* (response rate 86.7%) and *disarray near dumpsters* (response rate 79.2%). The main reasons mentioned by the Tauragė respondents were: *untidy streets* (response rate 75.6%), *results of vandalism* (response rate 64.3 %), and *the lack of litterbins* (response rate 57%).

Opinions on living conditions of the Visaginas and Tauragė respondents partly coincided (respectively the means 2.17 and 2.14). The respondents who have been living longer and who were wishing to stay here better evaluated the *living house conditions*, too. Fair-to-middling living conditions were estimated by 77.7% of the Tauragė and 73.3% of the Visaginas respondents; excellent 18.6% of the Tauragė and 22% of the Visaginas respondents.

It is noticeable that opinions of the respondents differ depending on living in an own house or a state flat. 50% of the Tauragė and 66.4% the Visaginas respondents have been living in their own houses, while 4.9% of the Tauragė and 10.3% of the Visaginas respondents – in state flats. Living conditions were better evaluated by the respondents who had been living in their own houses or flats (mean of estimation is 2.24 of Tauragė, Visaginas 2.08). Living conditions by the Visaginas region's respondents were evaluated better than of the Tauragė respondents.

It should be noticed that housing and living conditions were evaluated worse by the respondents living here shorter and wishing to leave the area (Table 2). The respondents identified reasons of unsatisfied housing. The problem mostly identified as a reason for dissatisfaction of the Tauragė and Visaginas respondents with living conditions is *miserable intercourse with neighbours* (response rate 97.5%). The respondents from Tauragė marked that they had been living in a *bad district* (response rate 92%); a *dwelling house was poorly tided and served* (response rate 90.4%); *landings were unclean* (response rate 86.1%), *accommodation place was too small* (response rate 88.2%). The Visaginas respondents marked the same reasons as in Tauragė. However these reasons were mentioned rarely.

Recommendations by the respondents for improving the situation of dwelling houses were also given. Most residents of these two areas suggested *renovating elevators* (response rate 91.1% of the Tauragė and 86.2% of the Visaginas respondents), *tiding a lighting of co-usage premises* (response rate 77.5% and 79.7%), *reconstructing heating systems* (response rate 65.4% and 65.4%), *roofs* (response rate 58.4% and 57%). The Visaginas respondents wish to *heat dwelling houses with isolation material dwelling houses* (response rate 58.7%), *reconstruct facades* (response rate 56.1%).

The evaluation of housing and living conditions is closely linked to *quality of job of utility services providers*. It is noticeable that statistically reliable differences are visible in evaluation of utility services quality in both areas. The respondents from Tauragė evaluated the work of utility service providers by 1.84 score, meanwhile the Visaginas respondents evaluated the work of these services providers better – it is 1.94 score.

It should be noted that residents state that living conditions improved during past five years (mean of estimation 2.46 score of the Tauragė respondents, Visaginas – 2.39 score). A positive correlation between evaluation of positive change of living conditions and a wish to stay living here has been got (Spearman's rho 0.161**).

In evaluating *transport infrastructure* problems the opinions of both regions were similar. It should be observed that the respondents who were inquired and who lived longer in the surveyed region see problems in public transport system and estimate the situation worse. The majority of public transport problems, according to the respondents, are related to *badly planned tracks* (response rate 84.9% of the Tauragė respondents, 86.2% of the Visaginas respondents) and *inconvenient schedule of transport* (response rate 71.1% of the Visaginas respondents), *discourteous drivers* (response rate 87.8% of the Tauragė sample, 86.5% of the Visaginas sample), *old transport means* (response rate 66.5% of the Tauragė respondents). The respondents evaluating problems of public transport system also excluded difficulties arising for pedestrian security: *the lack of pedestrian zones, defective traffic lights, uncontrolled crossroads, poor lighting of streets*, etc. The problems mentioned by respondents determine that both the respondents from Tauragė and Visaginas regions evaluate the system of

public transport only *fair-to-middling* (respectively, response rate 81.8% of the respondents from Tauragė region, and from Visaginas – 72.8%).

Education and re-qualification possibilities are one of the most important QoL items. The estimation of the work of child and youth educational institutions in Tauragė and Visaginas as well as possibilities to get a qualification or to upgrade it in the living area of the respondents differs statistically reliably.

By the Tauragė respondents this item was evaluated by 1.89 score, while the respondents from Visaginas – by 2.13. The municipality of Tauragė should take into account the lack of educational institutions that was marked by a large part of the respondents (39%). The respondents from Tauragė suppose that there is a small number of kindergarten institutions in the area, just 43.1% of them suppose that a number of these institutions is enough, while 79.7% of the respondents from Visaginas suppose that a number of child and youth education institutions is satisfactory and 5.9% – it is not.

The populations of these two areas do not complain about the lack of secondary schools (respectively response rate 78.7% and 87%). However the respondents who thought that the lack of secondary schools existed were twice more in Tauragė (9.8%) than in Visaginas (4.1%). Comparing to the respondents from Visaginas, the respondents from Tauragė marked trice more the lack of sport, music schools (respectively 36.4% in Tauragė and 12.6% in Visaginas), four times more the lack of high schools (respectively 14.4%, and 3.6%).

The quality of child and youth educational institutions was evaluated fair-to-middling by 82.1% of the Tauragė and 75% of the Visaginas respondents, badly by 14.2% of the Tauragė and 19.1% of the Visaginas respondents. The criteria for evaluating the quality of these institutions upon the residents of the surveyed area are presented in Table 3.

Table 3

Criteria of quality of child and youth education in Tauragė and Visaginas, %

Criteria	Tauragė, %	Visaginas, %
Rate of successful entry of youth to higher schools	83.1	71.1
Accessibility of services	81.8	83.7
Safety of child and youth at educational institutions	67	74.1
Competence of educational staff	44.9	40.9
Personal skills of educational staff (attention, solicitude, responsibility)	60.7	59.3

Possibilities to qualify or to improve the qualification were estimated as fair-to-middling (32.9%) by the Tauragė and 21.9% the Visaginas respondents. A half of the Visaginas respondents and one third of the respondents of Tauragė region negatively evaluated possibilities for re-qualification.

Positive or negative impact on estimation of QoL has ***a culture life***, ***possibilities for leisure time***. The respondents of both areas, who express a stronger wish to stay in their living area, estimate their cultural life as of unsatisfactory level, correlation ratio is reliably different for both regions (Table 2). The respondents from Tauragė and Visaginas who have been living longer in this area estimated their cultural life more positive.

The respondents from both areas mentioned the *lack of theatres*. The opinions of the respondents from Tauragė regions and Visaginas regions on the sufficiency of exhibition and concert halls, cinemas and recreation centres differed. The respondents from Tauragė more often mentioned a *deficit of museums* (response rate 59.8%; while the respondents from Visaginas – 35.7%), *cinemas* (response rate 54.7%, while Visaginas – 16.3%), *recreation centres* (totally absent response rate 39.2%, not enough 22.9%). The respondents from Visaginas are more satisfied with *recreation centres (*totally absent response rate 3.5 %, not enough 17.6%). The similar number of the Tauragė respondents mentioned the lack of *exhibition and concert halls* (response rate 61%; Visaginas – 42.1%). 76.7% of the Visaginas respondents estimated their culture life as fair-to-middling and 14.1% of them – as very well. The Tauragė respondents suppose that their culture life is poor (52.9%) or fair-to-middling (44.5%).

Opinions about what should be done in order to change the situation were similar. The respondents suggest *renovating objects of the culture, infrastructure, as well as processing of information* (Tauragė – 100%, Visaginas – 96.6%), *coordinating prices for culture events in relation to quality* (respectively response rate 98.1%, 96.1%), *motivating employees of culture, municipality enterprises* (respectively response rate 96.2%, 95.6%).

Evaluating the possibilities to spend free time was different. Visaginas residents evaluated better possibilities for leisure time (mean score 1.9), comparing to Tauragė (mean score 1.45). The respondents from Tauragė worse evaluate alternatives for spending their leisure time (response rate 56.2%). The respondents from Visaginas estimated a possibility for fine leisure time as follows: fair-to-middling (response rate 69.3%) or even well (response rate 10.6%). Alternatives for leisure time in both areas were similar. 80-90% of the respondents go in for sports and attend libraries, disco. However they more seldom meet their friends in cafes (response rate: Tauragė – 71.4%; Visaginas – 63.5% Visaginas). Wishing to spend their free time, the respondents desire that more possibilities to use the Internet would be available, new cafés or pizzerias could be available (94% - Tauragė and 92.8% -Visaginas). The respondents from Visaginas more often mentioned new swimming pools (81.2% - Visaginas and 42.4% - Tauragė). Sport places, clubs, cycling paths were mentioned by the respondents from both areas similarly.

Referring to the findings it should be noted that QoL of Tauragė and Visaginas residents is decreased by a lack of culture, leisure time and other various services. The respondents from Tauragė mentioned much more deficits; they evaluate possibilities for culture and free time worse than the respondents from Visaginas. Culture life by the respondents from Tauragė was estimated less than fair-to-middling (mean of estimation 1.5 score), while the respondents from Visaginas – better: the score is 2.05.

Evaluating the QoL, **a relationship with government** is doubtless urgent. The respondents of Tauragė and Visaginas evaluated sufficiency of information about various events, plans of Municipality activity for future, estimation of work quality of municipality employees and their reaction to complaints of residents. It should be

observed the statistically reliable differences between opinion of Tauragė and Visaginas respondents about quality of municipality employees job (Figure 1). The respondents from Tauragė region estimated the work of municipality employees worse: fair-to-middling 65.7%, well 16.8% and bad 14.9%. The respondents point out that municipality employees of this region most often hardly react to their complaints (74.5%) and do not react at all (11.6%) while Visaginas residents better evaluate the work of municipality employees (fair-to-middling 51%, well 40% and very well 6%). The respondents from Visaginas (35.9%) enjoy that municipality employees expedite solutions of residents' problems. The work of municipality employees was evaluated according to the available information about events in the area. According to the respondents from Tauragė and Visaginas, they have *not enough information about the activity of municipality of the town* (respectively response rate 72.4% and 54.4%), *about future perspectives* (response rate 79.8% and 69.2%).

In order to improve the quality of job of municipality, the respondents of Tauragė (62.8%) and Visaginas (61%) suggest arranging information about future plans and employing more competitive people (response rate 45.4% and 53.4%). Thirdly, the respondents of both areas mentioned a wish for closer cooperation with municipality employees.

The respondents declare their opinion about **who is responsible for various problems** related to subjective items of QoL. The residents themselves as well as the institutions that should provide better conditions by arranging purposeful and cultural rest as well as leisure time should be responsible for *living conditions, cultural life or alternatives for leisure time*. The findings of the survey show that residents are deliberate and understanding that government or municipality of the region could not take responsibility for better QoL of their people alone.

Summarizing the findings of two deprived areas, we are able to say that QoL is worse evaluated by Tauragė region. Visaginas residents more optimistically evaluate their living conditions. They more seldom want to leave from their living town as they feel here rather safe, have better conditions for education, more possibilities to qualify, alternatives for leisure. They also more trust the quality of municipality employees' work than Tauragė respondents. Advantages and disadvantages of the region, which the residents of both areas mentioned are statistically reliably different.

The respondents from Tauragė region and Visaginas similarly evaluate the possibility to shop and positively estimate the infrastructure of the areas. As an advantage of living area the respondents from Tauragė indicate fine surrounding of a town. Visaginas residents mark good geographical location of the area. The respondents mentioned the problems of traffic planning, poor situation of crime prevention in the region as main disadvantages in both areas.

Marketing in quality of life improvement

How marketing could improve the subjective estimation of QoL of the surveyed area? Firstly it should be noted that Lithuanian, the EU territory as many other world countries, regions, towns or smaller places compete for attraction of investments, specialists, tourists or *good* people. It is impossible to win in this competition market without marketing. The application of marketing concepts and tools to place management has already become a reality in a wide variety of countries. Understanding the situation a majority of Lithuanian municipalities prepare strategic plans being marketing-oriented. Marketing as an organizational function and set of processes for creating, communicating, and delivering value to customers, obligate that all priorities of objective markets should be included into a strategic plan – priorities of investors, export markets, tourists, and obviously citizens, as well as means implementing them. It is very important that scheduling the goals of territory development, range, duration of its implementation as well as citizens of these territories should be engaged. Thus they become not only observers and critics of government institutions' actions but also participants of current processes. It could be obtained by social marketing programmes, which change behaviour of citizens, it stipulates them to get engaged in development of living place through tiding the surrounding, keeping the peace, organizing the valuable leisure time and other activities. Usually people, who joint to well being of living area by specific jobs, much better estimate their QoL, too. They understand that only cooperation between politicians and community makes possible to create general preconditions for successful development of the territory, it is for improvement of QoL. Strengthening of identity is one more important marketing function contributing to impacting subjective estimation of QoL. Places have long felt a need to differentiate themselves from each other, to assert their individuality in pursuit of various economic, political or socio-psychological objectives. The conscious attempt of governments to shape a specifically-designed place identity and promote it to identified markets, whether external or internal, is almost as old as civic government itself. Thus any consideration of the fundamental geographical idea of sense of place must include the deliberate creation of such senses through place marketing. While a speech is going about the identifying, it is very urgent to exclude to whom the identification is done. Thus in summarizing we should note that it is necessary to display advantages of living area by means of marketing communication.

Conclusions

Happy and satisfied people are the accent of a prosperous society thus QoL is one of central objectives in every state. The goals of QoL to be achieved are physical, emotional and material well-being, being satisfied with life, enhancing various domains of life, improving social and environmental conditions etc. It follows that QoL is complex and includes a multitude of contributory facets such as housing, education, work, environment, income and financial deprivation, heath and ageing, work and the labour market, the family and social network, safety and security. The QoL has an appeal as a measure of well-being of nations, communities and individuals. The level of development of states, regions, towns as well as

indicators of QoL objectively reflecting it differs very much. People's evaluation of their QoL is subjective, changeable and depends on the circumstances they face.

The regions of Tauragė and Visaginas are attached to the category of deprived territories in Lithuania. The summarizing result of the research is that the respondents of Visaginas region better estimate their QoL. The respondents of Visaginas estimate best dimensions of safety and government, and worst – dimensions of transport infrastructure, public utility and living conditions QoL dimensions. In estimating the latter dimensions, very insignificant differences were identified. The greatest differences are in estimating the dimensions of culture and leisure of QoL. It is also identified that the duration of respondents' life within their living area determines their positive viewpoint to this place and estimations of particular dimensions of QoL. The respondents living for a longer period of time more favorably estimate their living area; and, though they mention more problems related to particular dimensions of QoL, they estimate them better. It is necessary to point out that the respondents of both surveyed regions mention similar problems (safety, housing and living conditions, public transport, culture and leisure, etc.) reducing their QoL. This allows drawing a premise that deprived territories face similar difficulties.

Marketing can positively influence subjective estimation of the QoL in the surveyed deprived regions. First of all this influence manifests so that strategic plans of the development of these territories must reflect how needs and expectations of the population would be met. In other words, in the strategy for territory development the population should be treated as the most important target group of the place. In order to meet needs of the population, the responsible institutions of the places search for and attract investments, induce development of business, especially tourism, etc. The places improve their livability by development of their aesthetics quality and values, improvement and maintenance of the basic infrastructure and increasing the attractions for their own people. Marketing activities and tools can expediently influence involvement of the population of the surveyed regions into activities, which would positively impact their well-being. Such activities are strengthening of the identity with the living place and reduction of negative influence of the image of the deprived territory. The marketing as practice for places revitalization succeeds when its residents derive satisfaction from their community.

References

1. A well-being manifesto for a flourishing society/ New economics foundation, 2004. Internet WWW page, URL: http://www.neweconomics.org/gen/uploads/21xv5yytotlxxu322pmyada205102004103948.pdf, (version current as on 18th of June, 2009).
2. Briggs, M. J. Innovation and the city: a macromarketing approach to industry development/ Marketing Intelligence & Planning, 2009, Vol. 27, No. 2, pp. 233-245.
3. Brown, I., Brown, R. I. Quality of Life and Disability: an Approach for Community Practitioners. Jessica Kinsley Publishers, 2003, 272 p.
4. Čekanavičius V., Murauskas, G. Statistika ir jos taikymai. 1.Vilnius, TEV, 2000. 239 p.
5. Čekanavičius V., Murauskas, G. Statistika ir jos taikymai. 1.Vilnius, TEV, 2002. 268 p.
6. Challenges for quality of life in the contemporary world: Advances in quality-of-life studies, theory and research. Ed. by Wolfgang Glatzer, Susanne von Below & Matthias Stoffregen. Dordrecht: Kluwer Academic Publishers, 2004, 354 p.
7. Community and Quality of Life: Data Needs for Informed Decisions Making. National Academies Press, 2008, 202 p.
8. Dėl Lietuvos regioninės plėtros politikos iki 2013 metų strategijos = On Lithuanian Regional Policy Strategy till 2013. LRV 2005 05 23 nutarimas Nr. 575, 2005.
9. Dėl probleminių teritorijų = On deprived area. LRV 2007 01 31 nutarimas Nr. 112, 2007.
10. Dėl probleminių teritorijų išskyrimo kriterijų = On criteria for deprived area. LRV 2003 04 08 nutarimas Nr. 428, 2003.
11. Dėl probleminių teritorijų išskyrimo kriterijų = On criteria for deprived area. LRV 2006 01 31 nutarimas Nr. 96, 2006.
12. Edginton, Ch. R., Degraaf, D. G., Dieser, R. B. & Edginton, S. R. Leisure and life satisfaction. Foundational perspectives. New York: MCGraw Hill, 2005, 512 p.
13. Felce, D., Perry, J. Quality of Life: Its Definition and Measurement/ Research in Development Disabilities, January-February 1995, Vol. 16, No. 1, pp. 51-74.
14. Handbook of marketing and society. Ed. by Paul N. Boom & Gregory T. Gundlach. Thousand Oaks: Sage Publications, 2001, 519 p.
15. Higginson, I., Carr, A., Robinson, P. (eds). Quality of Life. Oxford University Press. Annuals of oncology, 2003, Vol. 14, No. 3, pp. 503-203 (1).
16. Jayne, M. 7 Cities and Consumption. Oxon: Routledge, 2006, 244 p.
17. Kotler, Ph., Haider, D. H., Rein, I. Marketing places. Attracting investment, industry, and tourism to cities, states, and nations. New York, The Free Press, 1993, 388 p.
18. Kotler, Ph., Roberto, N., Lee, N. Social marketing. Improving the quality of life. Thousand Oaks: Sage Publications, 2002, 420 p.
19. Lehman, A. F. Measuring quality of life in a reformed health system/Health Affairs, 1995, Vol. 14, No. 3, pp. 90-101.
20. Lepage, A. The quality of life as attribute of sustainability/The TQM Journal, 2009, Vol. 21, No. 2, pp. 105-115.
21. Li, G., Weng, Q. Measuring the quality of life in city of Indianapolis by integration of remote sensing and census data. International Journal of remote Sensing, 2007, Vol. 28, No. 2, pp. 249-267.
22. Lietuvos Respublikos regioninės plėtros įstatymas = Lithuanian Republic Regional Development Act. LRV 2000 07 20 Nr. VIII-1889.
23. Marketing and the quality-of-life interface. Ed. by A. Coscun Samli. New York, Quorum Books, 1987, 368 p.
24. Marketing Handbook for the Design and Construction Professional: Society for Marketing Professional Services. BNi Publications Inc., 2000, 473 p.
25. McCann, E. J. 'Best Places': interurban competition, quality of life and popular media. Urban studies, 2004, Vol. 41, No. 10, pp.1909-1929.
26. McCann, E. J. 'Best Places': interurban competition, quality of life and popular media. Urban studies, 2004, Vol. 41, No. 10, pp. 1909-1929.
27. Medway, D., Warnaby, G. Alternative perspective on marketing and the place brand/ European Journal of marketing, 2008, Vol. 42, No. 5/6, pp. 641-653.
28. Mira, R. G., Uzzell, D. L., Real, J. E., Romay, J. (eds.). Housing, Space and Quality of Life. Cambridge University Press, 2005, 175 p.
29. Pan, Y., Zinkhan G. M., Sheng, S. The Subjective Well-Being of Nations: A Role for Marketing? Journal of Macromarketing, December 2007, Vol. 27 No. 4, pp. 360-369.
30. Peterson, M., Ekici, A. Consumer Attitude toward Marketing and Subjective Quality of Life in the Context of a Developing Country. Journal of Macromarketing, 2007, Vol. 27, No. 4, pp. 350-359.

31. Quality of life in Europe. First European Quality of Life Survey 2003. Luxembourg: Office for Official Publications of the European Communities, 2004. Internet WWW page, URL: http://www.eurofound.europa.eu/pubdocs/2004/105/en/1/ef04105en.pdf (version current as on 16th of June, 2009).
32. Rhillips, R. Concept Marketing for Communities. Capitalizing on Underutilized Resources to Generate Growth and development. Westport: Praeger Publishers, 2002, 296 p.
33. Schalock, R. L., Braddoc, D., Verdugo, M. A. (eds). Handbook on Quality of Life for Human Service Practitioners. Washington: American Association on Mental Retardation, 2002, 429 p.
34. Sirgy, M.J., Lee, D.-J. Setting socially responsible marketing objectives: a quality-of-life approach. European Journal of Marketing, 1996, Vol. 30, No. 5, pp. 20-34.
35. Sirgy, M.J., Samli, A.C. New Dimensions in Marketing/Quality-of-Life Research, Quorum Books, Westport, CT, 1995, 400 p.
36. White, S.C. Analyzing Wellbeing: A Framework for Development Practice. Working Paper. Bath: University of Bath/Wellbeing in Developing Countries Research Group, (WeD Working Paper 09/44), 2009. Internet WWW page, URL: http://opus.bath.ac.uk/13944/ (version current as on 19th of June, 2009).

Liudmila Bagdonienė, Neringa Langvinienė, Rimantė Hopenienė

Kaip marketingas gali pagerinti subjektyvų gyvenimo kokybės vertinimą: du Lietuvos depresinių regionų atvejai

Santrauka

Straipsnyje siekiama atskleisti, kad: 1) egzistuoja gyvenimo kokybės subjektyvaus vertinimo ir gyvenamosios vietos išsivystymo lygio ryšys, ir 2) galimas marketingo poveikis subjektyviam gyvenimo kokybės vertinimui. Teoriniame lygmenyje nagrinėjamas gyvenimo kokybės daugiadimensiškumas ir išryškinama individo gyvenimo kokybės subjektyvaus vertinimo svarba. Teritorijų išsivystymo lygio ir gyvenimo kokybės subjektyvaus vertinimo ryšys atskleidžiamas analizuojant dviejų Lietuvos depresinių regionų gyventojų apklausos rezultatus. Straipsnis baigiamas aptarimu, kaip marketingo veiklos galėtų teigiamai paveikti subjektyvų šių regionų gyvenimo kokybės vertinimą.
Raktiniai žodžiai: gyvenimo kokybė, vietos marketingas, socialinis marketingas, depresinis regionas, gyvenimo kokybės vertinimo rodikliai.

About the authors

Liudmila Bagdonienė, prof., dr. of Social Science (Management and Administration), Kaunas Technological University, Lithuania. E-mail: liudmila.bagdoniene@ktu.lt., phone.: +370 37 300124, mob. tel.: +370 698 86594. Research interests: business processes of organisation services, relationship of market participants, management of consumers' experience, services' innovations, local marketing and social marketing.
Neringa Langvinienė, assoc. prof., dr. of Social Science (Management and Administration), Kaunas Technological University, Lithuania. E-mail: neringa.langviniene@ktu.lt, +370 37 300127, mobilus tel. +370 618 61169, Research interests: services' internationalisation and competitive ability, services and innovations, services' development and its sponsorship.
Rimantė Hopenienė, lecturer, master degree of business administration, Kaunas Technological University, Lithuania. E-mail: rimante.hopeniene@ktu.lt, +370 37 300125, mob. Tel.: +370 686 93966, Research interests: business system, service marketing, relationship of market participants and collaboration quality, local marketing, tourism management.

THE DEVELOPMENT OF CAREER COMPETENCES THROUGH VOLUNTARY WORK

Aistė Baronaitė, Margarita Teresevičienė

Vytautas Magnus University, Lithuania

Abstract

Voluntary work is perceived as one of the most modern form of informal education, promoting young people's initiative, social participation, voluntary engagement and active citizenship, provides the opportunity for young people to develop a number of competences, improve self- confidence and feel responsible for their future. Qualitative research method was used in the study to reveal students' opinions about career competences developed through voluntary work. Students of two different non- governmental organizations in United Kingdom and Lithuania participated in a semi - structured interview examining career competences that are developed through voluntary work and methods used for their development.

Keywords
Career development, career competences, voluntary work

Introduction

Permanent changes in social and work environments, globalisation and significant advances in technology have created the need for continual career development requiring knowledge, skills, life-long learning and personal development.

As a result a lot of research has been carried out about students' career–related barriers (Creed, Patton, Prideaux, 2007; Lent et al, 2002), relation between leisure and career development (Munson & Savickas, 1998), career adaptability and career concerns in young adults (Creed, Fallon & Hood, 2009). According to Laker ir Laker (2007), Creed et al. (2007), most students are uncertain about how to establish a professional career. Many of those entering the workforce are poorly informed about potential careers, opportunities for career advancement, or what their specific skills and interests are. Low levels of exploration have been linked to delayed vocational identity formation (Robitschek & Cook, 1999), having unrealistic career expectations (Stumpf & Hartman, 1984), and difficulties settling into a career. The following solutions to these problems were discussed: to integrate service learning into university course (Astin, Vogelgesang, Ikeda, Yee, 2000; Kuznecovienė, 2005), to involve students into career planning programs (Laker& Laker, 2007; Hall& Barthorpe, 2004).

Voluntary work can be an effective means of providing personal growth, work and life experience, career exploration, decisiveness and etc. A great deal of research has been carried out on volunteering and it's benefits such as improving employability, building self-confidence, enhancing CV development (Prouteau & Wolff, 2007; Clary et al, 1998, Wilson & Musick, 1999; Gaskin, 2004), There is, however, no comprehensive research into its potential for developing students' career competences to enable them to make appropriate career decision, to realize their personal goals and values in one's career and to achieve meaningful career path. This has attempted to find the answer to following question: *What career competences are developed through voluntary work? How career competences are developed through voluntary work?*

The aim of the research is to reveal the development of career competences through voluntary work
The subject of the research- the development of career competences through voluntary work
The methods of research: the analysis of scientific literature and documents, semi-structured interview and qualitative content analysis

Specific nature of voluntary work

In this study voluntary work is defined as a planned and organised activity that involves spending time, doing something that aims to benefit the environment or individuals or groups, for which the volunteer does not receive pay or other material compensation (The Commission on Future Volunteering, 2008, Clary et al 1998, Wilson, Music, 1999). It is based on personal motivation and commitment to an ongoing helping relationship that may extend over a considerable period of time and that may entail considerable personal costs of time, energy, and opportunity (Jordanas, Ochman, 1998; Clary et al, 1998). However**,** higher goal does not have to deny some benefits for ourselves from volunteering.

Voluntary work is perceived as one of the most modern form of informal education, promoting young people's initiative, social participation, voluntary engagement and active citizenship, provides the opportunity for young people to develop a number of personal and professional skills, and as such contributes to their greater employability and to their participation in society in general. (Gailius, 2004)

Voluntary work as a form of informal education can be characterized by specific features (Gailius, 2004, p. 8):

- *Specific environment* regarding autonomy for young people to experiment, to try yourself out without damaging yourself and others, to take responsibility for your own actions and to gain new experience.
- *Active participation in educational process.* As a result of voluntary engagement into activity, young people are active in educational process. A lot of attention towards reflection on personal experience.
- *Holistic approach* towards young person, educational process and methods used.

- *Informal communication* – you can be yourself, share your own experience, and show your strengths and weaknesses. It is a save place to be yourself, to try yourself out without fear to make mistakes and to acknowledge your mistakes.
- *Creating a non-competitive environment* where young people are not compared with others; an environment for self-evaluation.
- *Learning oriented to group process.* Group is perceived as mini society where individuals interact with each others, learning how to solve a problem or make a decision and share responsibilities. Individual learning becomes more intensive in group process.
- *Experiential learning.* The non – formal education actively involves young person in a concrete experience and encourage to reflect on their experience;

As a matter of fact, experiential learning plays an important role in the context of developing career competences through voluntary work. Usually before starting volunteering, the organisation provides training course for volunteers to make them ready for certain task and performances. The most important element in these training courses is the combination of theory and practice for developing practical skills. In order to develop comprehensive competencies, to gain skills, knowledge must constantly be used in practice.(Stanišauskienė, 2004), so s**pecial stress is laid on volunteers experience and reflection** on her/his own activity. At this point, the experiential learning cycle involves four modes: concrete experience, reflective observation, abstract conceptualization and active experimentation, is used (Mainemelis, Boyatzis & Kolb, 2002).

Wilson & Music (1999), Prouteau & Wolff (2007), Jonutyte (2007), Levy (2005), Lent et al (2002), Creed et al (2007), Barthorpe & Hall (2004), The National Youth Agency (2007) analyzed volunteering benefits for people who volunteer, especially to young people. The review of their researches on the effects of volunteering leaves little doubt that there are individual benefits to be derived from doing volunteer work that reach far beyond the volunteer act itself and may linger long after the volunteer role is relinquished. The improvement in academic performance, self-confidence, the development of work-related skills, social learning, employability, and personal, decision-making competences were emphasized in different researches. The National Youth Agency (2007) reveals how volunteering helps to prepare young people for employment. According to National Agency (2007), Lent et al (2002) and Haski-Leventhal et alet at (2008), volunteering has created opportunities to test out different career options, gain practical experience and acquire skills related to specific types of employment. Based on the longitudinal research results, Astin and Sax (Haski-Leventhal et al, 2008) found that participation in voluntary work during the undergraduate years enhances students' academic development, life skills development, and sense of civic responsibility. In addition, volunteering can enhance students' job experience, help them choose the right vocation, and improve students' resumes and opportunities as they leave the university and seek jobs.

Career competences

Career development is „a lifelong process through which an individual develops and identifies within area of the working world. Involves the result of an individual's education and career - related choices, along with one's aptitudes, interests, beliefs, and self-concept". (Goodman, Frederick, 2003, p.47).

As Kuijpers, Schyns, Scheerens (2006, p. 169) wrote: "career competences could be seen as person's self-management of his or her working and learning experience in order to achieve desired career progress". On the basis of literature research (Laužackas, 2005; Pukelis, 2003; Stanišauskienė, 2004; Kumar, 2007; King-Fitch, 1983; Mowafy, 2006; Pukelis & Garnienė, 2003), the authors of article distinguish 8 career competences: *personal* (related with self-awareness and self-presentation), *educational and occupational exploration* (skills to participate in work and lifelong, to locate, evaluate, and interpret career information), *social competence, specific professional, planning and organising competence* (planning and organising activities, collecting, analysing and organizing information, goal setting), *employability*, *learning* and *decision-making competences.*

Career competences enable individual to initiate action changes in professional field, to take active role with respect to his/her career and achieve meaningful career path.

Method

The research study was based on qualitative research methodology because it was focused on people's experience, and perception what it is important to them. Semi-structured interview was developed for data collection because the purpose of research study was to reveal students' opinions about career competences developed through voluntary work. Semi – structured interview is flexible, allowing new questions to be brought up during the interview as a result of what the interviewee says. (Luobikienė, 2005). The content of interviews were analyzed using content analysis method, open coding considering the data in minute detail while developing initial categories. Qualitative content analysis is based on systematic realization of these steps: 1) transcribing interview from oral to written language 2) selecting units of meaning (keywords) 3) labelling units of meaning (conceptualising) 4) categorising 5) interpreting the categories with subcategories and their substantiation, based on extracted evidence from the text (Strauss & Corbin, 1998).

The data were collected in different countries: Lithuania and the United Kingdom, in 2008-2009. The respondents were selected in two different non-governmental organizations (one in Lithuania, one in the UK), according to certain criteria: age (19-30 years old), volunteering experience at least 2 years and they must be studying at the moment, or have just finished (university, college).

Participants

10 respondents were interviewed, 7 of them – women, and 3 men. 40 % of interviewees have been studying in

postgraduate courses (master's degree), 60%-undergraduate courses. The mean of students volunteering experience is 4,3 years.

Discussion of results

Qualitative research revealed that through voluntary work students' improved their personal attributes and competence, especially interviewees stressed building self-confidence, greater self-esteem (*„ it helped me build my confidence", "it raises your self-confidence, and you experience an inner joy"*) and increased self-awareness. Cockram, McClure, Thoits & Hewitt (Levy, 2005) affirm that the act and experience of volunteering provides people with a sense of empowerment, purpose and accomplishment, improves confidence and self-esteem and fosters belief in people's capacity to make a difference. Self-knowledge and self –assessment ("*getting to know yourself and what you can do*") were extremely relevant to those respondents who started volunteering before studying in the university. It helped them to make career decisions and had effect on their career choice. Voluntary work provided an opportunity for them to get a flavour of profession they wanted to study. Wallace- Broscious, Serafica & Osipow (Creed, et al, 2007) related career development to the development of the self-concept and emphasized that volunteering provides young people an opportunity to get to know themselves better, and to find out their strengths and weaknesses. In such case, career development process is more successful because of setting and accepting realistic career goals. Knowledge of work of world, the development of planning and organising skills are other aspects that have been revealed in research study are gained ("*you learn how to plan your time", "you have to organise yourself"*). In comparison to respondents of Lithuanian X organisation, respondents from the United Kingdom Y organisation who got involved into voluntary work because of career – related motives, more often emphasized gained professional skills, experience and the improvement of employability skills as the most important benefits of volunteering. The longitudinal Astin & Sax (Haski-Leventhal,et al, 2008) results revealed that participation in voluntary work during the undergraduate years enhances students' academic development, job experience, help them to choose the right vocation, and to improve students' resumes and opportunities as they leave university and seek for jobs. The surveys revealed that volunteering provides students with opportunities to learn from others and by experiential learning. Hask-Leventhalet al (2008), Wilson & Music (1999) research studies showed that participation in voluntary activities promotes lifelong learning due to youth continual engagement into learning process.

The results of research indicate that students' personal competence and attributes are developed (this was emphasized by the most of participants) through voluntary work which provide a firm foundation for young people to develop realistic self-perception about their abilities and career prospects. Most students mentioned the improvement of self-confidence. These results were similar to Jonutytė (2007), Wilson & Musick (1999) finding where volunteering experience enhances feelings of self worth, improves self-confidence. Social cognitive career theory analyses the importance of self-efficacy - as person's perception of the ability (it is related with self-knowledge, self-confidence) to reach the goal during process of career decision - making (Brown&Lent, 2005). Career adaptability competence has been developed through a background of gained experience and acquired work values through voluntary work. United Kingdom Y organization respondents especially emphasized employability competence gained through voluntary work which improved their employability because of the improvement of their communication and leadership skills and better sense of responsibility. Participants also perceived themselves as more attractive employees for applying for job position due to getting involved in voluntary work, being able to demonstrate their commitment to the certain area that they are interested in (because they are there not for the money, but completely for experience, building their knowledge). These results are similar to Levy's (2005) finding that indicate voluntary work as an activity for developing work skills, assisting the transition from volunteer positions to paid jobs, improving confidence and skills that can help lead to paid employment. Other beneficial behaviours associated with work experience include the development of reliability, perseverance, work values, work identity and career aspirations. (Creed et al, 2007)

Additional research results also revealed that voluntary work provides opportunities for gaining qualification and specific competence related to professionalism and professional experience. According to Jonutyte (2007), voluntary work helps young people to improve their specific skills, and qualification.

Involved in volunteering, young people do not experience as much difficulties as others in career decision making as this is a safe environment for trying out themselves, raising their self-awareness, and making decisions. Astin, et al (2000) proposed that volunteering has an impact on students career choice (helps to choose profession, to decide on further education, etc.), and career vision. This is similar to Lent *et al* (2002) results that internships, job shadowing, realistic job previews enable students to clarify their interests, values, and skills in relation to particular occupational fields and work tasks.

A number of participants cited learning competence that is developed during voluntary work because it provides a safe environment for experimentation, learning by doing and making mistakes. Educational and career awareness are also enhanced through voluntary work as participants found out more about different types of job, opportunities in their area regarding further education or career perspectives.

Interviewees reported that career competences have been developed through voluntary work due to "learning by doing": practical activities, which according to Dreyfus & Dreyfus (Iglar et al, 2003) are one of the most important factors for developing any competence; discussion groups when participants have been analysing different cases and reflecting their experience. It is relevant for individual's personal growth and can be used as an instrument

(method) for developing certain competences. A number of participants mentioned the importance of trainings related more to gaining theoretical knowledge as it helps you to understand and analyse individual's volunteering experience in a broader context, new ideas for questioning and taking actions. Communication with specialists was also emphasized by participants as it provides an opportunity to talk about their activities, difficulties that they have faced, get support as well as learning from them, while observing specialists' work. These are the methods how career competences have been developed through voluntary work. Voluntary work is perceived as safe environment for learning while making mistakes, facing various difficulties and failures. Bax & Moens (1997) agree that supportive atmosphere, safe learning environment, co-operation are the features of voluntary work. Volunteering also provides an opportunity for participants to get involved in personal growth activities such as art therapy, outdoors activities. To sum up, voluntary work could be conceptualized as a form of experiential learning which provides opportunities for personal and professional growth and the development of career competences is related to participants' abilities to apply volunteering experience in career decision making and developing career competences.

Conclusions

Qualitative research revealed that participants perceive their volunteering experience as important one in terms of developing career competences. The development of personal competence and attributes were more often mentioned by Lithuanian participants in the context of realistic self – perception about their abilities and career prospects. Employability competence was distinguished for its importance in nowadays world of work. Voluntary work provides an opportunity for the improvement of participants' communication and leadership skills and better sense of responsibility. Career adaptability competence was also mentioned as the one gained through volunteering experience and acquired work values through voluntary work. It was more often emphasized by the participants of the United Kingdom who got involved in voluntary more primarily because of career related motives. Learning competence is also developed during voluntary work because it provides a safe environment for experimentation, learning by doing and by making mistakes. Career decision-making competence and career awareness are also enhanced. Last but not least, voluntary work provides opportunities for gaining qualification and specific competence related to professionalism and professional experience.

In the process of developing career competences, different development ways can be applied: learning by doing, trainings, conversation and discussion with specialists. Reflection of volunteering experience is also important in the development of career competences as it helps to improve performance and to avoid same mistakes

References

1. Astin, A.W, Vogelgesang, L.J., Ikeda E.K., & Yee, J.A. (2000). How Service Learning Affects Students. Los Angeles: Higher Education Research Institute, UCLA
2. Bax, W., & Moens, J. R. (1997). Training of volunteers: project report. Prieiga per internetą : <http://www.voced.edu.au/td/tnc_72.192>
3. Brown, S.D., & Lent, R.W. (Eds.). (2005). Career development and counseling: putting theory and research to work. Hobaken (N.J): Wiley
4. Clary, E.G., Snyder, M., Ridge, R. D., Stukas A. A., Copeland, J., Haugen, J., & Miene, P. (1998). Understanding and Assessing the Motivations of Volunteers: A Functional Approach. *Journal of Personality and Social Psychology* 74(6), 1516-1530
5. Creed, P. A., Patton, W., Prideaux, L.A.(2007). Predicting change over time in career planning and career exploration for high school students. *Journal of Adolescence* 30, 377–392
6. Creed, P.A., Fallon, T., Hood, M, (2009). The relationship between career adaptability, person and situation variables, and career concerns in young adults. *Journal of Vocational Behavior*, 74, 219–229
7. Gailius, Ž.(2004). Jaunimo neformaliojo ugdymo samprata ir aktualijos: Kultūros įstaiga ir jaunimo pilietiškumo ugdymas.*Kultūros aktualijos,* 2(37), p. 6-10
8. Gaskin, K. (2004). Young people, volunteering and civic service: a review of the literature. London: Institute for Volunteering Research
9. Goodman, F. (Eds). (2003). The Greenwood dictionary of education. Greenwood press
10. Hall, M., & Barthorpe, S. (2004) A Collaborative Approach to Placement Preparation and Career Planning for University Students: a case study. *Journal of Vocational Education and Training 52 (2)* 165 — 175
11. Haski-Leventhal, D., Cnaan, R.A., Handy, F., Brudney J. F., et al. (2008). Students' Vocational Choices and Voluntary Action: A 12-Nation Study. Voluntas 19, 1–21
12. Inglar, T., Bjerknes, E., Lappen, R., & Tobiassen, T. (2003). Mokymasis ir konsultavimas. Kaunas: VDU
13. Jonutytė, I. (2007). Savanorystė socialinio ugdymo sistemoje. Klaipėda: Klaipėdos universiteto leidykla
14. Jordanas, P. & Ochman, M. (1998). Savanorių vadybos nevyriausybinėse organizacijose pagrindai. Vilnius : Savanorių centras
15. King-Fitch, C.C. (1983). Assisting exceptional students in developing career planning skills. American Association for Vocational Institutional Material: University of Georgia
16. Kuijpers, M.A.C.T, & Schyns, B., Scheerens, J. (2006). Career competencies for career success. *The Career Development Quarterly,* 55, 168-178
17. Kumar, A. (2007). Personal, Academic and Career Development in Higher Education – SOARing to Success.London: Routledge
18. Kuznecovienė, J. (2005). Mokymosi tarnaujant bendruomenei, rengimo darbui ir pilietiškumo ugdymo poveikis studentų mokymosi rezultatams. *Profesinis rengimas : tyrimai ir realijos*, 10, p. 100-111.
19. Laker, D. R , & Laker R. (2007). The Five-Year Resume: A Career Planning Exercise. *Journal of Management Education,* 31; 128-142
20. Laužackas, R. (2005). Profesinio rengimo metodologija. Kaunas: VDU
21. Lent, R.W., Brown, S.D., Talleyrand, R., McPartland, E.B., Davis, T., Chopra, S.B, Alexander, M.S., Suthakaran, V., & Chai, C.M. (2002). Career Choice Barriers, Supports, and Coping Strategies: College Students' Experiences. *Journal of Vocational Behavior* 60, 61–72
22. Levy, M. (2005, July). For love or money: volunteering and unemployed people. In Australian Social Policy Conference. University of NSW, Kensington.
23. Luobikienė I. (2006) *Sociologinių tyrimų metodika*. KTU: Technologija

24. Mainemelis, C., Boyatzis, R.E., Kolb, D.A. (2002). Learning Styles and Adaptive Flexibility: Testing Experiential Learning Theory. *Management Learning* 33 (1); 5- 33

25. Mowafy, L. (2006). Career Development Theory and Process. Prieiga per internetą: http://virtualhabitats.com/Students/StudentWelcome.html

26. Munson, W.W., Savickas, M.L.(1998) Relation between Leisure and Career Development of College Students, *Journal of Vocational Behavior*, 53, 243–253

27. Prouteau, L., & Wolff, F.C. (2007). On the relational motive for volunteer work. *Journal of Economic Psychology*, 7, 1-22

28. Pukelis K. (2003). Karjeros projektavimo gebėjimai žinių visuomenėje: nauji iššūkiai profesiniam konsultavimui ir karjeros planavimui. *Profesinis rengimas: tyrimai ir realijos*, 6, 66-76

29. Pukelis, K., & Garnienė, D. (2003). Moksleivių ugdymas karjerai: padėties analizė ir perspektyvos bendrojo lavinimo mokyklose. *Profesinis rengimas : tyrimai ir realijos*, 7, 24-35

30. Robitschek, C., & Cook, S. W. (1999). The influence of personal growth initiative and coping styles on career exploration and vocational identity. *Journal of Vocational Behavior*, 54, 127–141.

31. Stanišauskienė, V. (2004). Rengimosi karjerai socioedukaciniai pagrindai. Kaunas: Technologija

32. Strauss, A.L,& Corbin, M (1998). Basics of qualitative research: Techniques and procedures for developing Grounded Theory. London: Sage

33. Stumpf, S. A., & Hartman, K. (1984). Individual exploration to organizational commitment of withdrawal. *Academy of Management Journal*, 27, 308–329.

34. The Commision on Future Volunteering (2008, January). Report of the Commission on the Future of Volunteering and Manifesto for change. Prieiga internete: <http://www.volcomm.org.uk/NR/rdonlyres/0B8EC40C-C9C5-454B-B212-C8918EF543F0/0/Manifesto_final.pdf>

35. The National Youth Agency. (2007). Young People's Volunteering and Skills Development. (A research project). Leicester: The National Youth Agency

36. Wilson, J., & Musick, M. (1999). The effects of volunteering on the volunteer. *Journal of Law and Contemporary problems*. 62 (4), 141-168

Aistė Baronaitė, Margarita Teresevičienė

Karjeros kompetencijų ugdymas (sis) savanoriškoje veikloje

Santrauka

Šiame straipsnyje nagrinėjami kokybinio tyrimo, skirto atskleisti karjeros kompetencijų ugdymą (si) savanoriškoje veikloje, rezultatai. Aptariami metodai, kaip savanoriškoje veikloje yra ugdomo/ugdosi karjeros kompetencijos. Atliekant tyrimą dalyvavo 5 tiriamieji iš Lietuvos X organizacijos ir iš Didžiosios Britanijos Y organizacijos, kurie buvo atrinkti pagal numatytus kriterijus. Remiantis tyrimo rezultatų analize, savanoriškoje veikloje yra/buvo ugdomi tokios tiriamųjų karjeros kompetencijos: asmeninė, prisitaikymo darbe, įsidarbinimo, mokymosi, sprendimo priėmimo ir specialieji profesiniai. Šios kompetencijos ugdomos per "mokymąsi veikiant", t.y. praktinę tiriamųjų veiklą, per mokymus, kuomet suteikiama daugiau teorinių žinių sudarančių sąlygas gilesnei analizei, plastesniam supratimui, per pokalbius, aptarimus su specialistais. Anot tiriamųjų, savanoriškoje veikloje sudaromos sąlygos mokytis stebint ir bendradarbiaujant su kitais, sukuriami saugi mokymosi aplinka, praktinė veikla reflektuojama grupėje.

About the authors

Aistė Baronaitė has been graduated from Vytautas Magnus University. She has a master's degree in Educational Management. *Correspondence*: Department of Education, Faculty of Social Sciences, Vytautas Magnus University, K.Donelaicio str. 52, Kaunas, Lt 44244, Lithuania. Telephone: (8 37) 327 821. E-mail.: aiste.baronaite@fc.vdu.lt. Research interests include career development, social work, lifelong learning.

Margarita Teresevičienė is Doctor Habilitatis, Professor and Head of the Department of Education at Vytautas Magnus University in Kaunas, Lithuania *Correspondence*: Department of Education, Faculty of Social Sciences, Vytautas Magnus University, K. Donelaičio str.52, Kaunas, LT-44244, Lithuania. Tel. +370 37 327 821, fax: +370 37 327 821. . E-mail.: m.tereseviciene@smf.vdu.lt. Research interests include lifelong learning, adult education, and methods in teacher training.

INTEGRATING DIGITAL SOCIAL NETWORKS WITHIN THE INSTITUTIONAL FRAMEWORK OF A NATION STATE

Mantas Bileišis

Mykolas Romeris University, Lithuania

Abstract

The article attempts to create a normative model which would allow integrating notions of digital social networks which are essentially non-territorial with the institutional framework of a nation state. Such integration is considered important due to the possibility of loss of relevance of state institutions if political identities were to emerge from digital social networks. And such a development might threaten stability of a given polity.

Keywords

Nation state, digital social networks, institutional framework, public discourse, local government.

Introduction

This article is a normative exercise seeking to establish what role if any is there for a nation state in a digitally networked society. The article builds its argument on the basis of recognizing a potential for a profound social shift and that such a shift may fundamentally affect the current global political arrangement to which nation states are central. The main objective of the article is to establish how a nation state can constructively take part in the process of globalization. Implications of political (*democratization*), economic (*liberalization*) and social (*digitization*) aspect of globalization are considered. The subject of the article inquires into how digitization not only facilitates political and economic change but also redefines the role of institutions of a nation state. To address the subject two main challenges that may emerge to a nation state are outlined. By discussing notions of discourse theory (Townshend, 2003) it is argued that (a) the tenor of public discourse is fundamentally dependent on the institutional framework of a polity. In instances when institutions of a polity are not able to facilitate discourse construction alternative institutions may emerge. And (b) in times of profound social change emerging institutional settings might overlap with the established ones and this can lead to conflict. Therefore, it is argued, the ability or inability of a polity to adapt to social change is essential to resulting outcomes of processes discussed i.e. globalization. Given these premises institutions of a nation state might end up having varying degrees of relevancy in a specific society and lead to a situation where the established process of constructing public discourse might act as the main catalyst for social change on one extreme or at best a mere means of "legalizing" change on the other or might even lead to a collapse of a polity altogether. To address the subject in this light an analysis of communitarian approach to organizing a nation state is entertained. The article comes to a conclusion that a reflexive and democratically based public discourse is both possible and one to be favored by any measure. This in turn presupposes the retention of institutional framework of nation state. However, in order for those institutions to be functional a number of certain criteria have to be met.

Digitally networked society as an element of globalization

In the period of past 20 odd years the world has seen a multitude of major events that had profound effects on a great number of societies and individuals alike. To mention just a few: the collapse of the socialist block in Central and Eastern Europe; a shift towards services as the main source of added value in the industrialized world and an unprecedented change in the scope and methods of interaction among individuals, i.e. the spread of digital communications technology and especially that of internet.

The three examples can conceptually be divided into those of political, economic and social nature. The complex changes in these spheres of society and many others can be summarized in one term: globalization (Gruenwald, 2008).

Politically, the past decades have seen the number of democratic countries surpass that of non-democratic**.** Since the collapse of the Soviet Union western liberal democratic model seems not to have found a worthy replacement in the global political discourse. The number of liberal democracies has grown substantially and democratization appears to spread. And although it is probably early to call for the end of history the liberal democratic model of a nation state is the most proliferate one and is seldom seriously challenged in countries that adopt it (Puddington, 2009).

A move to economy where the major part of value is added in knowledge-intensive production is another major cause for social change (Pelkonen, 2008). The communications technology driven economy has profoundly changed the role of the state as its sovereignty seems to wane (Bryant, 2007). In social terms a key part of success in globalized economy for a firm seems to be the need of creating multicultural environments (Isenberg, 2008).

But processes of economic internationalization and political democratization have been a cause for growth of prosperity in many of the worlds regions (James, 2008). And here nation states do not seem to loose out. On the contrary, strong nation states did not loose their relevancy in the globalized world as economic success reinforces national identity rather than the other way round**.** The

strongest and most stable nation states seem to be the most prosperous as well (Gritsch, 2005).

Information technology is a crucially important catalyst for both political and economic changes of recent decades. But more importantly, digital communication technology has not only facilitated political and economic change it also is the source of new social structures in their own right. ICTs (Internet communication technology) and Web 2.0 have created a virtual space where social networking is fermenting at an astonishing rate. Technological advance has created conditions under which one can argue a new type of society can emerge. ICTs based socialization has the potential to satisfy users social needs without direct communication, therefore territoriality looses its importance in social interaction. Although digital social networks are not likely to replace nation state with a set cohesive institutions any time soon the potential for change at the expense of nation state is evident (Frost, 2006). Presence of territorially unbound social communities for nation states to which territoriality is at the very essence of their definition can become a serious challenge.

So far nation states remain a primary medium of expressing sovereignty, that is, nation states provide main institutions for the construction of public discourse. And as we have seen in relation to the economic dimension of globalization, nation states *per se* don't seem to fare badly at all, either. Economic globalization serves to increase the autonomy of nation-states who have strong institutions to start with (Gritsch, 2005). And democratic capitalist nation states are unrivaled at creating strong, stable and legitimate institutions. In an era of multinational companies nation states adopt strategies that allow them to remain as relevant to society as ever (Boudreaux, 2007). But is a similar adaptation possible or indeed needed towards digitization of non-economic social practices?

As digital social networks are still in their infancy and technologies they rely upon change rapidly shapes that digital social networks will acquire are hard if not impossible to predict. It is fair to suggest though that ICTs increasingly help develop not only business opportunities but satisfy intangible needs of individuals. The range of social needs that can be met on-line ranges from reading a book to creating a family (Coyle, Vaughn, 2008). And here networking might overlap with functions of nation state. Nation state has gradually expanded its field of social functions to cover many spheres that can be considered individual (Drori, Meyer, 2007). And such overlapping can potentially lead to conflict. There are postmodernist arguments to move away from fixed identities to eternally shifting ones (Zembylas, Vrasidas, 2005). But as nation states are dependent for their very existence on group identity of its citizens such a loss of stable identity might lead to questions whether nation states are needed at all.

Given these processes that many hale as a dawn of a new age it is fair to ask whether we live in times of a fundamentally novel culture which will eventually lead or already has lead to the marginalization of traditional political institutions of nation states? Or will those institutions remain relevant, will they linger on as relic of an age gone by or will they collapse altogether? In other words, will social networking emerge with a set of institutions rivaling current ones as an arena for political discourse construction?

To answer these questions there is a need to explore the feasibility of integrating digital social networking in the workings of a nation state as it similarly happened with economic practices and establish if such integration is a needed exercise.

Reconsidering public/private delimitation

It is important to stress that this article is somewhat speculative. Proliferation of digital social networking in many of the everyday economic and social activities is yet not all pervasive. And large sections of society are not involved with them at all. Further, it still is a practical alternative for people to attend to their everyday activities using pre-digital means. Therefore, social networking cannot be considered to have become an institution rivaling the nation state. Thus, considerations presented here are oriented towards some time in the future. Nonetheless there is no denying of an ever increasing pace of digitization in all spheres of life (Christensen, 2005). And theorizing on the implications of this process is surely a worthwhile exercise.

Exploring into potential consequences of social trends concerned requires a specific analytical approach. A hypothesis of three possible outcomes is explored by employing three historical examples where profound social change has lead to different outcomes for a polity: industrial revolution in Great Britain, the Great French revolution and collapse of Soviet communism.

The prerequisite to this discussion is that continued digitization might lead to emergence of strong and politically influential group identities that would not match national boundaries. Such emergence of digital social networks might lead to three different outcomes: the adaptation of state to the change, a conflict between the emergent institutions and traditional which will replace them within the geographical space of the former state or will lead to complete collapse of the geographical polity and give rise to a new one. To explain what the three examples have in common practice of delimitation of public and private domains is analyzed.

For social theorists discussion of social/private divide can rightfully be considered central (Fraser, 1987). Here I consider two ways that a delimitation of public/private spheres is possible. One is "procedural" and the other "specific". Political institutions are a framework of constructing a discourse for where this delimitation lies. Procedural approach puts the issue of private/public delimitation up for constant review as conditions change. Alternatively, there are instances when a line is delimited in a way when it is difficult or impossible to legally alter it. One example is the field of human rights. Here the process of deliberation on the subject of human rights can be displaced from the political field into the field of legal considerations (Drewry, 2001). Similarly, in the socialist block the content of "public" was not open for pluralistic discussion rather this delimitation was part of a bureaucratic top down process (Oswald, Voronkov, 2004). In the latter example we can in retrospect tell that such an institutional arrangement left the soviet system irrelevant to population and political discourse was

displaced outside the political system which eventually let to its demise when a sufficient dissatisfaction with the system developed (Reddaway, 2008).

Many of the modern leading democratic nation states have also experiences periods of social change that affected their institutions profoundly. However, such events have lead to somewhat different outcomes. Since Britain established a parliamentary democracy in 1688 it avoided any major political perturbations even under the strongest pressures of modernization. On the contrary, post 1688 period facilitated an age of unprecedented prosperity (Escosura, 2004, p. 1). France on the other hand suffered tremendously during its shift to bourgeois society. Although after the revolution France retained its geographical definition, the institutions were altered fundamentally with monarchy being replaced altogether (Heller, 2006, p. 1). We can suggest that institutions of a polity either adapt to broader social changes or provide for an increasing rise in social tension which can lead to a variety of outcomes. As we see aspirations for change in a society that emerge outside the institutional framework of a polity does not necessitate a collapse of a system, nonetheless it has such potential. Institutions can adapt to changes that emerge in social processes outside them. To provide for that, historically there appears to be a case for favoring solutions that accentuate the "procedural" aspects of policy conduct i.e. democracies.

Given these premises we ought to ask how modern nation states can integrate digitized social networks if they will emerge to become fundamentally new social practices of magnitude similar to those that caused revolutions discussed in previous examples. If we allow for a statement that democratic approach in times of social change is a best way of defining public and private delimitation. Then so far digitized interaction hasn't proven to be a serious challenge to any liberal democratic state. But it can be a factor in a popular effort to challenge a non-democratic regime as many could observe in the wake of 2009 Iranian election (Ehssan, 2009). So in all that is said one can claim a cumulative tendency of modernization to encourage democratization. But as the pace of change increases and individuals develop ever more distinct identities the current institutional arrangement for democracy can eventually be challenged. The problem lies in the great variety of potential institutional forms that democracy can take. And institutions of a nation state will have to warrant their existence in the digital age as opposed to any other institutional arrangement.

Institutional adaptation to novel discourses

Integration of new social practices requires a two way adaptation process (Bryant, 2007). As already mentioned in times of social change "specific" attempts at delimiting spheres of public and private life are problematic. And if delimitation that will satisfy the sides concerned won't occur within the existing institutional framework new practices of social interaction can emerge with alternative and competing institutions. Given the premises outlined I will attempt to construct a model which can provide for an integration of ICTs based social practices into the institutional framework of a nation state.

Nation states have proved to be most adaptable over recent centuries as their total proliferation on the world map so evidently shows. And liberal democratic ones represent the only coherent model that is prolific among states (Puddington, 2009). The democratic narrative at least in theory allows for an all inclusive discussion about political virtues (Held, 2002, p. 340). Democratic systems are more stable compared to the non-democratic because they are able to limit descent by integrating opposition and thus create more durable institutional setups. Yet in the face of the shift towards a digitally networked society democratic institutions of a nation state are being challenged as a best structure to facilitate public discourse. Democracy has taken a variety of forms in history and seems to have a variety of them in theory (Held, 2002, p. 20). A nation state as the principal arena for democratic process relies on its institutional setup to produce expected results.

On the political level institutions are often established by constitutions and are relatively stable and they are not fundamentally challenged. But the administrative level of the system has for a long time been a source for criticism (Peters, 2002, p. 14). Much of it was levied for low levels of responsiveness and inertia or on the other hand too much interference with politics (Henry, 2007, p. 15). All in all the ability of traditional bureaucracy to adapt to social changes is doubtful and in the age of ICTs it can only be even more so. Democracy is most widely practiced in territorially bound nation states, but this institutional arrangement is subject to criticism for not being the right tool in a globalized age (Hickey, 2007, p. 175). Democracy itself is rarely criticized as an ideal, but its administrative mechanism is much less protected. And attempts to reform the administrative system in the recent decades have been wide spread (Pollitt, Bouckaert, 2003, p. 21).

For further analysis of the implication of such criticism three alternative principles of administrative organization are discussed: hierarchy, market or community (Parsons, 2001, p. 71). In the past decades a philosophy of NPM (New public management) has risen as a critique towards the traditional administrative model of government. In essence it is a market being superior versus bureaucracy argument (Lane, 2001, p. 272). On the face of it NPMs idea of a state run by a set of contracts in times of greater individualism and decentralization seemed a good idea compared to perceived inefficiencies of bureaucracy. Yet, despite growing individualism in society, non-efficiency oriented public action remains prominent on the agenda of citizens towards public institutions (Tumėnas, 2008). NPM essentially neglected issues of communal significance (Felts, Jos, 2000). Such neglect complicates institutional positions of nation state. Nation state relies on a notion of a common national identity for its very existence (Kalb, 1999). Identity is intangible and economically impossible to evaluate, nonetheless it is key to nationhood. The philosophy of NPM prophesied the downfall of bureaucracy and the new age of governance run by laws of the market. "Laws of the market" in NPM are rehabilitated and given almost natural characteristics. And speaking of all things natural the scientific method requires "specific" definitions. And these were produced (Lane, 2001, p. 39).

Arguments presented by NPM go against the logic of argumentation presented in this article. NPM essentially is a call to step away from procedural democracy by allowing for a mistake to try and establish a "specific" definition of public/private delimitation albeit in clear favor of private. And in so doing this approach neglects the possibility of digital social networking as potential source of public action. By putting markets before politics NPM fails to address the need to produce ways of integrating practices of digital social networking. To conclude this discussion, NPMs critique of bureaucracy and failure to come up with relevant answers how to conduct public procedures in a digitally networked society leaves us in a situation where institutions of nation states do not have a primary role in public discourse construction. Both, hierarchical and market mechanism of implementation have limitations in their own right. In conditions of social decentralization hierarchy cannot produce individually tailored solutions for citizens needs, yet the market approach challenges the existence of a state altogether.

The discussion on the communitarian approach of conducting implementation of democracy has been more prominent in recent times drawing on shortcoming of other models (Denhardt, 2001, p. 246). ICTs in essence provide a field for discussion which can almost be comparable to direct democracy (Bekkers, 2004). The question here is whether this approach is feasible in terms of trying to integrate digital social networking into the public discourse within a nation state and how should institutions of such a state be amended?

Nation state: instruments for retaining relevancy

In all that is said so far we can establish that a procedural approach in public discourse ought to be favored. However, the institutionalization of digital social networking requires a democratic procedure to be ever more responsive. And different frameworks for facilitating democratic procedure differ in their responsiveness. A social shift *per se* does not necessarily undermine existing institutions. Institutions rather serve as agents of solving political problems and in essence rely on a virtue of relevance. Political relevance can be retained by properly adapting to social change. By failing to adapt such structures run the risk of creating instability in a political system. This in turn can result in great detriment to society where economic activity relies for its very essence on stability (Yi et al., 2008).

Firstly, to find a solution where institutions of nation state and digital social networks achieve symbiotic coexistence an approach of discourse theory might be useful. The discourse approach states that political identities are forged by defining the "other" which is then becomes a rallying argument for a political community to unite (Townshend, 2006). In this case the solution lies in a situation where institutions of nation state and digital social networks overlap as much as possible and displace the perceived "other" outside this two element system.

Further, if we consider governing to be technology than the analysis of mutual adaptation of governing and digitally networked society requires an analysis into the specific technological instruments that government employs. As digitally networked society cannot exist without ICTs so governing can't exist without government. The nation state has two basic tools of government. These can be defined by a duality of central and local government (Banner, 2002).

The discourse about globalization seems to often be at odds with nation state. However, alternatives to the nation state do not provide for a smooth and predictable transition (Kalb, 1999). So nation state remains the most promising means to retain a democratic procedure and keep political systems stable and relevant to the needs of the citizenry.

Arguments suggesting that the nation state is on the decline draw on facts of an increased international cooperation, communication, migration and decreasing political participation by citizens. However, such linear predictions will not necessarily result in an eventual zero value of state functions in society. This argument of the decline of the state is also problematic for not providing a broadly acceptable alternative to nation states (Kalb, 1999). Accepting the linear argument of globalization would mean dismissing the possibility of reflexive and managed process of social change. Societies are presented in deterministic categories where neither institutions nor individuals can do anything about the occurring change. Such argumentation begs contention.

An alternative stance is to suggest that reflexive change of the polity is possible within the boundaries of nation state. To advance the argument I will present a discussion from the analytical perspective of central government and local government. I contend that at different levels of government different social functions can be performed. And in the age of fermenting digital society a reshuffle of those is needed.

Central government of a nation state has proved to be very effective in maintaining a common identity. This provides for political stability as citizens accept political arrangements as they are. National aspirations of communities that do not have a state are a powerful idea to unite people for common causes (Aram, 1997). But as NPMs critique of a traditional administrative mechanism of nation state showed besides success in the field of symbolic communication government has troubles of excelling in any other field of public policy. Market approach as we saw isn't really an alternative as it neglects the arguments of identity altogether. And for a nation state untangible moral foundations are essential. National identity resides on "markers" that are closely associated with moral imperatives (Mansbach, Rhodes, 2007). Furthermore, hierarchy seems to be very robust to its challengers (Meier, Hill, 2005). In this situation a question rises how can we solve the problem of inefficiencies of the hierarchical central government and retain strong sense of national identity?

Exploring the possibilities of local government is a topic not yet covered by this article. Premises for such consideration are as follows: a person even living all or most of his social life on-line still requires basic infrastructure, both physical and social; territorial community as a political organization is already a source of managing such infrastructure (Banner, 2002); meanwhile geographical compactness of a local community allows for a keener interest by a resident, because the process might be less dependent on mediators

of policy (Dalton, 2007, p. 192). Meanwhile technology might provide for a construction of discourse which could integrate all individuals who would be willing to take part in it. Such total inclusiveness could potentially lead to upholding and supporting a proposed institutional arrangement (Dalton, Scarow, Cain, 2006, p. 19).

Here we need to get back to the argument of hierarchy, market and community. Hierarchy produces uniform solutions, which are good for a common stable and psychologically satisfying identity, but in an age of service based economy it isn't sufficiently responsive. On the other hand market by themselves cannot lead to prosperity (Quddus, Goldsby, Farooque, 2000).

The alternative to the two is the communitarian approach. With the help of ICTs can be practiced much more broadly. In an ICT driven local government not only the decision making, but also policy implementation can function based on a bottom-up principle. With ICTs democracy at least in theory appears to be possible to be made direct (Walton, 2007). An amalgamation of notions of digitally networked society and nation state is possible by promoting citizen involvement in democratic political process in the local community.

Such an arrangement is best implemented on a local government level. Direct democracy is much less feasible or needed on a national level. Number and diversity of nations' citizens is very great and demystifying identity by deliberating upon it can hardly serve any good to national identity. Communitarian policy-making on a national level also would not solve the problem of hierarchical policy implementation.

We can state that a national identity provides a polity with stability and integrity. However, it does not make specific policies any more relevant to every day needs of citizenry. Therefore, principle of subsidiarity should apply in policy issues not concerned with symbolic communication in an era of digital social networking. In terms of method of governance at different levels different methods seem to apply best. Hierarchy is best applied on issues that impact national identity directly. New public management ideas could potentially be utilized as way to upkeep standards of government among communities. And principles of local government ought to draw on more communitarian notions of new civil service (Denhardt, 2001, p. 250).

Prerequisites for a robust model

One more question remains outstanding. The separation of policy issues of symbolic communication from any other is not that easy as this separation is highly conceptual. For the model to be a success a proper separation between local and national policy functions is of utmost importance because otherwise it will either not serve the purpose of greater democratization or will compromise the subordination of local identity to the national identity. An increased emphasis on policies done on local level can lead to dissipation of common identity. The solution lies, in my opinion, in a separation of functions of local and central government in a specific, express and clearly defined way. This separation should occur along the lines of defining, social and

infrastructural functions (Peters, 2002, p. 30-31). Defining functions which are more or less stable should remain national, while social and infrastructural should be passed to local government level. Such an arrangement could provide for a sustainable practice where individual political identities will be bound to territories while digital social networking as usual will be limited to a private sphere of expression. Because given a legitimate way of participating in policy-making on a local level in a given territory it will become harder for an individual to legitimate his politically action on issues in other territories.

The model outlined in this article looks very broadly at the issue not of creating a digital government but rather trying to argue that a nation state is a feasible and relevant structure of global political system in an ever more digitized society. However, an implementation of such a model cannot be advocated on a one size fits all mode as there is a need for further considerations. Peculiarities of national identity or nation state, such as absence of unique language, presence of ethnic minorities, large size, federalism, disagreements on myths of national origin and other can all make this model problematic to implement in practice. Possibly more importantly this model has not been tested against arguments of digital divide within nations which can emerge as a fundamental hurdle.

However, this model provides for a normative reconciliation of nation state and non-territorial digital social networks. Yet, the need to discuss this issue further is pressing as in this age of unprecedented global economic and technological interdependence sporadic or even revolutionary institutional change would most unwelcome. Finally, for this model to be acceptable an overwhelming majority of a nation has to be able to grasp, conceptualize and accept the national idea and be competent in ICTs as a prerequisite.

Conclusion

The two virtues of relevancy and stability that a liberal democratic nation state provides are closely intertwined and one cannot exist without the other. Stability, which provides for economic prosperity in a nation state crucially, depends on supporting a common identity. But that is hard to uphold when the nation state is ever more challenged in providing relevant services to citizens. Until recently a philosophy of new public management tried to address the issue of relevancy of institutions of the nation state but its argumentation dangerously neglected issues of supporting national identity. In parallel, a process of ever increasing non-territorial digital social interactions is observed which in itself threatens not only relevancy but stability of an institutional framework of the nation state. Whilst retaining political stability without a nation state seems problematic a communitarian model on a local government level presents a normative solution by offering a possibility to reconcile notions of territoriality in a national identity and extraterritoriality in a digital social network to provide both political stability and relevancy to the citizenry of a nation state.

References

1.   Aram, J. D. Challenges to the Social Foundations of Capitalism in an Age of Global Economics. *Human Relations* 50, no. 8, 1997. p. 967-986.
2.   Banner, G. Community governance and the new central–local relationship. *International Social Science Journal* 54, no. 172, 2002. p. 217.
3.   Bekkers, V. Virtual policy communities and responsive governance: redesigning on-line debates. *Information Polity* 9, 2004 p. 193-203.
4.   Bryant, A. Government, E-Government and Modernity. *Developments in E-Government*. D. Griffin et al. (eds.). IOS Press, 2007. p. 3-15.
5.   Boudreaux, D. J. Nation-States and the Multinational Corporation: A Political Economy of Direct Foreign Investment. *Independent Review* 12, no. 1, 2007. p. 136-139.
6.   Christensen, P. V. Until Further Notice: Post-Modernity and Socio-Territorial Belonging. *International Review of Sociology* 15, no. 3, 2005. p. 547-561.
7.   Coyle, C. L., Vaughn H. Social networking: Communication revolution or evolution? *Bell Labs Technical Journal* 13, no. 2, 2008. p. 13-17.
8.   Dalton R. J. Democratic Challenges, Democratic Choices: the Erosion of Political Support in Advanced Industrial Democracies. Oxford; New York (N.Y.): Oxford Unty Press: 2007.
9.   Dalton R. J., Scarow S. E., Cain B. E. New Forms of Democracy? Reform and Transformation of Democratic Institutions. *Democracy transformed? Expanding Political Opportunities in Advanced Democracies. Cain B. E. et al. (eds.).* Oxford: Oxford Unty Press, 2006. p. 1-22.
10. Denhardt, R. B. Viešųjų organizacijų teorijos. Vilnius: Algarvė, 2001.
11. Drewry, G. Editorial: Law and Public Management-The Human Rights Challenge. *Public Money & Management*, June 2001, Vol. 21 Issue 3. p. 3.
12. Drori, G. S., Meyer J. W. The Rise of the Individual: Expanding the Social Concerns of the State, 1870-2004. *Conference Papers -- American Sociological Association.* 2007 Annual Meeting. p. 1.
13. Ehssan V. Twitter freedom's only link in Iran. *Australian, The* : 2-2, 2009.
14. Escosura, L. P. Introduction: Is British industrialization exceptional? *Exceptionalism and Industrialization. Britain and its European Rivals, 1688-1815*. Escosura L. P. (ed.). Cambridge Unty Press: 2004. p. 1-19.
15. Felts, A. A., Jos P. H. Time and Space: the origins and Implications of New Public management. *Administrative Theory & Praxis (Administrative Theory & Praxis)* 22, no. 3, 2000. p. 519-533.
16. Fraser, J. Community, the private and the individual." *Sociological Review* 35, no. 4, 1987. p. 795-818.
17. Frost, C. Internet Galaxy Meets Postnational Constellation: Prospects for Political Solidarity After the Internet. *Information Society* 22, no. 1, 2006. p. 45-49.
18. Gritsch, M The nation-state and economic globalization: soft geo-politics and increased state autonomy? *Review of International Political Economy* 12, no. 1, 2005. p. 1-25.
19. Gruenwald, O. The Global Paradox. *Journal of Interdisciplinary Studies* 20, no. ½, 2008. p. 1-20.
20. Held, D. *Demokratijos modeliai.* Vilnius: Eugrimas, 2002.
21. Heller, H. The Bourgeois Revolution in France 1789-1815. New York and Oxford: Berghahn Books, 2006.
22. Henry, N. Public Administration and Public Affairs/10th ed. Upper Sadle River (N.J.): Pearson: Prentice hall, 2007.
23. Hickey T. Globalization, Exclusion and the Future of Democracy. *Democracy: the Long Revolution. Powel D., Hickey T. (eds.)* London: Continuum, 2007.
24. Isenberg, D. J. The Global Entrepreneur. *Harvard Business Review* 86, no. 12, 2008. p. 107-111.
25. James, H. Globalization, empire and natural law. *International Affairs* 84, no. 3, 2008. p. 421-436.
26. Kalb, D. Identity Politics, Globalization and the National State. *European Societies*, *1*(2), June 1999. p. 269.
27. Lane J. E. Viešasis sektorius. Vilnius: Margi Raštai, 2001.
28. Mansbach, R., Rhodes E. The National State and Identity Politics: State Institutionalisation and "Markers" of National Identity. *Geopolitics* 12, no. 3, 2008. p. 426-458.
29. Meier J. K., Hill G. C. Bureaucracy in the twenty-first century. *The Oxford Handbook of Public Administration. Ferie et al. (eds.)* Oxford: Oxford Unty Press: 2005. p. 50-71.
30. Oswald, I., Voronkov V. The "Public-Private" sphere in Soviet and Post Soviet Society: Perception and dynamics of 'public' and 'private' in contemporary Russia. *European Societies* 6, no. 1, 2005. p. 97-117.
31. Parsons, W. Viešoji politika: politikos analizės ir teorijos įvadas. Vilnius: Eugrimas, 2001.
32. Pelkonen, A. 2008. Reconsidering the Finnish Model – Information Society Policy and modes of governance. *TRAMES: A Journal of the Humanities & Social Sciences* 12, no. 4, 2008. p. 400-420.
33. Peters, G. B. *Biurokratijos Politika.* Vilnius: Pradai, 2002.
34. Puddington, A. *Fredoom in the World 2009: Setbacks and Resilience.* Freedomhouse, 2009. http://www.freedomhouse.org/uploads/fiw09/FIW09_OverviewEssay_Final.pdf [accessed June 25, 2009].
35. Pollitt, C., Bouckeart. G. Viešojo valdymo reforma: lyginamoji analizė. Vilnius: Algarvė, 2003.
36. Quddus M., Goldsby M., Farooque M. Trust: The Social Virtues and Creation of Prosperity – a Review Article. *Eastern Economic Journal* vol. 26 no. 1 (winter), 2000. p. 87-98.
37. Reddaway, P. The Role of Popular Discontent. *The Strange Death of Soviet Communism. A Postscript.* Gvosdev N. K. (ed.). Transaction publishers: New Brunswick and London, 2008. p. 77-90.
38. Townshend, J. Discourse theory and political analysis: a new paradigm from the Essex School? *Political Studies*, 5 (1), 2003. p. 129-142.
39. Tumėnas, A. Naujoji viešoji vadyba ir jos mitai. *Viešoji politika ir administravimas,* Nr. 25, 2008. p. 38-49.
40. Walton, D. C. Is Modern Information Technology Enabling the Evolution of a More Direct Democracy?. *World Futures: The Journal of General Evolution* 63, no. 5/6, 2007. p. 365-385.
41. Yi F. et al. Path to Prosperity: The Dynamics of Freedom and Economic Development. *International Interactions* 34, no. 4, 2008. p. 423-441.
42. Zembylas M., Vrasidas C. Globalization, information and communication technologies, and the prospect of a 'global village': promises of inclusion or electronic colonization? *Journal of Curriculum Studies* 37, no. 1, 2005. p. 65-83.

Mantas Bileišis

Skaitmeninių socialinių tinklų integravimas nacionalinės valstybės institucinėje struktūroje

Santrauka

Straipsnyje siekiama sukurti normatyvinį modelį, kuris leistų integruoti iš pažiūros prieštaringus reiškinius: skaitmeninių socialinių tinklų formavimąsi ir sklaidą, kuriems teritoriškumas neaktualus ir nacionalinės valstybės institucinę struktūrą, kuriai teritoriškumas esmingai svarbus. Šio modelio poreikis aiškinamas tuo, kad skaitmeniniai socialiniai tinklai ilgainiui gali sąlygoti naujų politinių tapatybių formavimąsi ir taip mažinti esamų nacionalinės valstybės institucijų socialinį aktualumą. Šitokia raida autoriaus nuomone nėra pageidaujama, nes ji gali sąlygoti politinį nestabilumą nacionalinėse valstybėse.

About the author

Mantas Bileišis, lecturer and doctoral student at the Department of Public Administration at Mykolas Romeris University, e-mail: mantas.bileisis@mruni.lt, tel. no.: +370 684 97365, professional interests: role of the public sector in a changing society; interaction between political, administrative and civil levels in a political community; possibilities and limitations of modernistic and postmodern analysis of public administration.

SUSTAINABLE DEVELOPMENT EDUCATION EMPOWERMENT IN THE ASPECT OF LEARNING CITY DEVELOPMENT

Jurgita Bonkevičiūtė
Kaunas University of Technology, Lithuania

Abstract

Speedy development of economics, science and technologies and increasing ecological threats for survival of different sorts of life require systemic approach to sustainable society development. One of the means of sustainable development idea implementation is sustainable development education (SDE). Scientific issue of SDE empowerment in the learning city is clarified in the article. Relation between conceptions of SDE and environmental ducation is discussed in the first part of the article. Paradigm of SDE realisation and essential characteristics are analyzed in the second part. Levels of SDE realization are discussed in the third part. In the fourth part systemic approach to SDE empowerment in the context of learning city is presented.

Keywords
Sustainable development education, learning city.

Introduction

Objective of sustainable society is to lay firm foundations for development of economic, social and cultural aspects and to ensure environment preservation and meeting the needs of contemporary and future generations. Harmful influence on environment, depletion of natural resources, decreasing of biovariety – all that creates dangerous ecological imbalance and is contradictory to sustainability. Sustainable development can be reached through education, directed to preservation of environment, including different dimensions of social activities and existence.

Environmental education, developed from the end of the 20th century, is not capable to clarify rising ecological issues in the broader context (Filho, 1998). *Sustainable development education* (SDE), solving them, is integral in its nature, having holistic approach to development of economics and society, environment protection, culture, politics, health, and their interaction. Modern society is undergoing transformation from *environmental education* to *sustainable development education* that includes training of different abilities and skills, knowledge about public spirit and solidarity, human rights, equality, decisions based on ethical principles, variety of cultures, health, nature preservation, new models of production and consumption, socially responsible business, rational use of natural resources, decreasing of poverty and social exclusion. SDE principles were analysed by many scientists: Ryden (2007), Judes (2000), Ahlberg (1998), Filho, (1998), and Sterling (1996). Principles of sustainability were researched by Grundey (2007); Hargreaves (2007) researched aspects of sustainable leadership in education; Galkutė (2003), McNaughton (2004) – expression of sustainable development paradigm at school. Systemic demand for sustainable development is emphasized in works of Filho (1998), Judes (2000), and Huckle (1996), were aspects of the lack of cooperation between science, politics, different social groups and individuals, and aspects of clarifying local and global issues, insufficient attention towards non- formal and informal education were analysed.

Sustainability development is related to constant changes and is inseparable from a concept of lifelong learning. In the context of this conception, SDE and development of learning city strategy are closely related (Ngotho, Fincham, Quinn, 2004). Essence of learning city was revealed by Jucevičienė (2007), Lee, Edmonton (2003), Longworth (2000), and Larsen (1999). Lifelong learning models were investigated by Green, Reid (2004). Initiative of local society in striving for social proximity and economic renewal is emphasized in works of Shuman (1998).

Objective of learning city and SDE is quality of spiritual and physical life of people, competences necessary for modern life, competitive ability and steady sustainable development of people, organizations and the city. Settled learning society, activity of which is based on networks of learning in partnership, that is capable for continuous improvement in mutual learning and learning outside society, makes a base of learning city (Jucevičienė, 2007). The question is: what means of expression, capable to increase SDE realization possibilities, the learning city possesses? Learning city in all levels – lifelong learning residents of the city, learning organizations and networks of learning in partnership – is able to lay necessary foundation for realization of SDE system. It all reveals SDE empowerment through the *relevance and novelty* of initiatives of the city being developed into learning one.

Although conception of sustainable development reveals and acknowledges inseparable relations between all dimensions of society development, there is no definite system, joining individual efforts into consequent activities. Initiatives of formal and informal education and organizations of different types, directed towards sustainable development, are fragmentary, lacking systematization. Striving for more sustainable society, systemic changes have to happen in educational area itself (Sterling, 1996). Systemic efforts, concentrated in all levels of learning city, make possible realization of SDE aim – to provide knowledge to a person, to help in nurturing abilities and moral values, to stimulate motivation to act democratically and responsibly, thus adding to implementation of sustainable development objectives. Learning city that empowers SDE realization

by means of systematic efforts can help to reach aims of sustainable development.

Scientific problem of this article is revealed in the question: *how the city, being developed into learning one, can realize SDE by means of systematic efforts? The aim* of the article is to justify SDE empowerment in the aspect of the city, developing into learning one. *Subject of research:* sustainable development education. *Tasks:* to reveal relation between SDE and environmental education; to justify SDE characteristics; to reveal SDE realization levels; to justify aspects of systemic SDE realization in learning city. Article is prepared using scientific literature analysing method.

Relation between conceptions of sustainable development education (SDE) and environmental education. Relation between ecological, environmental and sustainable development education is not enough highlighted, therefore it is important to reveal it. Ecology is science about nature and includes knowledge about interdependence of different species and ecosystem. This is knowledge about trees, soil, fresh water, etc. While environmental and sustainable development education includes values. Environmental education stimulates new understanding, perspectives, values, knowledge and skills that are developed in formal and informal nurturing and strives to change behaviour towards creation of ecologically sustainable environment. However environmental education does not make sufficient base for striving to perceive sustainable development issues. In some countries it is supposed, that SDE originated from environmental education and includes such recourses as ethics, equality, new ways of thinking and learning. However many scientists affirm that environmental education is part of SDE, because SDE includes economic development, cultural variety, social and environmental equality (Sterling, 2001; Filho, 1998). Essential differences between *environmental education* and *sustainable development education* are the following: *environmental education* gives understanding, stimulates different behaviour, supports management and protection of environment; *sustainable development education* acknowledges transformational role of education, when ecologic sustainability is transferred to all generations and recourses are properly distributed (Pepper, 1998). SDE is broader than environmental education and includes global economic, ecological, multicultural, political and health aspects (Sterling, 2001; Filho, 1998).

In the end of the 20th century it became clear that *environmental education* is not able to clarify issues of economics and social life. Education, including broader context of social activity, was necessary for clarifying them. Transition from *environmental education* towards *sustainable development education* that includes and clarifies different environmental issues, covers many education areas and emphasizes importance of systematization took place in the mentioned period (Filho, 1998; Lele, 1991). Filho (1998) affirms that environmental education is part of sustainable development education.

Gray (2007) indicates that SDE has no specific formula. This is a process, a way of thinking, demanding certain understanding, assumptions, convictions and values both from teacher and learner. Different conceptions of SDE are presented in the Table 1. All recited approaches, from application through reforms till transformation, must be reflected in all levels of educational system and have to help society to move in sustainability direction. Critical thinking is cultivated in SDE process, and attitudes, directed towards preservation, are stimulating active participating in decision making. As Tilbury, Wortman (2004) notice, individuals, participating in the process, have not only be able to clear environmental issues of their own, their organization and social environment, but also must become active participants and decision makers in the process of changes. Sustainable development could be described as constant life quality improvement of current and future generations, using suitable proportions of man-made, natural, human and social capital (Čiegis, 2008).

Table 1

Conceptions of sustainable development education

Conception of SDE	Emphasized
Education about sustainability Sterling (1996)	Adaptation of new content and knowledge; systematization and transferring of knowledge; elements of sustainability in separate learning subjects; "learning as support".
Education for sustainability Huckle & Sterling (1996); Gray (2007)	Accurate reflection of sustainability ideas; integration into natural world, systemic thinking, "learning in striving for changes".
S**ustainable education)** Sterling (1996)	Changes of educational culture; theory and practice of sustainability; transformational paradigm; realization of human potential; economic-ecological-social wellbeing; "it is impossible not to change when learning and to change when not learning" (Kosko, 1994).
Education for sustainable development McKeown (2003)	Continuos process; constantly changing knowledge, systemized knowledge; experience and efforts; acting locally and thinking globally.
Education for sustainable future Wheeler & Bijur (2000)	Resultativeness; orientation towards future; society; systematicness; long-term objectives.
S**ustainability education)** Sterling (2001)	Education; transmissible character of education; specific knowledge and skills; global approach towards clarifying the issue.

Sustainable development is not only subject of ecological, economic and cultural discourse, but is also important in ideological and political aspects. Sustainable development most often emphasizes three dimensions - *environmental, economic, and social* (Fien, Tilbury, 2002; Sterling, 1996). 1) *Economic* dimension includes requirements of sufficient and stable growth. This means financial stability, quality, low and constant inflation rates, ability to invest, innovation, preservation of resources, and participation in economical development, moderate consumption and qualitative services. *Economical sustainability* means that all processes and projects must provide maximal possibilities and benefits, which have to be distributed and ensured to all generations equally. 2) *Social* dimension requires from social institutions and individuals understanding of their role when implementing changes and influencing development. Importance of participation, different

opinions, and sensitivity to limits of economic growth is emphasized, relation between development and prevailing social norms is revealed. This dimension ensures stability of public systems: employment, democracy, capability to participate in changes, equality, cultural variety, reduction of conflicts. 3) *Environmental* dimension requires understanding of influence of man-made decisions and actions on resources, emphasizes moral responsibility, preservation of biological variety, stability of climate, recycling of materials, protection of river basins, flexibility of ecological systems, capability to adapt to speeding changes of biosphere and not lose future possibilities (Tilbury, Wortman, 2004). Earth system must be considered as self-regulating, where every component is important.

Arising challenges highlight not only importance of traditional sustainable development dimensions (*economic, ecological, and social)*, but relevance of other, no less important dimensions of sustainable development: *cultural, political, and of health* (Filho, 2000; O'Connor, 1998; Macer, 2004). *Cultural sustainability* means variety of cultural groups, development and stimulation of heritage of their values and traditions. Culture links different existence, relations, behaviour, beliefs and activity of mankind into harmonious entirety. Macer (2004) presented "Chair of sustainable development", that stands on four dimensions (*ecological, economic, social and cultural),* and emphasizes importance of keeping the balance. Task of SDE – to coordinate all dimensions and to use them as means of striving for sustainable *development* – is not easy one, because all dimensions must be developed coherently and gradually.

SDE realization paradigm and essential characteristics. Objective of education as well as process oriented methodology are based on deep provisions of values, helping to define essential education outlook. A base of dominating paradigm, to which SDE refers, is very important in realization of sustainable development idea. As Sterling (1996) notices, SDE can refer to dominating *social paradigm*, which is technocratic, materialistic, and reductionistic in its essence, and to *environmental paradigm,* which is democratic, more eco-centric, socially engaged, and integral. Tension constantly arises between those two paradigms. *Social paradigm* is oriented towards satisfying human needs and is lacking attention to environment and protection of all sorts of life. *Environmental* development paradigm emphasizes holism, systematicness and synergy, includes participation, democracy, cooperation, feedback, orientation towards a process, cooperated development, integrity, association, adaptation, creativity, transformation, expedience, and epistemology. *Environmental paradigm* is close to SDE not only because of clear eco-centric orientation, but is also encouraging global valuation of environment and making decisions, covering interests of entirety. However the most relevant and stable in long-term perspective paradigm, on which SDE can lean, is *holistic paradigm.* It orients us towards transformation and is based on the following principles: *education about (*knowledge), *education towards* (values) and *activity, oriented towards sustainable development.* Knowledge must be related to

sustainable development, values and attitudes – oriented towards pluralistic approach and cultivation of responsibility, activity related to wish and capability of acting and integration of sustainable development into different fields. SDE, according to Hargreaves, Fink (2003), covers intercentinisated, holistic and ecological way of thinking. Holistic approach is important for realization of SDE, since it covers the whole context and is balancing between social and environmental paradigms. In the context of holistic *paradigm* the following *characteristics* of SDE are highlighting (Sterling, 1996):

Contextual – fully awake to and engaged Jn addressing the crises of modernity. EFS should be applied and grounded in the local economic, social and ecological context and community, followed by regional, national, international and global context.

Innovative and constructive – drawing inspiration from "new paradigm" postmodern thinking in a range of fields (including science, ethics, politics, economics, design and psychology) offering insights and ways forward that promise a safe, humane and environmentally sustainable future.

Focused and infusive – primarily grounded in, but not limited to, social development and human ecology, equity and futures, at the centre of a holistic approach which touches all other areas.

Holistic and human in scale – recognizing that all educational dimensions, such as curriculum, pedagogy, structures, organization and ethos are mutually affecting and need to be seen as a consistent whole; learner-centered (development of the whole person) and socially oriented.

Integrative – greater emphasis on interdisciplinary and transdisciplinary enquiry. That means breaking free of disciplinary perceptions and traditions to create new meaning, understandings, and ways of working.

Process oriented – education and learning as intrinsic to life. The emphasis is on learning, participation, critical reflection, experiential learning, democratic ownership.

Critical – ideologically aware and socially critical. Recognizing that no education values are politically neutral, EFS should draw on the body of critical theory associated with deep green orientations.

Balancing – seeking to rebalance correlated pairs that are dissociated and distorted in the dualistic paradigm. These include personal aspects such as knowledge and value, cognitive and affective learning, rationality and intuition, object and subject, material and spiritual and etc.

Systematic and connective – putting emphasis on relation and pattern (including dynamics and flows, distortions, feedbacks and causation). Designing sustainable and multilevel physical, environmental, social and economic systems.

Ethical – clarifying ethical issues, but also nurturing normative ethical sensibility that relates and renders seamless the deeply personal and collective; solidarity with others, distant people, environments.

Purposive – exploring, testing, criticizing and nurturing sustainability values and alternatives, with intension to assist change.

Inclusive and lifelong – not selective, but for all persons in all areas of life.

These characteristics show that *sustainable development education* is qualitatively different, so striving for sustainable development realization, radical changes must happen in the system. In broad sense SDE covers improvement of educational quality, reorientation of education towards sustainability, increasing of consciousness and education of society in different levels of nurturing. Education is considered as the most important factor in creating sustainable future, and institutions of teachers' training are named as agents of alterations in transformations experiencing education.

Referring to fulfilled analysis of SDE characteristics, it is possible to generalize sustainable development conception: *sustainable development education has enduring orientation, declares sustainability values, empowers society to clarify sustainable development issues "here and now", has transformational, holistic and global approach, covers economic, ecological, social, cultural, political and health areas, is developed in all educational structures and refers to consciousness, creativeness, tolerance, preservation and systemic approach.*

Levels of SDE realization. *Sustainable development education* is a device, empowering changing of society attitude and giving possibility to create more safe, healthy and comprehensively prosperous world. Therefore, learning can and must take place not only in formal or non-formal structures, but also in family, at leisure, in community life, and in daily activity. Bellow the following levels of SDE realization are revealed: *formal, non- formal and informal.*

Formal learning is taking place in educational and science institutions. Learning activity is purposeful, deliberate, organized, with fixed duration and schedule, hierarchic evaluation system, and formal requirements for admission. It has typical order, foreseen in advance, content, methods and resources for learning. Learners receive diplomas, acknowledged by state. SDE can be realized in the following levels of formal education: preschool and primary nurturing, secondary education, vocational training and studies at the university.

Instructive "information transferring" approach, especially prevailing in formal education, no longer answers to modern economic, social and environmental demands. Gray (2007) presents methods, reflecting demands of sustainable development realization:

- *holistic education, oriented to place,* concentrates towards cognition of local environment, stimulates taking necessary actions and creating culture of cooperation in community, helps to realize meaningful learning, gives a possibility of learning together, making it investment to real decisions (Sobel, 2005).

- *sustainability through learning in cooperation* includes all sustainability elements when teaching in formal structures. Group cooperation allows learners to receive feedback, to acquire necessary skills, to learn proper behaviour and understanding of the meaning of cooperation and group work (Gillies & Ashman, 2003).

SDE, as Margulis (1997) affirms, is constrained by formal environment of class, and is stuffed into frames of formal teaching institutions and academic culture. This inspires a need of objective external approach to environment (Haigh, 2006).

Non-formal learning. Understanding of *sustainable development* can be also formed in external environment (Rickinson, 2001; Robson, 2002; Calder & Clugson, 2005). Non-formal education includes any kind of organized educational activity, which takes place outside official educational system in groups that were formed in non-educational purposes (Fortner, 2001). Non-formal learning is described by the following characteristics: orientation towards specific, individual learning objectives and flexibility of choosing a method of learning. Common with the formal education is a fact, that this kind of learning is restricted by institutional dependence. Non-formal education can be rendered in working places; social organizations and groups can take care of it, as well as organizations, founded for supplementing formal systems. Non-governmental organizations (NGO) play important role in SDE realization. NGO orient their activity towards political, religious, social or environmental aspects, relevant to SDE. NGO can significantly contribute to training of global thinking and local acting skills (Pincen & Finger, 1994; Holliday et al., 2000; Madgwick, 2000; Mitford, 2000). A role of NGO in realizing SDE is solid because of their flexibility and capability to reach different social layers. NGO have ability quickly to absorb and implement in practice new educational methods and innovative solutions. Sustainable development requires efficiency and flexibility of learning, when informing people of new ways of thinking and acting, and preparing to them. SDE is efficiently transferring sustainable development ideas only if it is constructed as a lifelong process (Haigh, 2006). SDE, reflecting environmental changes, has to react to them quickly, to involve a society into discussion and to transfer necessary knowledge immediately (Martin & Jucker, 2005). SDE has to reach those, who entered into business and economical structures, and into different communities (Berry, 1999; Jackson, 2003). Therefore active involvement of NGO into realization of SDE objectives is an important step when striving for SDE implementation in non-formal education structures.

Informal education. Challenges, brought by SDE, have to be solved not only in academic level, and corresponding skills have to be trained not only in formal or non-formal educational structures, but have to reach each person in different stages of his/her learning (Haigh, 2006). Authors, emphasizing importance of learning society and learning individual in striving for sustainable development, pay attention on a fact, that learning in a level of individual is necessary factor of changes. For each individual especially important is understanding of social development perspectives and mankind survival possibility, cognition of existing processes, capability to act individually and in system, ability to improve, to survive in processes of changes, to recognize and stimulate positive processes of environment changes.

Informal education (learning) is often identified with *spontaneous (self-contained)* learning, when a person is improving every day without additional efforts. This kind of education is not necessarily premeditated, is less organized and structured, can be stimulated by life, circumstances, family, and conditions, therefore can be

not recognized even by individuals, broadening their knowledge and skills.

Speaking of *self-directed* learning, learning is conscious, learner makes additional learning endeavours, strives for perfection. Learner is purposefully trying to form learning environment, even though there will always be certain spontaneity (Jucevičienė, 2007).

Experiental learning is described by knowledge, skills, abilities, approaches, values, beliefs and emotions (Jarvis, Holford, Griffin, 2004). Experience is a base and factor of learning, where learners are actively designing their experience, learning is holistic and is designed in sociocultural medium, that means, is influenced by social, cultural, and economic environment (Miller, 1998). Qualification is usually acquired by learning in formal educational system and is heightened by formal and non-formal learning. Competence and its improvement is informal, therefore is a result of *spontaneous (self-contained), self-directed* learning and learning from one's experience. Essential objective of SDE is high competence of individual in clarifying issues of sustainable development, critical thinking and conscious acting (Davidson, 2000). *Spontaneous (self-contained), self-directed* and *experiential* learning is equally important for SDE realization in informal level. Perception of sustainable development values on individual level strengthens success of SDE realization.

Speaking of SDE realization in different forms and in all levels of education, Paden (2000) emphasizes essential principles that must be followed: *local and global clarifying of issues; context, covering all dimensions, lifelong learning, interdisciplinary and experiential learning methods, cooperation with institutions and organizations of different types, systemic thinking, training of independence, stimulation of environmental sensibility, social righteousness, striving for social prosperity.* According to Sterling (2001), in order to meet sustainable development objectives, it is necessary to design and to implement new strategic planning in different levels of education, to develop interrelationship between institutions, their interaction with business and social partners, scientific institutions, and to involve society into decision making process.

Systemic approach to SDE empowerment in the context of learning city development. Sustainable development education, including different levels and forms, demands systemic approach. A question, relevant to this topic, is: whether SDE objectives can be realized, invoking systemic efforts of learning city? As Jucevičienė (2007) affirms, sustainable learning city is *innovative, insightful, intellectual, socially aware, and creating possibilities. E- city, safe, sensitive to nature, healthy in lifestyle, sensitive to human- being, highly cultural, enterprising.* All these characteristics are related to main dimensions of sustainable development – economic, ecological, social, cultural, political, and of health. When striving to ensure constant development of sustainable city, governance, based on the following principles, is necessary: *inter-sectoral approach; participation of society; clarity and seeing a future; evaluation of local, regional, and global impact of activity; cautiousness, holistic thinking, publicity of information, scientific and technologic advancement, stimulating of innovations,*

international cooperation; openness, development of human resources, informational and cultural changes; charging polluters; valuation of sustainable development; long-term programming (Čiegis, 2007).

Typical for *learning city* is the following: effective learning environments, learning society, network of learning in partnership, constant improvement, mutual learning, innovations and continuous striving of people, societies, organizations, and city as a whole for sustainable development (Jucevičienė, 2007). Organizational pattern of learning city development, which can also be applied to SDE realization, consists of *initiation, setting in motion, and becoming* stages (Jucevičienė, Jucevičius, Bagdonas 2008). The main character at *initiation* stage is university, which accumulates knowledge and competence, necessary for development of sustainable city, establishes international links, initiates municipality, department of education and other structures to organize sustainable development conferences, fulfils investigation of the needs of citizens and organizations for sustainable development education. Municipality at *initiation* stage organizes conferences of representatives of citizens and organizations and takes leading role in SDE implementation.

The main characters at the *setting in motion* stage are municipality, organizations of the city, and scientists. SDE council in municipality, SDE centre, experimental education institutions, education centres and different profit-making and non-profit organizations create sustainable development education implementation pattern. Scientists organize seminars, give consultations, and pursue research of the following matters: methods and ways of SDE implementation; flexible reaction of education department, schools and their leaders, pedagogues, human recourses development services of enterprises and organizations, to demands of sustainable development competences; identification of SDE demands and their changes; SDE expansion in organizations; creating partnership networks that strive for SDE; efficient activity of learning centres, when striving for SDE; activity of SDE counsellor.

All forces of the city (individuals and organizations) act at *becoming* stage: people master methods and means of SDE and constantly apply those in different areas of their life (at work, at home, at leisure, etc.); SDE system becomes modern, stimulating and empowering to strive for sustainability; various organizations (especially of business and production) become those striving for SDE, capable to improve constantly and to be competitive; societies become more active, networks of purposive learning in partnership (for citizens and organizations) act busily; SDE expands in centres of education; society strives for high level of SDE informational, communicational and educational technologies; SDE is propagated through media and other means of communication, positive experience is spread, SDE festivals and fiestas are organized; citizens and organizations are honoured (awarded) for high results in sustainable development implementation; SDE expanding in families is stimulated; links with European and global networks, implementing SDE, are cultivated, and interchange of experience takes place.

Referring to systemic approach, learning city by mutual efforts is enabled to strive for sustainable development in three main levels: *individual, organizational and of the city as a whole* (Jucevičienė, 2007), (Table 2).

Table 2

SDE realization (modified according to Jucevičienė, 2007)

INITIATIVE of MUNICIPALITY	INITIATIVE of CITIZENS (ORGANIZATIONS)
Sustainable development issue	
Determination of participants (individuals, organizations and others)	Consultation of Municipality Sustainable development committee
Determination of SDE course	
Determination of additional participants	
Concentration of efforts of various institutions	
Determination of participants' competence, needed for SDE realization (necessary, existing, deficient)	
Creation of conditions for clarifying SDE issue	Process of SDE
Empowerment of participants to clarify SDE issue	
Development of SDE competences in activity	
Clarifying SDE issue	

Provision for improvement, learning, participation in networks of learning in *partnership*, and interest in activity of learning city dominates in the level of *individual.* In the level of *organization* important are: sufficient level of innovativeness, perception of importance of collective and lifelong learning, ability to work in team, educational literacy of the leader, social relations with citizens of the city, networks of learning in partnership. Organizations establish and strengthen environmentally oriented norms, values, culture and structure, change their behaviour and implement environment protection measures (Hajer, 1996). *City level* is oriented towards basic economic conditions, employment of citizens, acceptability of education system, level of education, interest of municipality and organizations in learning city development, perception of importance of lifelong learning, satisfying learning needs of socially excluded people. Municipalities of cities are playing critical role in striving for SDE objectives. City municipality represents interests of society and is responsible for the right of self-government and implementation of own functions. The main goals of city municipality – stimulation of business expansion, development of education, science and culture, improvement of health, social, and environmental matters, ensuring increase of welfare – are closely related to sustainable development education objectives. Therefore SDE implementation through strategy of learning city, implemented in municipality, is one of the means of reaching the goals of sustainable development. These goals can be realized on initiative of citizens, organizations or municipality.

Learning city, realizing lifelong learning conception by making favourable education conditions for society, can become empowering factor for realization of sustainable development education (Jucevičienė, 2007). Learning city, implementing SDE, is sustainable city. Priorities of SDE and learning city reflect striving of society towards wellbeing and sustainability with all surrounding environment by invoking individual and collective learning. According to Van Kannel-Ray (2005), SDE includes three main principles: *responsibility of generations, systemic perspective* and *sustainability results* on individual and society levels. Main task of those three principles is to ensure quality of life for future generations (Bowers, 1991).

Therefore, learning city, invoking municipality as institution, becomes a catalyst of SDE realization. All initiatives are equally important: depending on the issue of sustainable development, one can choose different issue clarifying means: initiative of citizens, organizations or municipality.

Conclusions

• Sustainable development education is broader than environmental education and includes global economic, social, environmental, multicultural, political, and health aspects.

• Sustainable development education is of transformational nature, refers to holistic paradigm and leans on the following basic characteristics: contextual; innovative and constructive; focused and infusive; holistic and human in scale; integrative; process oriented; empowering; critical; balanced; systematic; ethical; purposive; continuous.

• For effective contribution of sustainable development education to nurturing of environment protection values and ability to act independently when clarifying environmental issues, SDE strategies must be coherently implemented in all levels of education (preschool, primary, secondary education, and university), invoking different forms of education – formal, non-formal and informal.

• Sustainable development education can be systematically realized through strategies of learning city, invoking initiatives of municipality, citizens, and organizations. Characteristics of learning city – learning society, stimulating of lifelong learning, networks of learning in partnership, constant society perfection, efficient learning environments, innovative activity, spiritual and physical wellbeing, sustainable development, development of competences and increasing international competitive ability –are favourable for realization SDE systemic efforts.

References

1. Ahlberg, M (1998). Education for Sustainability, Good Environment and Good life//Environmental Education for Sustainability. P. 25-43.
2. Berry, T. M. (1999). The Great Work: Our Way Into The Future. New York: Bell Tower.
3. Bowers, C.A. (1991). Critical Pedagogy and the 'Arch of Social Dreaming': A Response to the Criticisms of Peter McLaren, Curriculum Inquiry. Vol. 21(4), pp. 479-487.
4. Calder, W. & Clugston, R. (2005). Editorial: education for a sustainable future, Journal of Geography in Higher Education, 29(1), pp. 7–12.

5.   Davidson, J. (2000). Sustainable development: Business as usual or a new way of living? Environmental Ethics, Spring 2000, Vol. 22 Issue 1, p25, 18p.
6.   Fien, J. & Tilbury, D. (2002) The global challenge of sustainability, in: D. Tilbury, R. B. Stevenson, J. Fien & D. Schreuder (Eds) Education and Sustainability: Responding to the Global Challenge, pp. 1–12 (Gland,Switzerland: International Union for the Conservation of Nature (IUCN), Commission on Education and Communication) Available at http://www.iucn.cec.org (accessed October 2002).
7.   Filho, L., W. (2000). Dealing with misconceptions on the concept of sustainability. International Journal of Sustainability in Higher Education. Vol. 1, pp.9-19.
8.   Filho, L. W. (1998). Environmental education and Quality of Life//Environmental Education for Sustainability: Good environment, good life. Ed. by M. Ahlberg, W.: Leal Filho. Peter Lang, p. 11-23.
9.   Fortner, R. W. (2001) Nonformal environmental education in the United States: current programs and practices, Korean Federation for Environment Movement (KFEM): International Symposium on Environmental Education in 2001. Available at http://english.kfem.or.kr/international/symposium.htm .
10.   Galkutė, L. (2003). Švietimas ir visuomenės raida; švietimo vaidmuo; "Darbotvarkė 21"; pamokos gyvenimui – pasaulyje ir Lietuvoje; temos ir orientyrai // "Darbotvarkė 21" – mokykloje. – Vilnius; REC biuras Lietuvoje.
11.   Gillies, R., M.& Ashman, A., F., eds. (2003). Co-operative Learning: The social and intellectual outcomes of learning in groups. New York, NY: RoutledgerFalmers.
12.   Gray. L. (2007). Learning for Our Future: Moving Toward a Sustainable Worldview. Hampshire College, School of Natural Science.
13.   Green, B. & Reid, J.A. (2004). "Teacher education for rural-regional sustainability: changing agendas, challenging futures, chasing chimeras?" Asia-Pacific Journal of Teacher Education. Vol. 32(3), pp. 256-273.
14.   Grundey, D. (2007). Applying the principles of sustainability in university management: a comparative analysis. Transformations in business and economics. Vol. 6, no. 2, p. 67-86.
15.   Haigh J. (2006). Promoting Environmental Education for sustainable Development: The Value of Links between Higher Education and Non-Governmental Organizations (NGOs). Journal of eography in Higher Education,Vol. 30, No. 2, 327–349.
16.   Hajer, M. (1996). Ecological modernization as cultural politics. In Risk, Environmental and Modernity: Towards a New Ecology, Lash S., Szerszynski B., Wynne B. (eds). Sage: London; 246-268.
17.   Hargreaves, A. (2007). Sustainable Leadership and development in Education: creating the future, conserving the past. European Journal of education, Vol. 42, No. 2.
18.   Hargreaves, A., Fink, D. (2003). Sustaining leadership. Phi delta Koppan, 84(9), 693-700.
19.   Holliday, S., Owen, P. & Turner, C. (Eds) (2000) Journeys of Discovery (Oxford: Earthwatch Institute).
20.   Huckle, J.(1996). Realizing sustainability in changing times.// Education for sustainability. Ed by J. Huckle, S. Sterling, Earthscan.P.3-18.
21.   Jackson, M. G. (2003) Internationalising the curriculum, Journal of Geography in Higher Education, 27(3), pp. 41–48.
22.   Jarvis, P., Holford, J., Griffin, C. (2004). The theory and practice of learning. London: Kogan Page.
23.   Jucevičienė, P., Jucevičius, R., Bagdonas, A., (2008). Projektas: Kaunas – besimokantis miestas. Kaunas.
24.   Jucevičienė, P. (2007). Besimokantis miestas : Monografija. - Kaunas: Technologija, 407 p.
25.   Judes, U. (2000). Towards a culture of sustainability//Communicating Sustainability. Walter Leal Filho (ed.) Environmental education, communication and susteinability. Vol.8 Peter Lang. P. 97-120.
26.   Kosko, B. (1994). Fuzzy thinking, Flamingo.
27.   Larsen, K. (1999). Learning rities: the new rwcipe in regional development. Organization foe economic cooperation, 217/218, 73-77.
28.   Lee,   S.,   Edmonton,   A.   (2003).   Building   cities   and   towns   as   learning   communities.   Internete: http://www.oise.utoronto.ca/CASAE/cnf2003/2003_papers/sylvialeeCAS03.pdf.
29.   Lele, S., M. (1991). Sustainable development: a critical review. World Development 19(6), 607-621.
30.   Longworth, N. (2000). Making lifelong learning work: learning cities for learning century. London: Kogan Page.
31.   Macer, D.R.J. (ed.) (2004). Bioethics for Informed Citizens across Cultures. Cristchurch, New Zealand: Eubios.
32.   Madgwick, S. (2000) There is no such thing as a free lunch, in: S. Holliday, P. Owen & C. Turner (Eds) Journeys of Discovery, pp. 61–64 (Oxford: Earthwatch Institute).
33.   Margulis, L. (1997). Science education in the USA: not science, not yet education, in: L. Margulis (Ed.) Slanted Truths: Essays on Gaia, Symbiosis and Evolution, pp. 317–320 (NewYork: Copernicus-Springer Verlag).
34.   Martin, S. & Jucker, R. (2005). Educating earth-literate leaders, Journal of Geography in Higher Education, 29(1), pp. 19–30.
35.   McKeown, R. (2003). "EE (does not equal) ESD: defusing the worry," Environmental Education Research. Vol. 9(1), pp. 117-128.
36.   McNaughton, M. J. (2004) Educational Drama in the Teaching of Education for Sustainability.. Environmental Education Research, v10 n2 p139-155 May.
37.   Miller, Jr., T. (1998). Living in the environment.10th edition. Belmont, CA: Wadsworth.
38.   Mitford, H. (2000). Back to basics, in: S. Holliday, P. Owen & C. Turner (Eds) Journeys of Discovery, pp. 17–11 (Oxford: Earthwatch Institute).
39.   Ngotho, M., Fincham, R., Quinn, N. (2004). Government, Business and the Public: The Role of Environmental Education in Creating Sustainable Urban Places . Environmental Education Research, v10 n3 p313-329 Aug.
40.   O'Connor, J. (1998). Natural Causes: Essays on Ecological Marxism. Giulford: New York.
41.   Paden, M. (2000). Education for Sustainability and and Environmental Education. Education for Sustainable Future: A Paradigm of Hope for the 21st Century. Ed. by Wheeler, A. Kluwer Academic/Plenum Publishers, New York, p. 7-15.
42.   Pepper, D.(1998). Sustainable development and ecological modernisation: a radical homocentric perspective.Sustain Dev6:1-7.
43.   Pincen, T. & Finger, M. (Eds) (1994). Environmental NGOs in World Politics: Linking the Local and the Global (London: Routledge).
44.   Rickinson, M. (2001). Learners and learning in environmental education: a critical review of the evidence, Environmental Education Research, 7(3), pp. 207–320.
45.   Robson, E. (2002). 'An unbelievable academic and personal experience': issues around teaching undergraduate field courses in Africa, Journal of Geography in Higher Education, 26(3), pp. 327–344.
46.   Ryden, L. (2007). The Value of Sustainable Development// Towards Sustainable Development in Higer Education-Reflections. Ed. By T. Kamvola, L. Rohweder. Ministry of Education, Finland, p. 28-34.
47.   Shuman, M. (1998). Going local creating self-reliant communities in a global age. New York: Free Press.
48.   Sobel, D. (2005). Place-Based Education: Connecting Classrooms and Communities, 2nd Ed. Nature Literacy Series Number 4. Great Barrington, MA: The Orion Society.
49.   Sterling, S. (2001). Sustainable education. Re-visioning Learning and Change. Green Books for the Schumacher Society.
50.   Sterling, S. (1996). Education in change// Education for sustainability. Ed by J. Huckle, S. Sterling, Earthscan. P. 20-39.
51.   Tilbury, D.&Wortman, D. (2004). Engaging People in Sustainability. Gland Switzerland and Cambridge, UK: Commission on education and Communication, IUNC. L.A.G. 61.
52.   Wheeler, K.A., Bijur, A.P. (2000). Education for Sustainable Future: A Paradigm of Hope for the 21st Century. New York: Kluwer Academic/Plenum Publishers.

Jurgita Bonkevičiūtė

Darnaus vystymosi švietimo įgalinimas miestui vystantis į besimokantį aspektu

Santrauka

Sparti ekonomikos, mokslo ir technologijų raida, didėjančios ekologinės grėsmės įvairių gyvybės rūšių išlikimui reikalauja sisteminio požiūrio į darnios visuomenės vystymą. Viena iš priemonių, įgyvendinant darnaus vystymosi idėją, yra darnaus vystymosi švietimas (DVŠ). Šiuolaikinė visuomenė patiria virsmą iš *aplinkosauginio švietimo* į *darnaus vystymosi švietimą* apimantį įvairių gebėjimų ir įgūdžių lavinimą, žinias apie pilietiškumą ir solidarumą, žmogaus teisę, lygybę, etikos principais pagrįstus sprendimus, kultūrų įvairovę, sveikatą, gamtos išsaugojimą, naujus gamybos ir vartojimo modelius, socialiai atsakingą verslą, racionalų gamtos išteklių naudojimą, skurdo ir socialinės atskirties mažinimą. Nors darnus vystymasis dažniausiai akcentuoja tris dimensijas - *aplinkosaugos, ekonominę, socialinę*, tačiaus kylantys iššūkiai išryškina ne mažiau svarbių darnaus vystymosi dimensijų aktualumą - *kultūrinė, politinė* bei *sveikatos*.

DVŠ remiasi holistine paradigma, yra transformacinio pobūdžio, bei grindžiamas šiomis charakteristikomis: kontekstualumas; inovatyvumas ir konstruktyvumas; sutelktumas ir neišskaidomumas; holistiškumas ir humaniškumas; integralumas; orientacija į procesą; įgalinimas; kritiškumas; subalansuotumas; sistemiškumas; etiškumas; tikslingumas; tęstinumas. Kaip teigia daugelis mokslininkų DVŠ turi ilgalaikę orientaciją, deklaruoja darnos vertybes, įgalina visuomenę darnaus vystymosi problemas spręsti "čia ir dabar", yra transformacinio, holistinio, globalaus pobūdžio, apima įvairias gyvenimo sritis ir turi būti plėtojamas visose švietimo struktūrose. Darnos idėjoms realizuoti yra svarbus kiekvieno individo sąmoningumas bei kūrybiškumas, tolerancija, gebėjimas globaliai mąstyti bei veikti lokaliame lygmenyje.

Darnaus vystymosi tikslams pasiekti būtina kurti ir diegti naują strateginį planavimą tarp įvairių švietimo lygmenų, vystyti institucijų tarpusavio ryšius, jų sąveiką su verslo ir socialiniais partneriais, mokslo institucijomis, į sprendimų priėmimą įtraukiant visuomenę. Todėl įvairios DVŠ strategijos turi būti diegiamos nuosekliai visuose švietimo lygmenyse (ikimokykliniame, pradiniame, viduriniame, universitetiniame), pasitelkiant įvairias švietimo formas-formalią, neformalią ir informalią.

Besimokančio miesto ir DVŠ siekis yra žmonių dvasinio ir fizinio gyvenimo kokybė, šiuolaikiniam darbui reikalingos kompetencijos, konkurencingumas bei nuolatinis žmonių, organizacijų, miesto darnus vystymasis. Todėl DVŠ gali būti realizuojamas sistemingai per besimokančio miesto strategijas, pasitelkus savivaldybės, piliečių, organizacijų iniciatyvas. Besimokančio miesto charakteristikos - besimokanti bendruomenė, mokymosi visą gyvenimą skatinimas, mokymosi partnerystėje tinklai, nuolatinis visuomenės tobulėjimas, efektyvios mokymosi aplinkos, inovacinė veikla, dvasinis ir fizinis gerbūvis, darnus vystymasis, kompetencijų vystymas ir tarptautinio konkurencingumo didinimas - yra palankios sisteminėms DVŠ pastangoms realizuoti.

About the author

Jurgita Bonkevičiūtė, PhD student, Master in Education. Kaunas University of Technology, Faculty of Social Sciences, Department of Educational Systems, Lithuania. E-mail jurbonke@gmail.com. Phone +370 616 09530. Research interests: sustainable development education, learning city.

METHODOLOGICAL PRINCIPALS OF REGIONAL COMPETITIVENESS MEASUREMENT WITHIN COUNTRY BY COMPOSITE INDEX

Jurgita Bruneckienė

Kaunas University of Technology, Lithuania

Abstract

In this article the concept of regional competitiveness in the context of regional competitiveness measurement is presented, the possible methods of measurement of competitiveness are shortly reviewed, the necessity of the complex measurement of regional competitiveness is proved. The best-known methodologies of competitiveness indices are analysed, the principal scheme of the measurement the regional competitiveness is formed. On the background of the research done, the methodological principals of regional competitiveness measurement are identified, which can be practically applied for the measurement of competitiveness of Lithuanian counties or regions of other countries.

Keywords

Regional competitiveness, measurement of regional competitiveness, regional competitiveness index.

Introduction

Every country consists of regions. The fact is that economy of the whole country is directly dependent on an economic and social viability of regions and their ability to be competitive. That's why it is very important to measure not only national, but also regional competitiveness and it's impact on the competitiveness of whole country.

In spite of an increasing interest in the problem of regional competitiveness in the worldwide scientific literature (very few analyses have been carried out in this sphere in Lithuania), its theoretical explanation is still one of the most difficult and complicated parts of the conception of competitiveness. The absence of the method of a complex measurement of regional competitive position is becoming one of the most important obstacles for creating effective strategies of improving the regional competitiveness.

Despite the fact, that different methods of the measurement of competitiveness can be found in scientific literature, the measurement by a composite index is considered to be one of the method to analyze the problem in a complex way. Indices of competitiveness *(The Competitiveness Index of IMD, The Global Competitiveness Index of World Economic Forum, UK regional competitiveness index)*, which have been formed and are widely applied in the world, are generally intended for the measurement of the competitiveness in a country. Thus, this limits possibilities of their application to the measurement of competitiveness on a regional level and proves the necessity of methodological principals, which can be practically applied for the measurement of regional competitiveness within country.

Aim of the article – on the background of the analysis of the best-known methodologies of competitiveness indices, to identify the methodological principals of regional competitiveness measurement by composite index within the country.

Methods of the research: a systematic and comparative analysis of concepts, methodologies and conclusions, published in scientific literature, as well as logical generation of conclusions.

The concept of regional competitiveness in the context of regional competitiveness measurement

The concept of a region is used in the wide range of different context: geographic, cultural, historic, political, economic and social spheres. If the new approach or theory appears, the concept of a region is modified newly. That's why many authors (Schmitt-Egner, 2002, Гранберг, 2001, Hoover, Giarratani, 1999, Бильчак, Захаров, 1998) provide different definitions of the region. The ambition to measure the regional competitiveness quantifiable (Snieska, Bruneckiene, 2009) encouraged to define a region as a composite part of a larger economic social space, which differs from other surrounding territories in economic, social, demographic, cultural, natural, and infrastructure systems connected by material and informational relations. In this article a region is understood as a part of the country. A particular number *(n)* of regions compose the country. The methodological principals of regional competitiveness measurement will be formulated further in this article according to the provided definition of a region.

The theoretical analysis of models of competitiveness (Simanaviciene, et al., 2007) showed that to provide the definition of the regional competitiveness accepted generally is a difficult task. It is due to the discussions about the expedience of the application of competitiveness concept to territories (Porter, 1990, Krugman, 1994, Camagni, 2002, Turok, 2004), the amplitude and variety of the concept itself, abundance of competitiveness factors and complexity of the relations among them. The ambition to measure the regional competitiveness quantifiable (Snieska, Bruneckiene, 2009) encouraged to analyze the competitiveness as a result of the interaction of input, output and outcome and define the regional competitiveness as an ability to use factors of competitiveness in order to make a competitive position and maintain it among other regions. The methodological principals of regional competitiveness measurement will be formulated further in this article according to the provided definition of the regional competitiveness.

Possible methods of competitiveness measurement and necessity of a complex one

The research, which is done by the author in other articles (Snieska, Bruneckiene, 2009) showed that the competitiveness of a region can be measured in different ways and each method has its advantages and disadvantages. Some authors stressed more the factors of competitiveness at macroeconomic level (eg. Macroeconomic stability, Basic Infrastructure), the other – the impact of competitiveness of enterprises to territorial competitiveness (eg. Business sophistication, Innovation), the other tried to measure intangible factors (eg. Attitudes and values). The analysis of scientific literature (Saisana et al., 2005, Ramanauskas, 2004, Civi, et al., 2001) let to structure the variety of methods of competitiveness measurement (see Table 1).

Table 1

The variety of methods of competitiveness measurement

Character of measurement	Example of methods of competitiveness measurement	
	By using the comparison among countries or regions	By using a composite index
Measuring total national or regional competitiveness		
1. Measurement of competitiveness at international level	- The World Bank's database of competitiveness indicators	- The Global Competitiveness Index of World Economic Forum; - The Competitiveness Index of IMD;
2. Measurement of competitiveness at national or regional level	- Regional Competitiveness Indicators of UK	- Europe competitiveness index; - UK regional competitiveness index;
Measuring partial national or regional competitiveness		
3. Measurement of competitiveness of economic sector	M. Porter "National diamond" model	- OECD Science, Technology and Industry Scoreboard.
4. Measurement of competitiveness by separate factors	- Indicators of price and nonprice competition	- Regional Attractiveness Index by PricewaterhouseCoopers - Human Tourism Index (World Travel and Tourism Council - the Knowledge-Based Economy Index
5. Measurement of the impact of economic policy to competitiveness	- Study of national economic freedom by Freedom House	- Index of Economic Freedom (Heritage Foundation); - Corruption Perceptions Index (Transparency International);

The theoretical research (Bowen et al. 2005, Giovannini et al, 2005, Huggins, 2005, Wignaraja et al, 2004, Booysen, 2002, Lall, 2001 a, b, Huovari et al, 2001, 2000) showed, that regional competitiveness cannot be completely defined by one or several economic social indicators at micro or macro level and theirs comparison with identical indicators of other regions. Thus complex measurement of competitiveness is a must.

The analysis of possible methods of competitiveness measurement proved, that measurement by a composite index helps to solve the problem of a complex measurement of regional competitiveness.

Composite indices in the measurement of competitiveness of territories

Many authors (IMD, 2009, Huggins 2005, Wignaraja et al., 2004, Freudenberg, 2003) define the composite index as a synthetic tool, which consists of subindices and integrates a large amount of information into easily understood formats. It is suggested to use the index for analysis of multicriteria phenomena (eg. globalization), which is difficult to analyze by one indicator.

The analysis of the best-known methodologies of competitiveness indices (see Table 2) let the author of the article to classify them into two groups:

- Indices, measuring total competitiveness of territory. These best-known indices are assigned to this group: The Competitiveness Index of IMD, The Global Competitiveness Index of World Economic Forum, UK regional competitiveness index.

- Indices, measuring partial competitiveness of territory. The best-known index of this group is Index of Economic Freedom.

Because of partial measurement of competitiveness, Index of Economic Freedom, will not be analysed further in the article.

The analysis of the best-known methodologies of competitiveness indices and scientific literature (IMD, 2009, WEF, 2008, Bowen et al. 2005, Giovannini et al, 2005, Huggins, 2005, Wignaraja et al, 2004, Booysen, 2002, Lall, 2001 a, b, Huovari et al, 2001, 2000), let to identify the methodological stages of the construction of composite index (see picture 1).

The analysis of scientific literature showed, that the zero stage „Developing a theoretical framework" is not assigned to the stages of the construction of composite index and many authors do not identify it at all. The theoretical research, which is done by the author in other articles (Snieska, Bruneckiene, 2009, Bruneckiene, Cincikaite, 2009) showed, that the theoretical model is the fundamental background for measuring regional competitiveness, as it makes big influence on the result of the measurement. That's why the author of the article identified it to a separate stage. In this stage the model of regional competitiveness is formed, which identify and combine into one system the main factors of competitiveness, indicators of factors and links among them.

Table 2

The comparison of best-known competitiveness indices

Title	The Competitiveness Index of IMD	The Global Competitiveness Index of World Economic Forum	UK regional competitiveness index	Index of Economic Freedom
Target	To measure the ability of nations to create and maintain an environment that sustains the competitiveness of enterprises.	To measure national competitiveness, which captures the microeconomic and macroeconomic foundations of national competitiveness	To measure the competitiveness of United Kingdom and the regions of United Kingdom	To measure the freedom of economy
Number of countries	57	134	12 (regions of UK)	183
Factors of competitiveness used in the measurement	1. Domestic Economy; 2. International Trade, 3. International Investment; 4. Employment; 5. Prices; 6. Public Finance; 7. Fiscal Policy; 8. Institutional Framework; 9. Business Legislation; 10. Societal Framework; 11. Productivity and Efficiency; 12. Labor Market; 13. Finance; 14. Management Practices; 15. Attitudes and Values; 16. Basic Infrastructure, 17. Technological Infrastructure, 18. Scientific Infrastructure, 19. Health and Environment; 20. Education.	1. Institutions 2. Infrastructure 3. Macroeconomic stability 4. Health and primary education 5. Higher education and training 6. Goods market efficiency 7. Labor market efficiency 8. Financial market sophistication 9. Technological readiness 10. Market size 11. Business sophistication 12. Innovation	1. R&D Expenditures; 2. Economic Activity Rate; 3. Business Start-Up Rate per 1,000 Inhabitants 4. Business per 1,000 Inhabitants; 5. GCSE Results - 5 or more grades A* to C 6. Proportion of working age population; 7. Proportion of knowledge business; 8. Gross value added per head 9. Export per head of population; 10. Import per head of population; 11. Proportion of Exporting Companies; 12. Productivity – output per hour worked; 13. Employment rate; 14. Gross weekly pay; 15. Unemployment rate.	1. Business Freedom; 2. Trade Freedom; 3. Fiscal Freedom; 4. Government Size; 5. Monetary Freedom; 6. Investment Freedom; 7. Financial Freedom; 8. Property rights; 9. Freedom; from Corruption; 10. Labor Freedom.
Number of criteria	329	116	20	50
Type of data	Hard statistical data; Opinion data	Hard statistical data ; the Executive Opinion Survey's results	Hard statistical data	Hard statistical data; the Executive Opinion Survey's results
Used weight coefficients	No	Yes	Yes	No

Freudenberg (2003) stressed, that the accuracy of the measurement by index depend mostly on the quality of data, which represent the problem, and the possibility to measure the problem quantifiable. The research showed that in practice the scientists usually meet with difficulties in the absence of data of needed information.

It is often meet in practice, that there's the lack of the basic statistical information at regional level, which can be gained at national level. Usually Statistical departments do not calculate and provide the needed data at all or the data is late for two years from the actual time. These facts burden the process of the measurement of regional competitiveness by index. For the solution of this problem, some scientists choose clear and easily obtainable indicators, some - less tangible, and some - even use the data of less reliable sources of information.

The research, which is done by the author in other articles (Snieska, Bruneckiene, 2009) showed, that the absence of the data of indicators, used in the calculation of the index, reduce the reliability of the index and distort the information about the competitiveness position of the region among other regions. For the solution of this problem, the scientists (Freudenberg (2003)) use different methods:

- Data deletion - omitting entire records when there is substantial missing data.
- Mean substitution - substituting a variable's mean value computed from available cases to fill in missing values.
- Regression - using regressions based on other variables to estimate the missing values.
- Multiple imputations - using a large number of sequential regressions with indeterminate outcomes, which are run multiple times and averaged.
- Nearest neighbour - identifying and substituting the most similar case for the one with a missing value.

- Ignore them - take the average index of the remaining indicators within the component.

The research, which is done by the author in other articles (Snieska, Bruneckiene, 2009) showed that it is difficult to interpret the changes of regional competitiveness index over time because of the changing situation in chosen and comparative regions. This problem will be very actual if the methodology and underlying data are not made public.

DEVELOPING A THEORETICAL FRAMEWORK: REGIONAL COMPETITIVENESS MODEL

Determination of factors of competitiveness and indicators of factors

0 stage

Analysis of links among factors of competitiveness and development of regional competitiveness model

DEVELOPING A METHODOLOGY OF INDEX CONSTRUCTION

Normalization of values of indicators of factors

1 stage

Grouping the factors and the indicators of factors

2 stages

Weighting the factors and the indicators of factors

3 stage

Calculation of the index

4 stage

ANALYSIS OF RELIABILITY OF THE INDEX

Analysis of robustness and sensitivity

5 stage

Figure 1. The principal scheme of construction of regional competitiveness index

It is very difficult for a user of the index to distinguish the reasons of the change of the results over period of time. These facts prove the necessity of a sound methodology of the index construction.

The first, the second, the third and the fourth stages together are named as the stage of the developing a methodology of index construction, where the methods of data normalizing, techniques of grouping the factors, techniques of factors weighting, expression of a mathematical function of the index are presented.

At the first stage the indicators of factors of competitiveness are normalized, in order to avoid problems in mixing measurement units. The research (Giovannini et al., 2005, Saisana et al., 2005, Freudenberg, 2003, Booysen, 2002) showed, that the normalization of variables let to avoid having extreme values dominate and also to partially correct for data quality problems.

Several techniques can be used to normalize variables in the calculation of index. Each method has its advantages and disadvantages, but the most often are these: Standard deviation from the mean; Distance from the best and worst performers; Distance from the group leader or the mean.

At the second stage, the factors and the indicators of factors are grouping, according to the regional competitiveness model, developed in the first stage.

At the third stage, the factors and the indicators of the factors are weighted. This stage is assigned to the most complicated stages by scientists, because the techniques of weighting have a big impact on the results of competitiveness measurement by index. The author of the article suggests, based on the research, which is done by the author in other articles (Bruneckiene, Cincikaite, 2009, Bruneckiene, Pukenas, 2008), to check the shift of the competitiveness measurement results induced by the use of different weight coefficients in the index calculation.

The analysis of methodologies of best-know indices let to identify the most popular approaches of weighting:
- The equal weighting coefficients applied for all indicators;
- The equal weighting coefficients applied for all groups of indicators (if the groups consist of different

number of indicators, the weight coefficients of indicators from separate groups differs);
- The different weighting coefficients applied for all indicators;
- The different weighting coefficients applied for groups of indicators.
- The scientists argue about the expedience of the weighting.

Some authors (Houvari et al. 2001, 2000, Sachs et al. 2001) have emphasized the fact, that it is difficult to form the substantiation of the measurement of weight coefficients or all variables are provided with the same weight coefficients with no reason (IMD, 2009). Other authors (Saisana et al., 2005, Freudenberg, 2003, Booysen, 2002) pointed out, that different weight coefficients enable to calculate competitiveness index more precisely as well as provide indicators with weight coefficients of different value (WEF, 2008).

In scientific literature the provision of weight coefficients of the same value for indicators is usually criticized due to the fact, that a particular aspect of the problem under consideration may be measured twice in case it is defined by more than one index. The provision of weight coefficients of different values for indicators is criticized due to a possible factor of subjectivity and a wider freedom of manipulation aiming at favourable results of calculation.

The equal weighting approach was criticized by Saisana et al. (2005), Freudenberg (2003). They told that some aspects of the problem can be double weighted, if two or more indicators measure the same aspect of the phenomena. As a remedy, indicators could be tested for statistical correlations, and lower weights could be given to variables strongly correlated with each other.

The research showed that the greater weight coefficients are given to components which are considered to be more significant (according the opinion of the index authors, economic theory or empirical researches). As a remedy competitiveness phenomena.

The results of the measurement of the competitiveness by index mostly depend on the techniques of the selection of factors and indicators, methods of data normalizing, techniques of factors weighting and expression of a mathematical function of the index. Because of this, at the fifth stage the analysis of reliability of index is done. Researches showed (Giovannini et al., 2005, Saisana et al., 2005, Freudenberg, 2003, Booysen, 2002), that the analysis of robustness and sensitivity are used usually. Research has proved that robustness and sensitivity methods of analysis are mostly used to substantiate the transparency of index calculation. The analysis of robustness shows if potential sources of uncertainty bring an influence on the structure of the index and on the very result. The analysis of sensitivity measures the strength of the influence brought on the results of the index by sources of uncertainty, i.e. what is the change of the index result after the abolition or variation of one of possible sources of uncertainty.

The theoretical research, done in this article, has proved that the results of the measurement of regional competitiveness by a composite index depend on: a) techniques of the selection of factors and indicators; b) techniques of grouping the factors; c) strength of the

for the solution of this problem is usually used regression analysis, principal components analysis and factor analysis. Of course, there's the risk that the correlations will not correspond to the practical links between the phenomena being measured.

The analysis of methodologies showed, that it is also possible to give less weight to indicators that suffer most from missing values. According to Freudenberg (2003), the reliability of a composite indicator can be improved by giving more weight to the components with higher quality and availability. However, the author of the article predicts that higher competitive positions will get regions with more comprehensive data collection, and the index will not represent the real situation.

The research (Freudenberg, 2003) showed that the source of identification of weight coefficients can be:
- Opinion of the authors of the competitiveness index;
- Social opinion, based on public analysis, economic researches, expert evaluation;
- Strategic development plans or priorities of the authorities;
- Statistical-mathematical methods.

The author of the article suggests, based on the research, which are done by the author in other articles (Bruneckiene, Cincikaite, 2009, Bruneckiene, Pukenas, 2008), that the combination of several source of identification of weight coefficients provide more accurate results of the competitiveness measurement by index.

At the fourth stage, the regional competitiveness index is calculated. The aggregation of indices tends to be of either an additive or a functional nature. The functional indices are the most criticized by the authors (Booysen (2002)) because of the complexity to select best equation and the dependence of the results on the number of empirical tests. The functional indices use indicators, which represent the function the best, but not always describe the correlation among factors; d) methods of data acquisition necessary for calculation; e) methods of data normalizing; f) techniques of factors weighting; g) expression of a mathematical function of the index. Correlation, cluster and factorial analyses are the most frequent in the analysis of index reliability.

The analysis of methodologies of indices let to define, that many reports of competitiveness measurement by index lack with the model of competitiveness and analysis of reliability of the index. Thus, the author of the article thinks, that the developing of the theoretical framework and analysis of robustness and sensitivity are very important for the transparent measurement the regional competitiveness by index.

Conclusions

The differences among regions and inadaptability of the best-known competitiveness indices to measure regional competitiveness within country encourage finding new possibilities of measuring this phenomena.
The theoretical research, done in this article, has proved that the measurement by a composite index helps to solve the problem of a complex measurement of regional competitiveness.

An index of competitiveness is calculated via the following stages: forming the model of competitiveness, normalizing, grouping and weighting the indicators, calculating the index of competitiveness and analyzing the uncertainty and sensitivity of the index.

The results of the measurement of competitiveness by a composite index depend on: a) techniques of the selection of competitiveness factors and indicators; b) techniques of grouping the factors; c) strength of the correlation among factors; d) methods of data acquisition necessary for calculation; e) methods of data normalizing; f) techniques of factors weighting; g) expression of a mathematical function of the index.

Correlation, cluster and factorial analyses are the most frequent in the analysis of index reliability.

The carried out research of the index calculation methodology let to form a methodological basis in the formation of the index of regional competitiveness as well as in a complex measurement of regional competitiveness:

- It is necessary to develop and make public the theoretical framework of regional competitiveness, i.e. to form the regional competitiveness model, which identifies and combines into one system the main factors of competitiveness, indicators of factors and links among them.

- It is necessary to include the analysis of robustness and sensitivity to the construction of regional competitiveness index and prove the reliability of the index.

The defined methodological principals of regional competitiveness measurement can be practically applied for the measurement of competitiveness of Lithuanian counties or regions of other countries.

References

1. Booysen, F. (2002). An overview and evaluation of composite indices of development. *Social Indicators Research* 59, p. 115–151.
2. Bowen, H. P., & Moesen, W. (2005). Benchmarking the Competitiveness of Nations: Non-uniform Weighting and Non-economic Dimensions. *Vlerick Leuven Gent Working Paper*, Series. 2, 30 p.
3. Bruneckienė, J. & Činčikaitė, R. (2009). Šalies regionų konkurencingumo vertinimas regionų konkurencingumo indeksu: tikslumo didinimo aspektas. *Ekonomika ir vadyba* [elektroninis išteklius]. Kaunas university of technology. Kaunas: Technologija. No. 14,p. 700-708.
4. Bruneckienė, J. & Pukėnas, K. (2008). Regionų konkurencingumą lemiančių veiksnių įtaka bendram konkurencingumui. *Ekonomika ir vadyba - 2008: 13-osios tarptautinės mokslinės konferencijos pranešimų medžiaga* [Elektroninis išteklius]. Kaunas: Technologija. p. 459-466.
5. Camagni, R. (2002). On the Concept of Territorial Competitiveness: Sound or Misleading? *Urban Studies*, Vol. 39, No. 13, p. 2395-2411.
6. Civi, E., Oncu, S., & Taner, B. (2001). The Assessment of Competitiveness Rankings and Emerging Economies' Places in the World. p. 59-74. Available at: http://info.opf.slu.cz/kfi/pb2000/sbornik2000/PDF/ucivi.pdf.
7. Freudenberg, M. (2003). Composite Indicators of Country Performance: A Critical Assessment. *STI working paper*. p. 2–34.
8. Giovannini, E. (OECD), Nardo, M., Saisana, M., Saltelli, A., Tarantola, S. (EC/JRC), & Hoffman (2005). A. Handbook on Constructing Composite Indicators: Methodology and User Guide. *OECD Statistics Working Paper*, STD/DOC OECD publishing, 108 p.
9. Hoover, E. M., & Giarratani, F. (1999). An Introduction to Regional Economics. Available at: http://www.rri.wvu.edu/WebBook/Giarratani/contents.htm.
10. Huggins, R. (2005). Creating a UK Competitiveness Index: Regional and Local Benchmarking. *Regional Studies*, Vol. 37.1, p. 89–96.
11. Huovari, J., Kangasharju, A, & Alanen, A. (2000). Regional competitiveness in Finland. *ERSA 40th European Congress*, 29th August – 1st September, 17 p.
12. Huovari, J., Kangasharju, A, & Alanen, A. (2001). Constructing an index for regional competitiveness. *Pellervu Economic Research Institute Working Paper*. No. 44, Helsinki, Finland, 23 p.
13. IMD. The World Competitiveness Yearbook 2009. (2009). *Lausanne: International Institute for management Development*, Available at: http://www.imd.ch/research/publications/wcy/upload/methodology
14. Krugman, P. (1994). Competitiveness: A dangerous Obsession. *Foreign Affairs*, Vol. 73, 10 p.
15. Lall, S. (a) (2001). Competitiveness Indices and Developing Countries: An Economic Evaluation of the Global Competitiveness Report. *World Development*, Vol. 29, Issue 9, p. 1501–1525.
16. Lall, S. (b) (2001). Comparing National Competitive Performance: An Economic Analysis of World Economic Forum's Competitiveness Index. *QEH Working Paper*, No. 61, 41 p.
17. Porter, M. E. (1990). *The Competitive Advantage of Nations*. Reprinted in 1998 by Palgrave, 855 p.
18. Ramanauskas, G. (2004). Evaluation of International Competitiveness. *Ekonomika*, Vol. 68, p. 1-22.
19. Sachs, J., Zinnes, C., & Eilat, Y. (2001). Benchmarking competitiveness in transition economies. *Economics of Transition*, Volume 9, No. 2, July, p. 315–353.
20. Saisana, M., Tarantola, S., Schulze, N., Cherchye, L., Moesen, W., & Van Puyenbroeck, T. (2005). Knowledge Economy Indicators. State-of-the-Art Report on Composite Indicators for the Knowledge-based Economy. Available at: http://kei.publicstatistics.net/KEI%20D5_1.pdf
21. Schmitt-Egner, P. (2002). The concept of „Region": theoretical and methodological notes on its reconstruction. *European Integration*, Vol. 24, No. 3, p. 179-200.
22. Simanavičienė, Ž., Bruneckienė, J., & Šimberova, I. (2007). Regionų konkurencingumo vertinimo teoriniai aspektai. *Ekonomika: mokslo darbai*. Vilniaus universitetas, Vilnius, T. 77, p. 68–81.
23. Snieska, V., & Bruneckiene, J. (2009). Measurement of Lithuanian Regions by Regional Competitiveness Index. *Inzinerine Ekonomika-Engineering Economics* (1), 45-57.
24. Turok, I. (2004). Cities, Regions and Competitiveness. *Regional Studies*, Vol. 38.9, December, p. 1069–1083.
25. WEF. Global Competitiveness Report 2008-2009. *World Economic Forum*. Available at: http://www.weforum.org
26. Wignaraja, G., Lezama, M., & Joiner, D. (2004). Small States in Transition: From Vulnerability to Competitiveness. *Commonwealth Secretariat*, United Kingdom, 98 p.
27. Бильчак, В.С, & Захаров, В.Ф (1998). Региональная экономика. *Исд-во Янтарный Сказ*, Калининград, 314 c.
28. Гранберг, А. Г. (2001). Основы региональной экономики. *Исд-во ГУ ВШЭ*, Москва, 492 c.

Jurgita Bruneckienė

Šalies regionų konkurencingumo vertinimo indeksu metodologiniai principai

Santrauka

Nepaisant nuolat didėjančio susidomėjimo mokslinėje literatūroje konkurencingumo koncepcija, šalies regionų konkurencingumo vertinimas išlieka viena iš sunkiausių ir sudėtingiausių šios koncepcijos dalių. Metodo, leidžiančio kompleksiškai įvertinti šalies regionų konkurencinį potencialą, nebuvimas, tampa viena iš kliūčių, trukdančių formuoti efektyvias regionines konkuravimo strategijas.

Mokslinėje literatūroje pateikiami įvairūs konkurencingumo vertinimo metodai, tačiau vienas iš jų, leidžiantis kompleksiškai vertinti problemą – vertinimas indeksu. Nors pasaulyje sukurti ir plačiai taikomi įvairūs konkurencingumo indeksai, tačiau daugiausia jie skirti vertinti šalių konkurencingumą ir tai riboja jų pritaikymo galimybes vertinant konkurencingumą regioniniu lygmeniu.

Darbo tikslas – išanalizavus pasaulyje plačiausiai žinomų konkurencingumo indeksų metodologijas, išskirti šalies regionų konkurencingumo vertinimo indeksu metodologinius principus.

Straipsnyje apžvelgiama regionų konkurencingumo samprata šalies regionų konkurencingumo vertinimo kontekste, galimi konkurencingumo vertinimo metodai ir pagrindžiama kompleksinio vertinimo būtinybė. Pasaulyje plačiausiai žinomų konkurencingumo indeksų metodologijų analizė leido išskirti indekso skaičiavimo etapus ir metodologinius šalies regionų konkurencingumo vertinimo indeksu principus.

Konkurencingumo indeksas skaičiuojamas šiais etapais: konkurencingumo modelio formavimas, konkurencingumo veiksnių rodiklių reikšmių normavimas, grupavimas ir svorio koeficientų jiems suteikimas, paties indekso skaičiavimas ir jo tvirtumo bei jautrumo analizė.

Konkurencingumo vertinimas indeksu priklauso nuo: a) konkurencingumo veiksnių ir rodiklių parinkimo metodikos; b) veiksnių grupavimo metodikos;c) koreliacijos tarp veiksnių stiprumo; d) skaičiavimui reikalingų duomenų gavimo metodų; e) duomenų normavimo metodų; f) svorio koeficientų veiksniams suteikimo metodų; g) indekso matematinės funkcijos išraiškos.

Atlikti tyrimai leido išskirti šiuos metodologinius principus, kurie gali būti praktiškai taikomi vertinat Lietuvos apskričių ir kitų šalių regionų konkurencingumą:

- Svarbu suformuoti ir viešai publikuoti metodologinį indekso skaičiavimo pagrindą, t.y. suformuoti regionų konkurencingumo modelį, identifikuojantį ir į sistemą apjungiantį konkurencingumo veiksnius, juos apibūdinančius rodiklius bei apibrėžiantį ryšį tarp jų.

- Į konkurencingumo vertinimą indeksu būtina įtraukti tvirtumo ir jautrumo analizę, leidžiančią pagrįsti skaičiavimo statistinį patikimumą.

Raktažodžiai: *šalies regionas, regionų konkurencingumas, regionų konkurencingumo indeksas.*

About the author

Jurgita Bruneckiene Doctor of social sciences (economics), Kaunas University of Technology, Economics and Management Faculty, Department of Business Economics; tel. + 370 37 30 05 89, e-mail jurgita.bruneckiene@ktu.lt. Academic interest: regional competitiveness, measurement of regional competitiveness by index, regional development and strategic planning.

TRIPLE HELIX SYSTEM AS A FORCE FOR PROGRESS OF HIGH TECHNOLOGIES DEVELOPMENT

Eugenijus Chlivickas[1], Juraj Nemec[2], Neringa Petrauskaitė[3]

[1, 3] *Vilnius Gediminas Technical University, Lithuania,* [2] *Matej Bel University, Slovakia*

Abstract

Expansion of high technologies in Lithuania and Slovakia has not yet reached such a level as it is in other well developed the EU Member States. Current high technologies expansion indexes in Lithuania and Slovakia do not completely meet the goals set by the EU. Therefore, this article analyzes the theory of high technologies development, including the most effective models for high technologies development and the principles of its formation. After analyzing models, aimed at high technologies development, it follows that the EU Member States have to expand high technologies on the basis of a 'triple helix' model of overlapping elements and provide conditions for taking the role of the others in the 'triple helix', collaboration and circulation of persons as well as ideas (information) and innovations within the model between acting parties.

Introduction

Studies of scientists as well as strategically significant documents of national and international organizations tend to focus on the importance of high technologies in the period of intensive economic globalization, because the development of high technologies is a strategically essential area, promoting efficiency of a regional and national economy and ensuring a competitive edge of a region and a country. In order to gain a position in the global market, for the European Union (EU), promotion of efficiency and competitiveness of products is the key factor enabling the EU export development. Another important condition is the increase in ratio of volume of high added value products production versus lower added value products production. The added value of the product is determined by the technology that is used to produce it. Whether a technology can be determined as 'high' or not, depends on the amount of knowledge and used sophistication. Production of high technologies products not only generates marketable products for export, but also promotes rapid growth of the Gross Domestic Product, as these products create the highest added value. Therefore, it is very important to strive for the rapid high technology business development in the EU as well as in each Member State.

High technologies develop are at a different rate in all of the EU Member States. Lithuania and Slovakia are regarded as the Member States that have a lower rate of high technologies development. Thus, the **objective** of the present research is to propose the model of high technologies expansion and the guidelines for its formation after conducting a scientific literature analysis and a review of indexes that indicate the EU, Lithuania's and Slovakia's high technologies development.

Background for high technologies development in the EU

The first step to prompt expansion of innovations and also high technologies in the EU was the Green Paper on Innovation of 1995 which according to Rossi (Rossi, 2005) was followed by the First Action Plan for Innovation in Europe. The fundamental progress was made when implementing the aims of the Lisbon Strategy in 2002 the Council of Europe in Barcelona defined a target for 2010 for the scientific research and experimental development (R&D) to constitute 3 percent of Europe's GDP and investments into the R&D from the private sector to account for two thirds of the overall investment into the R&D (Rossi, 2005). Understanding the role of innovations for the development of economy, the EU both reforms its approach to an active and independent position of the Member States regarding innovations, and implements relevant mechanisms on the EU level oriented towards promotion of the innovation culture, creation of the framework conducive to innovations and orientation of science towards innovations in spheres of industry and services. Therefore various programs for high technologies development are implemented in the EU. Despite promotion of the high technologies and innovations policy in general, the rate of high technologies development in Member States of EU differs.

High technologies development in the EU, Lithuania and Slovakia

On a global scale, it is important to note that currently the largest GDP share in high technologies is generated by the United States of America (0.15 percent), whereas in the EU it is 0.12 percent. In terms of the scope for production of high technologies and other indices of high technologies expansion in separate EU member states, we may note that the leaders of high technologies based on the recent data are Great Britain, Italy, France, Slovenia and Hungary. These countries create added value in high technologies area of over 30 percent compared to general added value. The highest added value in the high technologies sector based on the absolute indexes is created in Great Britain, Italy, France and Germany since the value added created in the said countries in this sector is over 50 million euros. The above listed countries and

Spain can also boast of the largest number of high technologies companies, the number of which exceeds 25 million companies operating in the area in each country.

Lithuania and Slovakia as members of the EU are also seeking to develop systems, encompassing strategic plans, organizational structures and processes as a force for progress of high technologies development. However in the last few years the development of high technologies in these countries considerably lags behind in comparison with the EU level.

The program for development of high technologies by 2013 indicates that currently a share of the GDP generated by production of high technologies in Lithuania is less than 6 percent which is half as much in comparison with the EU average. Furthermore, the export of high technologies in the countries in question is also considerably lower than the EU average: Lithuania exports about 3.5 times less than the EU average, and Slovakia is 3.1 times falls behind the EU average of the hight technologies export. Based on the *Eurostat* data Lithuania in terms of this indication is ranked twenty-third (4.65 percent) and Slovakia twentieth (5.43 percent) among the 27 EU countries and from Malta which is the leader in this respect (54.61 percent) they lag behind almost twelve and ten times respectively.

Moreover, both Lithuania and Slovakia considerably fall behind in implementing the EU goal by 2010 to achieve that the R&D would constitute 3 percent of Europe's GDP and investments into the R&D from the private sector would be two thirds of the overall investment into the R&D. According *Eurostat* the funding allocated for the R&D in Lithuania and Slovakia constituted respectively only 0.82 and 0.46 percent of the Gross Domestic Product of the countries which is 3.7 times less than the target for Lithuanian and even less for Slovakia. The majority of the R&D in both countries was financed from the state funds. Meanwhile the financing share of business companies, for example in Lithuania was merely 24 percent of all expenses for the R&D. So far this indication is almost three times lower than the target to be reached by 2010.

Systems for development of high technologies

The complexity of the problem of high technologies expansion is determined by characteristics of high technologies. Walsh (2003) notes that the notion of high technologies was changing in time, since it is not constant due to its content: what used to be understood as high technologies after a period of time can no longer be attributed to high technologies and some technologies cannot be regarded as high technologies because what yesterday was high technologies, today may be usual and widely spread technologies. This is to say that the basis for the characteristics defining high technologies should be dynamics. Therefore according to the scientists such characteristics should describe a developed product, therefore Rexroad (1983), defines high technologies as the newest, most innovative and modern products at a given period. Furthermore according to Allen (1992), Riggs (1983), Shanklin, Ryans (1984) first of all it should be noted that the products in question (goods and services) are inseparable from **application of science and**

technologies. MacInnis, Heslop (1990), Goldman (1982) identify a **short life cycle in the market** as another specific characteristic of high technologies. In the opinion of McIntyre (1988), Meldrum (1995) to the list of specific characteristics of high technologies we should also add **indispensability of the associated infrastructure**. The nature of high technology implies that there is unlikely to be an established external infrastructure which will make easy to commercialize high technology products (Meldrum, 1995).

Due to exceptional characteristics of high technologies development of this business is rather complicated because processes of business promotion, innovation spread and fostering of the technological progress are highly intricate and it is important to know that expansion of high technologies business first of all strongly depends on the development of high technologies. According to Melnikas (2004) it means that promotion of such processes and purposeful management of operations of their participants requires a complex approach.

The foundation for expansion of high technologies is innovation policy and it is reached by invoking innovations expansion systems. During the last three decades four innovations expansion theories have evolved: systems based on models of comparison of national innovation system, the first and second model of production of scientific knowledge and the model of the 'triple helix'. The latter is considered the most advanced.

The 'triple helix' model indicates a relationship among the university, industry and authorities as an entirety of overlapping areas reflecting an impact of each element to other spheres. The model based on cooperation of science institutions, industrial enterprises and authorities was introduced almost a hundred years ago and such model promoting expansion of the high technologies sector was first suggested in the 1920s in the United States of America. It became the basis in developing programs promoting expansion of high technologies from the 1930s to mid-80s when the specialised Massachusetts Institute of Technology was established mainly working in the area of developing and implementing innovations. The 'triple helix' model which states that the boundaries of a knowledge economy between the public and private sector in the society, science and technologies, universities and industry are vanishing giving a way for a system of interactive relationship to emerge, was formulated in the 1980s by Etzkowitz and Leydesdorff. The model was advocated as a useful method for stimulating enterprise and economic development as well as innovations, on national or international level. The 'triple helix' model of high technologies reflects the entirety of multi-faceted relations affecting stages of creation and capitalisation of innovations. The model displays interrelatedness of academic public which is more often referred by authors as university, industry and government as entirety of separate overlapping areas, where influence of one element onto another is well reflected.

Etzkowitz, Gulbrandsen and Levitt (2000) and Wessner (1999) analyzing expansion of high technologies in different regions of the world distinguished three main configurations of the 'triple helix' model (see Fig. 1), all of them have advantages and disadvantages (see Table 1).
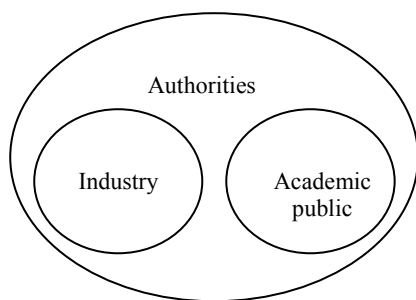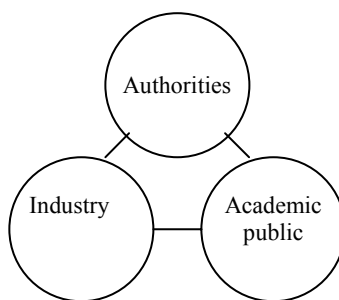
| The 'triple helix' model with one dominating element | The 'triple helix' model with mutual relations | The 'triple helix' model of overlapping elements |
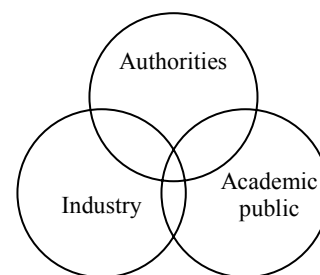
Technology Entrepreneurs. New York: Harcourt. 2000. pp.420.

Table 1

Advantages and disadvantages of various 'triple helix' models

Type of the 'triple helix' model	Characteristics	Advantages	Disadvantages
The 'triple helix' model with one dominating element	The areas indicating elements of the industry and academic public exist independently without interacting. The dominant role of an intermediary is played by the authorities being the only element ensuring relations among the sectors. This model represents situation in which the state incorporates industry and academic public, where state owned industries are predominant.	Government may take initiative without consulting others and it may subsume the other institutional spheres and direct their activities.	The ideas are coming from only one source – the central government, therefore the model generates only a limited source of ideas and initiatives.
The 'triple helix' model with mutual relations	The second model shows mutual relations of different elements.	The model allows establishing relations between different spheres, to manage investments and to allocate them properly into different spheres of industry and academia.	The model does not express the nature of relations between institutions, therefore each of them plays an independent role in the own area only.
The 'triple helix' model of overlapping elements	The elements of this model are in cooperation by taking charge of each others' roles.	The model allows solving all problems in innovations implementation by negotiations and transactions. Trilateral initiative is available.	It can be successfully implemented only in developed countries. The implementation process is quite difficult as it requires high cooperation between institutions.

Based on the 'triple helix' theory, the acting parties involved in the process of knowledge creation take progressively bits of the role of the others, thus allowing dynamic interactions and overlapping interests and opinions. Academic systems are undergoing a change that is progressively eroding their organizational and normative boundaries: the academic work is being redirected towards commercial applications, industry-university collaboration is becoming a critical issue; industrial and political interests are integrated into the planning and organization of university research. Therefore academic researchers must take into account impacts of the scientific outputs of their work onto industry, and at the same time researchers working in industry need to be up-dated on the evolutionary developments of science. Therefore, to conclude, the 'triple helix' model for high technologies development is based on the following principles (Dzisah, Etzkowitz, 2008): a) a more prominent role in innovation is attributed to the university on a par with industry and government in a knowledge-based society; b) a movement towards collaborative relationships among the three major institutional spheres in which innovation policy is increasingly an outcome of interaction rather than a prescription from government; c) in addition to fulfilling their traditional functions, each institutional sphere 'takes a role of the other' in some regards.

The application of different configuration of the 'triple helix' model depends on determined goals in science and an area of research and development, also on a political and socio-economical situation in the country. The first model in which one sphere dominates the others is suitable for the countries with a strong influence of authorities, where the government sets the priorities in industry development and provides financial tools for it. Whereas other high technologies expansion models, that can also be referred to as knowledge-based organisations can be implemented in a political and socio-economical situation with dominating principles of democracy and a free market.

The aim is to reach the third helix, which implies that the parties jointly realize that university spin-off firms, trilateral initiatives for knowledge-based economic development, strategic alliances between different types of firms, governmental laboratories, and academic research groups together contribute an innovative environment (Brundin, Wigren, Isaacs, Friedrich, Visser, 2008).

The role of the academic public, industry and authorities in a triple helix model

The role of the academic public
The main role of universities, which are often referred to as the main academic public institutions operating in the process, in expansion of high technologies based on 'triple helix' model next to its main functions is to transform their knowledge and technology to industry (enterprises) which actually means that universities have to transform themselves to entrepreneurial universities. An entrepreneurial university is one that extends its mission in higher education and academic research to assume the role of stimulating economic innovation in the environment (Leydesdorff, Meyer, 2007). While mastering the knowledge, the business sector generates new ideas and a need of new scientific knowledge emerges which stimulates further collaboration. The university is also responsible for forming new firms in incubator facilities.

The role of industry
Industry, in this case, is responsible for economic production and trade. Its main goal in expansion of high technologies is to absorb university-generated knowledge for improvement of technological productivity. Technological productivity is associated with the science-intensity of patents (Leydesdorff, Meyer, 2007).

A firm can enhance its absorptive capacity by training its personnel, by carrying out R&D, and by using advanced manufacturing equipment (Schiller, Diez, 2007).

The role of authorities
The main task for government in high technologies expansion is encouragement of this expansion on the basis of the 'triple helix' model. Etzkowitz concludes that this encouragement can be manifested in the following means: (Etzkowitz, 2008):

1. Establishment of a legitimate authority within a territory is extended from the public sphere to the private sector, promoting stability and reducing uncertainty in interaction (e.g. government guarantees are given to private capital so that with such insurance it may take greater risks in investing in new ventures);
2. Levying of taxes to support protection of the nation and promotion of the general welfare is extended by using the tax system in a targeted fashion to provide special incentives and benefits;
3. Establishment of rules to support the economic life including laws to charter firms and foundations and to regulate the conduct of markets and currency systems (e.g. new (hybrid public-private) agencies are established to promote innovation);
4. Use of a legal system to establish special rights such as patents or temporary monopolies to promote innovation;
5. Provision of basic research funding to establish a linear model of innovation (e.g. provision of public venture capital to create an assisted linear model of innovation).

To summarise, the government supports development of high technologies through funding programs and changes in the regulatory environment (2001).

The role of authorities, industry and the academic public in the 'triple helix' model of overlapping elements for high technologies development

	Authorities	Industry	Academic public
Traditional functions in economical and business development	Assurance of stable collaboration, coordination and regulation; Financial support for scientific research and expansion;	Innovative products and services production; Economic trade;	Economic knowledge production and transfer; Research and academic activity;
New functions in the 'triple helix'	Academic aspect elaboration in daily activities;	High technologies expansion promotion; High technologies expansion financing; Developing training and research;	Initiating high technologies development process; Firm formation;

Konde (2004) notes, that in many countries triple helix entities seem to be weak, because their elements tend to work in isolation. Therefore one of the aspects of the 'triple helix' model in question is internal communication undergoing in every element of the model irrespective of the processes in other helices. Therefore, one of the key 'triple helix' criterion in expansion of high technologies is circulation of (Dzisag, Etzkowitz, 2008) persons, ideas (information) and innovations.

Formation of the 'triple helix'

In order to create an effective 'triple helix' based a knowledge-based organisation on purpose, at first it is necessary to ensure human capital and material resources as well as availability of cooperation between the institutions and circulation of people, ideas and innovations. Etzkowitz (2008) calls it human, material and organizational factors. Among human capital factors he mentions the critical mass of scientists and engineers linked through social networks, research groups and a pool of scientists and engineers interested in formation of their own firms. In this opinion the essential material

resources are the capital from private or government sources, inexpensive and appropriate space for new firms and equipment. To maximize likelihood to realize a strategy of knowledge-based economic developments and at the same time high technologies, organisational factors are needed. The factors include (Etzkowitz, 2008):

1. Opportunities for scientists and engineers to learn business skills or gain access to persons with these skills. A graduate school of business with consulting services or courses on entrepreneurship in which students develop business plans can be helpful.
2. University policies designed to (a) encourage faculty members and students to interact with industry, (b) give academic credit for promotion and award degrees for this work, and (c) provide clear guidelines delineating appropriate activities.
3. Applied research institutes, centres, and incubator facilities to assist firms with development problems and to provide mediating linkages between academic scientists and engineers and industry.
4. Residential communities with cultural, scenic, and/or recreational resources that can attract and hold a population whose skills make them potentially highly mobile.

The evolutionary path, that 'triple helix' model takes in axes acting interchanging on the circumstances, time and opportunities, creates a dynamic environment of acting parties, whose acting must be concerted in order to reach a common goal. This requires creation of a knowledge-based organization model which would aim to integrate each party interested in the whole system. For the above reasons, the 'triple helix' model of interchanging elements is formed in four stages (Etzkowitz, 2001):

1. Internal transformation in each of the helices.
2. Influence of one helix upon another.
3. Creation of a new overlay of tri-lateral networks and organizations from the interaction among the three helices.
4. Recursive effect of these triple helix networks.

Conclusions

Expansion of high technologies in Lithuania and Slovakia has not yet reached such a level as it is in other well developed EU Member States. Current high technologies expansion indexes in Lithuania and Slovakia do not completely meet the goals set by the EU.

Particularity of high technologies requires new, systematic approach for high technologies development. There are three main configurations of the 'triple helix' model for high technologies development. The most effective theory is considered the 'triple helix' model of overlapping elements as it presents trilateral initiative and solves all problems in implementation of innovations, in a form of negotiations and transactions. Success of the model's application in high technologies expansion is defined by cooperation of elements of the triple helix, ability of the acting parties, that are involved in the process of knowledge creation, to take progressively bits of the roles of the others, and circulation of persons, ideas (information) and innovations within the model.

To reach an effective expansion of high technologies in the EU Member States it is essential to provide opportunities for scientists and engineers to learn business skills, opportunity for academic public to interact, create and develop new forms of organizations that provide mediating linkages between academic scientists, engineers and industry. Only under these conditions the internal transformation in each of the helices, influence of one helix upon another and creation of a new overlay of tri-lateral networks will be available and will constitute an effective high technologies expansion system.

References

1. Allen, J. C .Starting a technology business. 1992. London: Pitman Publishing. pp.244.
2. Brundin, E., Wigren, C., Isaacs, E., Friedrich, C., Visser, K. Triple helix networks in a multicultural context. Triggers and barriers for fostering growth and sustainability. *Journal of Development Entrepreneurship*. 2007. Vol. 1 (13), pp.77–98.
3. China passes the EU in High-tech exports. *Science and technology. Eurostat: Statistics in focus*. 25/2009.
4. Dzisah, J., Etzkowitz, H. Triple helix circulation: the heart of innovation and development. *International Journal of Technology Management and Sustainable Development*. 2008. Vol. 2(7). pp.101–115.
5. Etzkowitz, H. The Bi-Evolution of the University in the Triple Helix Era. *Science Policy Institute*. 2001.
6. Etzkowitz, H. The Triple Helix: Industry-University-Government Innovation in Action. Routledge. 2008. pp.164.
7. Etzkowitz, H., Gulbrandsen, M., Levitt, J. Public Venture Capital: Government Funding Sources for Technology Entrepreneurs. New York: Harcourt. 2000. pp.420.
8. Goldman, A. Short product life cycle: implications for marketing activities in small high tech companies. R and D Management. 1982. Vol. 12. No. 2. pp.9-81.
9. Konde, V. Internet development in Zambia: a triple helix of government university-partners. *International Journal of Technology Management*. 2004. Vol. 27. pp.440-451.
10. Leydesdorff, L., Meyer, M. The Triple Helix of University-Industry-Government Relations: Introduction to the Topical Issue, *Scientometrics*. 2007. Vol. 70(2). pp.207–222.
11. MacInnis, M., Heslop, L.A. Marketing planning in high tech environment. Industrial Marketing Management. 1990. Vol. 19. pp. 16-170.
12. McIntyre, S. H. Marketing adaptation as a process in the product life cycle as radical innovations and high technology products. Journal of Product Innovation Management. 1998. Vol. 19. pp.52-140.
13. Meldrum, M. J. Marketing high-tech products: the emerging temes, *European Jurnal of Marketing*. 1995. No. 10. p.45–58.
14. Melnikas, B. Transformacijos. Vilnius. 2004. p.749
15. R&D Expenditure and Personnel. *Science and technology. Eurostat: Statistics in focus*. 91/2008.
16. Rexrod, R. A. High Technology Marketing Management. Ronald Press: New Your.
17. Riggs, H. E. Managing High Technology Companies. Lifetime Learning Publication. 1983. Belmont. pp.333

18. Schiller, D., Diez, J. R. University-industry linkages: potential and realization in developing countries: Thai experience. *Tech Monitor*. 2007. Vol. Jan-Feb. pp.38–44.
19. Science, Technology and Innovation in Europe. R&D expenditure in the EU27 stable at 1.85% of GDP in 2007. *Eurostat news release.* 127/2009.
20. Shanklin, W. L., Ryans, J. K. Marketing High Technology. 1984. Lexington: Lexington Books. pp.21.
21. Walsh, K. *Foreign high-tech R&D in China.* 2003. [online] [accessed 12 October 2008]. Available from Internet: <http://www.stimson.org/techtransfer/pdf/FinalReport.pdf>.
22. Wessner, C. The Advanced Technology Program: Challenges and Opportunities. Washington: National Academy Press. 1999. p.127

Eugenijus Chlivickas, Juraj Nemec, Neringa Petrauskaitė

Trigubos spiralės sistema kaip aukštųjų technologijų plėtros skatinimo veiksnys

Santrauka

Aukštųjų technologijų plėtra Lietuvoje ir Slovakijoje atsilieka nuo daugumos išsivysčiusių ES valstybių pasiekto lygio. Šiuo metu Lietuvos ir Slovakijos aukštųjų technologijų plėtros rodikliai yra žemesni nei ES vidurkis. Todėl šiame straipsnyje analizuojama aukštųjų technologijų plėtros teorija, nagrinėjanti efektyviausius aukštųjų technologijų plėtros modelius, ir pažangius modelių formavimo principus.

Išanalizavus aukštųjų technologijų plėtrai skirtus modelius, galima teigti, jog Lietuva gali plėtoti aukštąsias technologijas taikant trigubos spiralės su persidengiančiais elementais sistemą, sudarant sąlygas sistemos dalyviams plėtoti vykdomas funkcijas, bendradarbiauti bei tinkamai panaudoti žmogiškuosius išteklius, idėjas ir inovacijas.

About the authors

Eugenijus Chlivickas, Professor, Doctor of Social Sciences, Vilnius Gediminas Technical University, Eugenijus.Chlivickas@vv.vgtu.lt, tel. no. +370 687 80874., research areas: management and administration of public sector, strategic management of international marketing.

Juraj Nemec, Professor, Doctor of Social Sciences, Matej Bel University, Slovakia, juraj.nemec@umb.sk, tel. no. +421/484.466.318, research areas: problems of managemnt and adminsitartion in private and public sectors.

Neringa Petrauskaitė, Assistant Professor, Vilnius Gediminas Technical University, neringa.petrauskaite@st.vgtu.lt, tel. no. +370 867 640 572, research areas: high technologies, marketing, management.

COHERENCE OF MANAGER'S MANAGERIAL COMPETENCES AND EMPLOYEES' MOTIVATION: THEORETICAL AND PRACTICAL ASPECTS

Virginija Chreptavičienė
Kaunas University of Technology, Lithuania

Abstract

The article analyses models of managerial competence, their peculiarities are disclosed, study programmes of four universities in the United Kingdom and one university in the USA, as well as the standard of business administration and management programs of the Association for Quality Assurance in Higher education in the United Kingdom, criteria of study programmes for master in business administration of the Association to Advance Collegiate Schools of Business are analysed; theoretical-hypothetical model of managerial competence is formulated and presented. The second part presents the empirical research, which by considering theoretical evaluation criteria, was performed at an enterprise providing services in Klaipeda. It was identified which managerial sub-competences of managers would mostly motivate employees. On the basis of the empirical research the model of coherence of manager's managerial competences and employees' motivation is prepared and presented.

Keywords
Motivation, competence, managerial competence, model of managerial competence.

Introduction

Within the changed society the role of an organization's leader has radically changed, as well as the new conception of management has also been disclosed. The ability to effectively perform traditional functions of management (planning, organization, administration and control) is not enough, modern activity highlights the necessity for new functions: formation of vision, initiation of changes and their implementations, effective communication, creation of the system for motivating employees, formation of teams and their management, etc. This mission can be performed only the leader possessing *managerial competence.*

In order to concentrate and keep competitive employees, it is necessary to know what factors would stimulate effectiveness of employees' activity and their loyalty to the organization because motivation is the impellent for person's behaviour, which activates and controls his/her actions by ensuring direction and energy for their activity. Only loyal employees, according to Charskij (2007), can help an organization to keep leader's positions because when being very concentrated for their work they always use their possessed resources to reach maximum results. There are no universal best methods, means, and ways to motivate people because each of them has individual needs, interests and values. When analysing scientific sources, it is possible to notice that authors most frequently point out the same traditional means for material and immaterial stimulation. However needs and interests of employees, particularly of professionals constantly change. The same means for stimulation that are long-term applied become ineffective. Thus naturally the following questions rise: what unconventional motivation means can be applied to induce employees' motivation? Is managerial competence of a leader the very dynamic power that activates actions and energy of employees for their activity? It was hard to find scientific works, which would estimate the influence of manager's managerial competences as phenomenon upon employees' motivation. Scientific works do not present the definition of managerial competence that would fit everyone; and the abundance of models of managerial competence witnesses that there is no substantiated model of managerial competence that would disclose the structure of this competence. By referring to performed researches by different authors, it becomes evident that the most important components (further in the text – sub-competences) and their characteristics are distinguished in the structure of managerial competence. This article however when comparing models of managerial competence presented by different authors in scientific literature and the results of the research the curriculum analysis of the study programmes of four universities in the United Kingdom and one university in the USA (Fallows and Steven, 2000), as well as referring to the analysis of the standard of business administration and management programmes confirmed by the Association for Quality Assurance in Higher Education (2000), the analysis of the criteria of study programmes for master in business administration by the Association to Advance Collegiate Schools of Business, the research by Porter and McKibbin (1988), the theoretical-hypothetical model of managerial competence, which is applied in performing this empirical research, is substantiated.

This article solves a complex scientific problem and this allows systemising the knowledge and researches of foreign and Lithuanian scientists on employees' motivation, motivation tools, and structure of manager's managerial competence, its characteristics, and their influence upon employees' motivation in searching for the answers to the following questions: *Which model of managerial competence would objectively represent the phenomenon of managerial competence? Do managerial sub-competences influence employees' motivation and which? What managerial competences do managers lack or are they not enough?* These questions make the basis of this scientific problem.

The aim of the article is to identify relations between managerial competence of a leader and employees' motivation. The research was performed by applying the methods of scientific literature analysis, survey-in-written and statistical data analysis.

The article consists of two parts. The first – theoretical – part presents the concept of managerial competence, analyses and compares models of managerial competence by different authors, substantiates and presents theoretical hypothetical model of managerial competence. The second – empirical – part introduces the research methodology and the results of the empirical research; also it discloses the interaction of leader's managerial competences and employees' motivation.

The concept and structure of managerial activity competence

Management – is the activity, by which it sought that material, human, and information resources* possessed by an organization would be effectively used when attaining set goals (Drucker, 1985; Stevenson, 1990; Jucevičius, 1996). In order to achieve aims a manager must be able to organise work groups, distribute assignments, powers and resources, and administer the process: initiate and coordinate employees' work, motivate them, direct their efforts towards proper direction, improve the process of activity, initiate development of employees' competence in order that they would effectively perform the assignments, etc. Purposive activity, by which it is orderly sought for desired results of this activity, needs *managerial competence*, which when referring to definitions of the concept competence by Jucevičienė, Lepaitė (2000) and Westera (2001) *can be treated as ability to successfully act in complex unpredicted situations; the ability is conditioned by wide list of high level skills and behaviours, viewpoints, personal features as well as values.*

Scientists, who have analysed the phenomenon of managerial competence, point out that this competence is a structural derivative integrating appropriate elements (sub-competences) and present their list as well as characteristics, which give possibilities to act. Unfortunately, each author indicates different elements of this competence as well as their number. According to Grzeda (2001), by now there no common opinion about the concept "managerial competence" and this is impossible. Stevenson (1996) assumes that constructions of managerial competence are frequently changed with respect to different contexts. In prevailing models of competence a managerial competence is presented as the list of behaviours, and competence – as the list of knowledge, skills, viewpoints or essential personal features, which define behaviour. In order to disclose similarities and differences of models of managerial competence as well as to substantiate its structure, it is purposeful to compare them.

When analysing scientific literature, it becomes evident that in previous Western models of managerial competence two viewpoints existed, namely: the American model – oriented to personal competences, which is presented by Boyatzis, 1982 (USA) and the European model – functional analytical, which is

developed by Management Charter Initiative (MCI) (United Kingdom) – oriented to functions and the activity, which has to be effectively performed by competitive managers.

According to the American scientist Boyatzis (1982), managerial competence is characteristics of an individual (cognitive skills, features, etc.), which determine the expression of activity's effectiveness. The author gives the list of personality-oriented competences, which are necessary to perform functions of management. As Boyatzis (1982) states, the managerial competence consists of *five sub-competences and corresponding characteristics* of them conditioning performance of the activity: 1) *Aim and actions: logical thinking* (knowledge and skills, social role); influence of interest (knowledge and skills, motives); diagnostic application of conceptions (knowledge and skills, social role); orientation to effectiveness (knowledge and skills, motives, social role); pro-activity (knowledge and skills, social role). 2*) Leadership*: logical thinking (knowledge and skills, social role); development of conceptions (knowledge/know-how); self-confidence (knowledge and skills, social role); practice of public speeches (knowledge and skills, social role). 3) *Management of human resources*: adequate self-evaluation (knowledge and skills); management of group processes (knowledge and skills); application of appreciable power (knowledge and skills, social role). 4) *Management of subordinates: positive attention* (knowledge and skills); education of other people (knowledge and skills, social role); spontaneity (knowledge and skills); application of power (knowledge and skills, social role). 5) *Attention to others: objective understanding* (knowledge and skills); self-control (a feature of character); stamina and adaptability (a feature of character). A separate block consists of specialised knowledge (John Wiley, 1982).

In order to define the competence of a manager, MCI applied the method of functional analysis, the goal of which was to reveal roles and functions characteristic for this profession, but not knowledge and skills necessary for performing these roles. Having performed the analysis, MCI made the list of the characteristics of managerial competence related to essential functions. Managerial activity is divided into categories and specifications; a list of criteria to perform adequate work is made for every category. When evaluating effectiveness of managers' activity, the correspondence of their competence to all main criteria of managerial activity is being analysed. The methodology of competence determination of MCI is applied in the United Kingdom for identifying the level of managers' competence. The model of managerial competence, which is prepared by MCI, consists of *nine sub-competences and their appropriate characteristics*: 1) *To initiate and to implement development of services, goods, systems*: to search for a possibility to improve services, goods, systems; to estimate advantages and disadvantages of change suggestions; to eliminate obstacles in implementing perspective changes; to implement and to estimate changes of services, goods, systems; to implement, to develop and to estimate quality management systems. 2) To *control how resources are used*: to control input and to increase the return of used

resources; to control requirements of budget limitations in performing all operations. 3) *To guarantee that resources would be optimally distributed for operations and projects*: to substantiate suggestions/proposals in appointing resources for projects; to coordinate budgets. 4) *To recruit and to select personnel*: to identify the need for personnel; to prepare requirements for personnel quality; to assess and to select employees according to requirements of a team and organization. 5) *To improve teams, to develop employees' and personal qualification in striving for better indicators:* to create and to improve teams in planning and organising trainings; to identify, to review and to improve the means meant for developing employees' qualification; to improve the performance of own duties; to assess and to improve methods of personnel education. 6) *To plan, to distribute and to assess the work of teams, individual employees as well as his/her own work*: to identify and to update goals of teams and individual employees; to plan events and to implement work ways that guarantee attainment of the goals; to distribute work and to evaluate the work of teams, employees as well as his/her own work by comparing achievements to the goals; to provide teams and employees with feedback about their work quality. 7) *To create, to maintain and to strengthen effective work relationship*: to gain trust of employees as well as to maintain it; to gain trust of a direct head as well as to maintain it; to commence and to maintain relations with colleagues; to identify and to solve interpersonal conflicts; to apply penalties and procedures for solving work conflicts; to consult employees. 8) *To collect, to assess and to process information*: to collect and to assess information necessary for decision-making; to notice the most important tendencies and to predict events; to fix and to keep information. 9) *To share information necessary for decision-making with colleagues*: to organise meetings and group discussions of decisions being made; to contribute to the discussion of a decision being made; to consult and to advise employees.

Having compared these models, it is possible to state that the model of managerial competence (USA) by Boyatzis (1982) is oriented to personality (his/her personal features and abilities), the model of the United Kingdom (MCI) – to profession and functions being performed. According to the MCI researchers, competence is expressed in an activity by standards of work performance, which is to be achieved. This viewpoint is approved by Barnett (1994) and Alsop (2001). The latter author states that a competitive employee is able to perform a particular activity according to an indicated standard, which is relevant for a particular organization and particular work.

However competence can be doubly explained: 1) person's ability to perform an assignment related to the area of a professional activity, and when the premise for successful activity is the qualification acquired by a person; 2) person's ability to perform a role or roles in particular work environment when the premise for effective activity personality's features and behaviour reflecting the developing of social abilities. Lloyd, Cook (1993) state that competence is the premise for successful activity and is related to the brought „input" involving personality's features, behaviour modes and non-

specialised abilities. This definition should be related to holistic spring of competence and shows that successful activity is determined by not only professional qualification and competence related to activity area, but also abilities not oriented to professional activity; however they are the necessary premise for successful activity. Trotter, Ellison (2001) point out that these competences can be divided into two types: 1) threshold, to perform which minimal application of abilities is necessary. They are determined by person's features, motives, viewpoint, values, which a person brings to the process of activity and targets them towards necessary direction; 2) distinguished, which are „key" in realising a particular activity; they cannot be mechanically copied or imitated. Only understanding aims and meaning enables a person to use them. Motivation influences this. Thus the distinguished competences are related to personality characteristics and can be treated as the premise for successful activity. This viewpoint of Trotter, Ellison (2001) corresponds to the opinion of Spenser, Spenser (1993), who state that competence is constantly related to an employee's personality and this allows stating that competences can be divided into two types: related to (1) personality characteristics, (2) activity content. In the context of activity the threshold competences perform functions of „strengthening" and „diversion". Lloyd, Cook (1993), Spenser, Spenser (1993), Trotter, Ellison (2001) incorporate the personality competence into the concept of competence. Thus managerial competence has to involve personality-oriented competences, which in their structure do not have qualification and activity-oriented competences called sub-competences (Westera, 2001), functional sub-competences (Alsop, 2001). In the context of a particular activity the result of the synergy of these two type competences is the expression of the competences significant and exclusive for this activity (Trotter, Ellison, 2001), they sometimes are called „key" (Shaw, 1998) (e.g. ability to work in a team; leadership, ability to motivate, etc.), and they determine the success of the activity. The model presented in *Figure 1* shows that managerial competence consists of competences of two types (sub-competences oriented to activity and to personality) and that they interact. The competences oriented to activity have direct relation to activity aims being strived for and assignments being performed, and the competences oriented to personality help an employee to realise particular roles of the activity. In the environment of the activity aims, objectives and roles are related and change depending in the needs of the activity. Due to synergy of sub-competences and personal competences, when performing a particular activity, "key" competences, which only in the context of work environment get the meaning, develop; their expression is dynamic and depends on the change of the activity. When an employee strives for the specific aims related to the activity, „key" competences perform the function of „strengthening" and are the premise for the effectiveness of aim achievement.

Going deep into the structure of the model of managerial competence by Boyatzis (1982), it becomes evident that it fits for managers of all activity areas. Instrumental competences of higher-level managers cannot be oriented to operational activity. They have to involve abilities of

higher level: to effectively apply knowledge, leadership, and integration of new experience into previous experience, global thinking and action, self-evaluation of own experience, taking responsibility, risk, etc.

In the Competency Dictionary it is possible to find more than 470 work profiles and more than 10 thousand models of competences of employees working in business, management, finance, marketing, information technologies, telecommunications, engineering, sales and other fields. Six sub-competences and characteristics corresponding to them make the model of managerial competence in McBerr (2000) Competency Dictionary: 1) *Achievements and actions*: orientation to achievements; care for order and quality; initiative; strive for information. 2) *Help for others*: interpersonal understanding; orientation to customer service. 3) *Influence and impact*: understanding of organization; commencing relations; influence and impact. 4) *Management*: presenting of guidelines; teamwork and cooperation; leadership in a team; development of others. 5) *Cognisance*: analytical thinking; conceptual thinking; professional knowledge. 6) *Personal effectiveness*: self-control, self-confidence; flexibility; loyalty for an organization.

By relating the researches of different scientists on the topic of managerial competence McCredie and Shacleton (2000) grouped managerial sub-competences into one hypothetical model, in which they distinguished four sub-competences and their characteristics: 1) *Orientation to result*: achievements; energy; initiative; control. 2) *Intellectual abilities*: disposition to act; analysis. 3) *Interpersonal abilities*: wide likings; directiveness; development of relations. 4) *Flexibility and adjustment*: integrity; self-confidence; emotional self-possession.

Tett et al. (2000) distinguish traditional functions of managers in the model of managerial competence: *understanding of problems, decision-making, management, delegation of decisions, short-term planning, strategic planning, coordination, setting of aims, control, and motivation by power, motivation by persuasion, team formation, and productiveness*. Performance of the functions manifests through orientations of a manager, and it is divided into two groups: manager's (1) orientation to assignments and (2) orientation to person. If a manager is oriented to assignments, according to Tett, he/she possesses initiative, concentration for an assignment (clear exposition who is responsible for what, detailed exposition how to perform an assignment, observance of necessary rules of activity, formulating clear goals, strictness in implementing set plans and work control, informing organization's members about attained results. If a manager is oriented to person, he/she shows communication with subordinates and friendliness, advertence, trust in employees, their empowerment, openness, empathy, cooperation, maintenance of subordination, creation of positive psychological atmosphere within the organization. According to Tett, in order to perform managerial functions, the following is important: 1) Attitudes: tolerance, adjustment, creative thinking, cultural understanding; 2) Emotional control: tenacity, stress control; 3) Communication: listening skills, communication, public presentations; 4) Self-

development and development of others: setting of aims, assessment, feedback, self-development; 5) Professional intelligence and interest: technical experience, organizational consciousness, interests for quantity, quality, finance and safety.

Having compared the structure of the models of managerial competence by different authors, i.e. indicated sub-competences and their characteristics, it is possible to state that variety of the models of managerial competence exists. However scientists acknowledge that in management there is no one ideal or universal theory – each has its application limitations. Scientists (Eyre and Smallman, 1998, etc.) note that in European and American context certain differences of managerial activity prevail. Thus different models of managerial competence are also possible.

In order to substantiate the structure of the model of manager's managerial competence, we also analysed programmes of American and four universities of the United Kingdom because the content of the study programmes has to answer the question what abilities and skills should be developed so that a person after graduating from university could perform assignments successfully; as well as we studied the research of business administration programmes by Porter and McKibbin (1988), the criteria of the study programmes for master in business administration formulated by the Association to Advance Collegiate Schools of Business (AACSB). It became evident that in the university programmes for different levels consider most frequently repeated abilities: communication, problem solution and planning, analytical/critical thinking, development of cooperation/teamwork. Development of these abilities is pointed out in the works of other authors (Otytes, 1992, Barnett, 1993): here the phenomenon of competence has been analysed in more conceptual viewpoint, by not presenting any groups of competences and their components. The research performed by Porter and McKibbin (1988) show that, when developing competence of managerial competence, the structure of curriculum emphasises development of communication skills, entrepreneurship features, understanding of international business management, application of information systems. According to the author, though the requirements of AACSB raised for bachelor's study programmes in business administration are comprehensive enough, however they pay too little attention to development of abilities to manage people, to analyse external environment, international aspects of business, to communicate, as well as abilities of morality and entrepreneurship. The essential feature of master's study programmes of business administration is development of managerial activity in a broad sense. In the latter programmes the greatest priority should be given to competences of decision-making, leadership and interpersonal relationship, i.e. cognitive activity, social interaction and teamwork. General Standard of Business and Management Programmes in the United Kingdom (Association for Quality Assurance in Higher Education, 2000) envisages that the following aspects should prevail in bachelor's study programmes: studies on an organization, its management and changing environment, in which the organization functions; career planning and

preparation for business administration and managerial activity; improvement of personal development skills. Thus bachelor's programmes should consider development of competences of organization and its external environment, person's behaviour, social communication, social interaction and teamwork, as well as development of thinking activity.

Referring to the performed content analysis of managerial competence models, the content of the study programmes of the USA and the United Kingdom universities, the researches by Porter and McKibbin (1988), the criteria of the study programmes for master in business administration of AACSB, it is possible to state that the structure of managerial activity competence model can be best reflected by the model presented in Figure 1.

The research on coherence of manager's managerial competence and employees' motivation

Research methodology

The goal of the research – is to substantiate the influence of manager's managerial competence upon employees' motivation by referring to the results of empirical research. For the research a quantitative method (survey-in-written) was applied: a non-standard questionnaire was created referring to the theoretical model of managerial competence (Figure 1). The questionnaire consists of 33 questions and 126 statements, 114 out of which characterise managerial competences. The questions are of different types (closed, open, and mixed), mostly they are closed when the only answer is possible. The given variants of possible answers facilitated processing of the obtained data. The Likert-scale was used to fix the answers of the respondents in the questionnaire (five-point answer rating that allowed rating by 1 – absolutely unimportant, 2 – unimportant, 3 – partly important, 4 – important, 5 – very important. The respondents could mark those statements that were important as motivating factors. In order to disclose influence of managerial competences upon employees' motivation, the descriptive statistical analysis, which allowed disclosing of differences between sub-samples when analysing demographic data and presenting the expression of dependent variables by means of concurrence percentage. For the data systematisation the information processing system Microsoft Excel was applied. Systemised data (in absolute and relative expression) allowed disclosing the coherence of manager's managerial competence and employees' motivation.

Organization and sample of the research

The empirical research was performed at a Klaipeda service enterprise in May 2009. The sample of the research is 45 employees of the enterprise, among them 15 managers and 30 employees. When performing the research, it was sought to involve employees who were directly subordinate for the manager of the enterprise, i.e. director of finance, director of marketing, director of personnel, etc., as well as managers of particular departments (bookkeeping, marketing, etc.) and employees of these departments. Such distribution of the respondents was determined by the wish to more

objectively reveal the influence of managerial competences upon employees' motivation at the surveyed enterprise.

The analysis of research results

The characteristic of the respondents: 45 respondents took part in the research. Among the respondents there are 35 percent of women and 65 percent of men. The age range of the respondents was different, namely: 20 – 29 years old (35 percent), 30 – 39 years old (40 percent), 40 – 49 years (20 percent), 50 and more years (5 percent). Education of the respondents is also different, namely: 40 percent of the respondents have master's diploma, among them 25 percent of women and 15 percent of men; 35 percent of the respondents have bachelor's diploma, among them 10 percent of women and 20 percent of men; 25 percent of the respondents have higher education, among them 15 percent of men and 10 percent of women. Total work experience of the respondents is 6.4 years; among them 39 percent of the respondents have 5 – 10 years of work experience; 30 percent - 3 – 5; 9 percent - 11 – 15. Five respondents (22 percent) have the smallest work experience – 1 – 3 years.

Analysis of quantitative research data. When analysing the research results in the aspect of employees' motivation, the opinion of the respondents on what needs, motives and interests induce them to work at this enterprise. Thus the questionnaire presented the question „*What factors would motivate you to work better?*" as well as 33 statements, among which 11 managerial sub-competences that characterised the managerial competence of a manager. The article presents only those research results, which represent the opinion of more than a half of the respondents. The answers of the respondents distributed as follows: 55 percent – possibilities to develop are very important; 63 percent – career possibilities; 43 percent – *possibility to participate in decision-making*; 33 percent – possibility to make decisions independently; 81 percent – *quality of the decisions made by managers*; 67 percent – confidence and given responsibility; 85 percent – *abilities of a manager to formulate and impart assignments*; 87 percent – qualitative communication within the organization; 88 percent – *manager's ability to motivate employees*; 57 percent – *manager's communication with employees*; 73 percent – *abilities of managers to control changes*; 100 percent – fair remuneration for the work; 53 percent – competence-based wages; 59 percent – stimulation of an individual employee; 77 percent – advertence and trust; 56 percent – interesting and favourite work, 67 percent – to have a possibility to realise own ideas; 76 percent – personality, behaviour, leadership style of a manager; 85 percent – relationship in the staff; 76 percent – recognition; 67 percent – open communication; 51 percent – liquidation of bureaucracy; 69 percent – *implementation of innovations within an organization*; 89 percent – *communication skills of* a *manager*; 51 percent – *manager's abilities to lead a team*. During the research it was sought to find out which elements of managers' managerial competences (sub-competences and their characteristics) made more influence upon employees' motivation. What part of employees does the latter motivate?

- Ability to plan own and subordinates' time,
- Ability to prepare rational timetable,
- Ability to selects essential information,
- Ability to perform work by applying modern technologies,
- Ability to efefctively delegate functions,
- Ability to effectively communicate,
- Ability to avoid hindrances.

Competence of effective time use

- Determination,
- Knowledge about decision-making styles,
- Ability to define a decision,
- Understanding own importance,
- Ability to identify a problem,
- Ability to distinguish factors determining a problem,
- Analysis of problem solution,
- Generation of ideas,
- Strive to check correctness of ideas,
- Ability to collect information,
- Ability to diminish risk to minimum,
- Ability to overcome opposition in implementing decisions.

Competence of decision-making

- Understanding importance of function and role delegation,
- Ability to create relations,
- Ability to select functions being delegated,
- Ability to analyse and evaluate problems due to delegated functions and responsibility
- Ability to effectively instruct and control,
- Ability to emphasise importance of delegated role,
- Ability to gain support.

Competence of function and role delegation

- Understanding the essence of motivation,
- Understanding the needs of organization's employees,
- Ability to maintain initiative of team members,
- Ability to evaluate and assess,
- Ability to empower,
- Ability to motivate subordinates in performing the assignment presumable for them
- Ability to apply effective motivating factors

Competence of motivating employees

- Understanding factors of good team formation,
- Understanding of team members' functions and roles,
- Ability to set goals by means of team,
- Ability to maintain initiative of team members,
- Ability to evaluate and award team members for eprformed work,
- Ability to adjust to changes,
- Ability to plan team goals for the future.

Competence of leading a team

- Understanding factors determining changes,
- Ability to identify a change,
- Ability to focus on a goal,
- Ability to distinguish essential changes,
- Ability to make an action plan to implement changes,
- Ability to neutralise opposition against changes,
- Ability to detect links among changes,
- Ability to follow and envisage advancement,
- Wish and ability to check own skills in.

Competence of change management

- Ability to detect stress symptoms in oneself and in environment,
- Ability to estimate stress situation,
- Ability to choose tools for stress decrease,
- Ability to analyse stress reasons.

Competence of stress

- Self-confidence,
- Analysis of own appearance,
- Ability to eliminate the emerged tension,
- Ability to estimate moods of surrounding people,
- Ability to overcome opposition against implemented changes with minimum input,
- Ability to induce employees' creativity in solving problems,
- Ability to inspire employees' trust and loyalty,
- Ability to effectively participate at meetings.

Leadership

- Potential for better communication,
- Understanding and application of gestures and mimics language,
- Ability to listen, to ask questions,
- Ability to make and read conspects,
- Ability to use information technologies,
- Ability to effectively exchange information,
- Ability to negotiate,
- Ability to prepare and say public speech,
- Ability to give suggestions,
- Ability to impress,
- Ability to effectively advertise,
- Ability to evaluate information,
- Ability and wish to check own skills of communication,
- Ability to assess cultural difefrences within communication process.

Communication competence

- Ability to choose negotiation strategy,
- Ability to create appropriate atmosphere for negotiations;
- Ability to estimate moods,
- Ability to give suggestions and to strengthen them,
- Ability to recognise intricacies and ability to resist them,
- Ability to evaluate contradictions,
- Ability to strengthen own position, and to weaken opponent's position,
- Ability to use intermediaries,
- Wish and ability to check own skills in negotiation.

Competence of negotiation

Competence of organization identity

- Discipline,
- Orientation to rules,
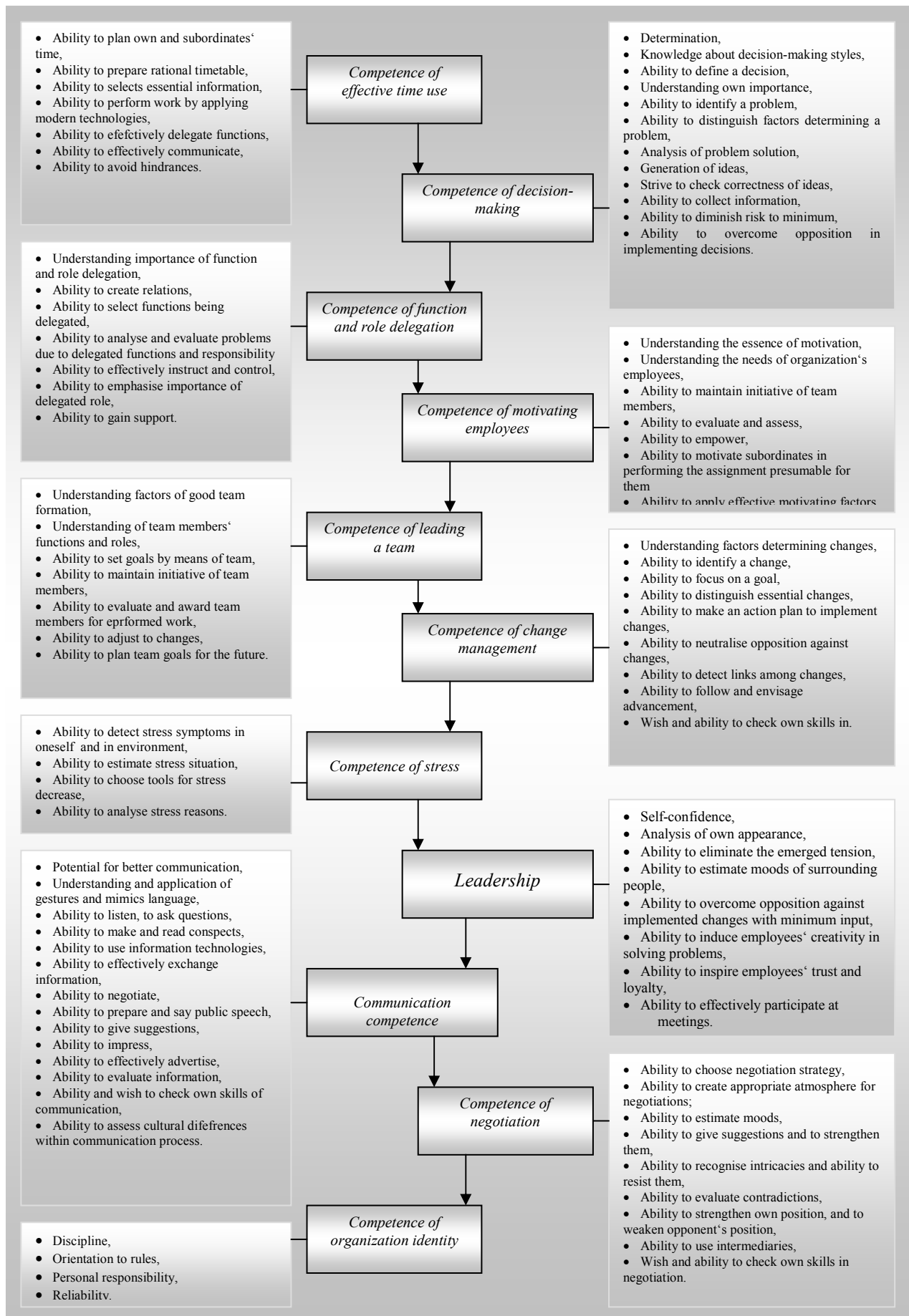- Personal responsibility,
- Reliability.

Figure 1. Characteristics of managerial competence

In order to find out whether *decision-making sub-competences possessed by managers* influence employees' motivation, the respondents were presented with 12 statements that characterised this sub-competence (Figure 1). Having analysed the research results, it became evident that more than a half of the respondents are motivated or very motivated by mangers' ability to take responsibility (56 percent), ability to identify a problem (63 percent), knowledge about decision-making styles (56 percent), ability to define a decision (56 percent), ability to identify the factors determining a problem (56 percent), as well as manager's intuition (56 percent).

Delegation of functions and responsibility – is allotment of power, knowledge and resources for employees so that they would be able to implement assignments; this is the process, during which managers of an organization delegate employees with the power and responsibility for decision-making. Such empowerment can be considered as the means for employees' energy stimulation and their motivation.

In order to find out whether *employees are motivated by the sub-competence of managers to delegate their functions*, nine statements that characterised this sub-competence were presented (Figure 1). Having analysed the research results, it became evident that a larger part of the respondents is motivated or very much motivated by *manager's ability to highlight the importance of the delegated role* (81 percent), *manager's ability to control effectively* (63 percent), *manager's ability to create relations* (63 percent), *manager's ability to gain support* (56 percent), *manager's ability to select the functions being delegated* (50 percent) (Figure 2).
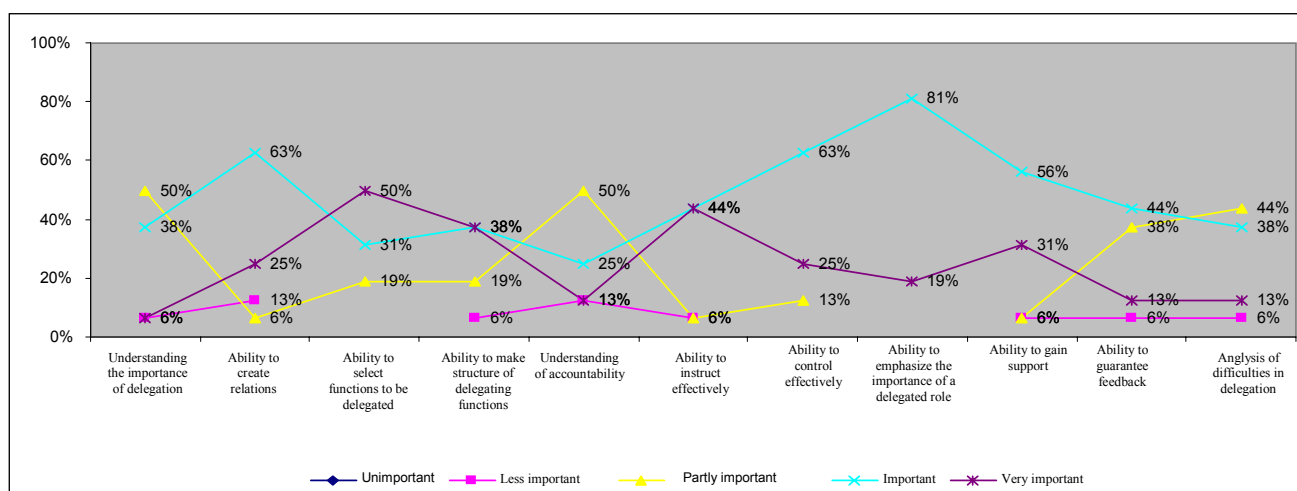
Figure 2. Manager's ability to delegate functions motivating employees

The activity directed to improve employees' needs is a feature of effective management. *Motivation sub-competence* is one of important components of managerial competence (this was indicated even by 88 percent of the respondents). In order to evaluate the influence of this sub-competence upon employees' motivation, the questionnaire presented six statements characterising this sub-competence (Figure 1). The research results revealed that a larger part of the respondents is motivated or very much motivated by manager's ability to evaluate an employee (75 percent), manager's ability to single out distinguished employees (69 percent), manager's ability to maintain the initiative of staff members (56 percent), manager's ability to motivate employees when they perform changes presumable for them (56 percent), manager's ability to create tolerant culture (56 percent) (Figure 3).

Leadership – is the power initiating people's activity and directing organization's activity towards the set direction as well as uniting staff's efforts to implement its main aims. A leader-manager is able not only to manage, but also to gain the trust of staff members, to influence them, to concentrate them for implementation of organization's aims.

In order to find out whether managers at the surveyed organization possess features of a leader, in the questionnaire the respondents were presented 23 statements, which reflected leader's features and were distinguished according to Handy, 1985; Hollander, 1985; Yukl, 1994; DuBrin, 1995, as well as the chosen statement had to be marked on five-point system. The research disclosed that managers of all levels possessed leader's features. The manager of the enterprise possesses vivid initiative (71 percent of the respondents indicated this); integrity (59 percent); self-confidence (81 percent), energy (86 percent), courage (69 percent), dominance (77 percent), communicativeness (72 percent), flexibility (83 percent); honesty (91 percent); insight and ability to influence behaviour of other people (76 percent). Managers of lower level (finance, technique, marketing, etc.) possess features of tenacity (87 percent), initiative (79 percent), communicativeness (66 percent), responsibility (78 percent), tolerance (66 percent), energy (85 percent), courage and precipitance, reliability (85 percent). Managers of the department possess the abilities of insight and influence of behaviour of other people (89 percent), initiative (91 percent); communicativeness (80 percent); integrity (74 percent); responsibility (79 percent); self-confidence (77 percent), optimism (83 percent); energy (68 percent); sensitiveness for others (71 percent); ability to influence behaviour of other people (59 percent).
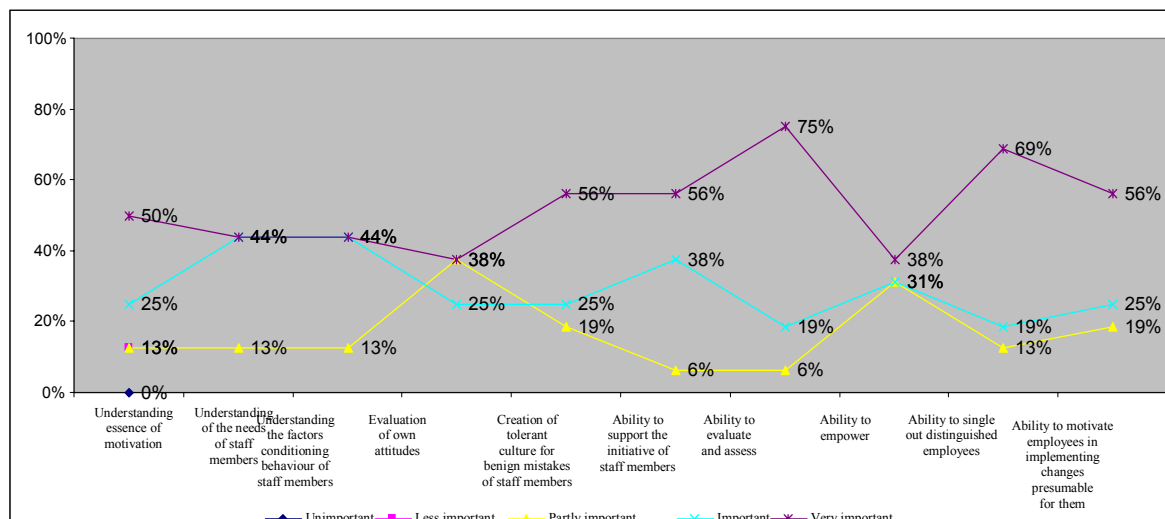
Figure 3. Influence of manager's abilities to motivate employees upon employees' motivation

In order to find out what influence managers' *leadership competence* makes upon employees' motivation, in the questionnaire seven statements that characterised this sub-competence were presented (see Figure 1). Having analysed the research results, it became evident that more than a half of the respondents was motivated or very motivated by manager's ability to eliminate emerged tension (63 percent), manager's ability to organise meetings (56 percent), manager's self-confidence (50 percent), attention to own appearance (50 percent), manager's ability to assess moods of the people around (44 percent) (Figure 4).
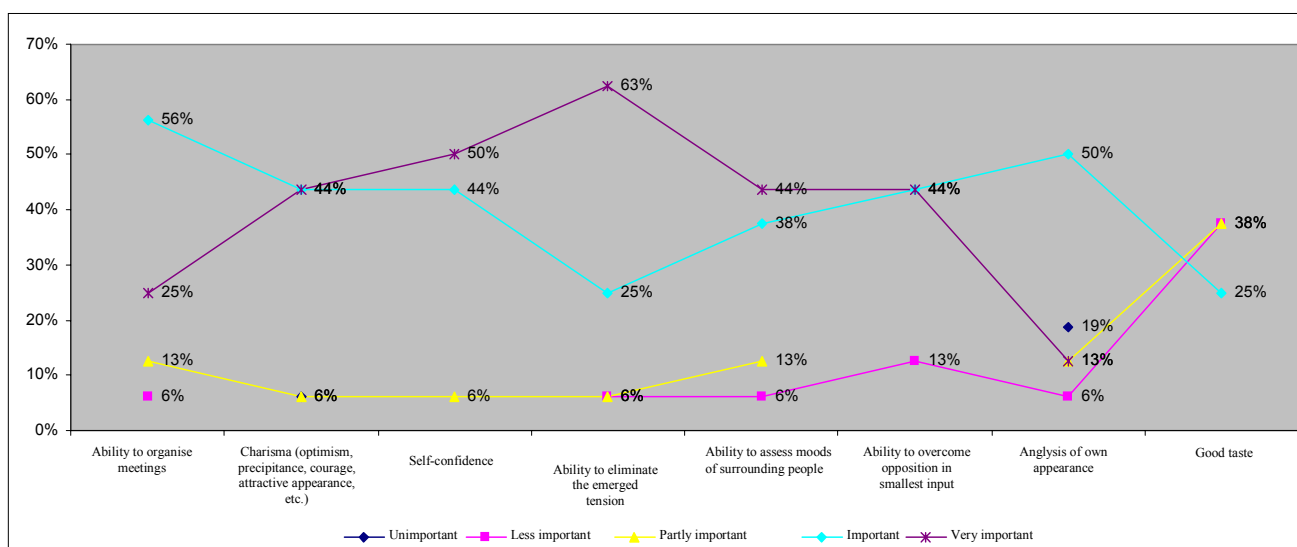
Figure 4. Influence of leadership of manager-leader upon employees' motivation

When finding out what influence managers' *communication competence* makes upon employees' motivation, the questionnaire presented 15 statements characterising this sub-competence (Figure 1). The research results revealed that more than a half of the respondents was motivated or very motivated by manager's ability to effectively transmit and receive oral business information (to effectively instruct, to present reports, to advertise) (69 percent), ability to listen and to ask questions (56 percent), ability to effectively transmit and receive (understand) written business information (to prepare reports), to effectively advertise (56 percent), ability to impress (56 percent), ability to negotiate (50 percent) (Figure 5).

The main feature of organizations' competitiveness is the ability to flexibly react to new changes of environment and to change. A manger able to implement changes clearly knows what he/she strives for, he/she is able to transform the aims into practical actions as well as sees the benefit offered by the changes, they are not frustrated due to emerging failures; they clearly explains the essence of the changes, involve the aims into the process of change implementation and take care of their security, as well as they flexibly plan and make efforts that the changes would be useful for employees personally.
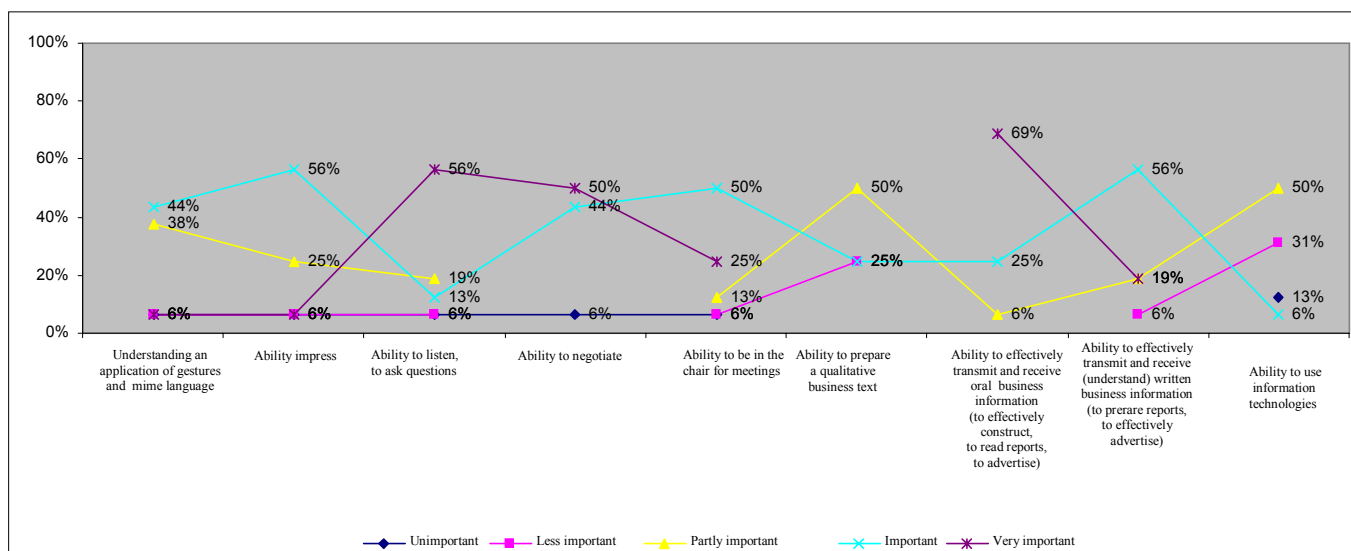
Figure 5. Influence of communication competence upon employees, motivation

When analysing the influence of the competence of change management possessed by managers upon employees' motivation, the questionnaire presented nine statements characterising this competence (Figure 1). The research results revealed that more than a half of the respondents was motivated or very motivated by manager's ability to make an action plan of change implementation (69 percent); to distinguish essential changes (63 percent); ability to change organization's culture (56 percent), ability to focus on the aim (56 percent); ability to envisage advancement (50 percent) (Figure 6).
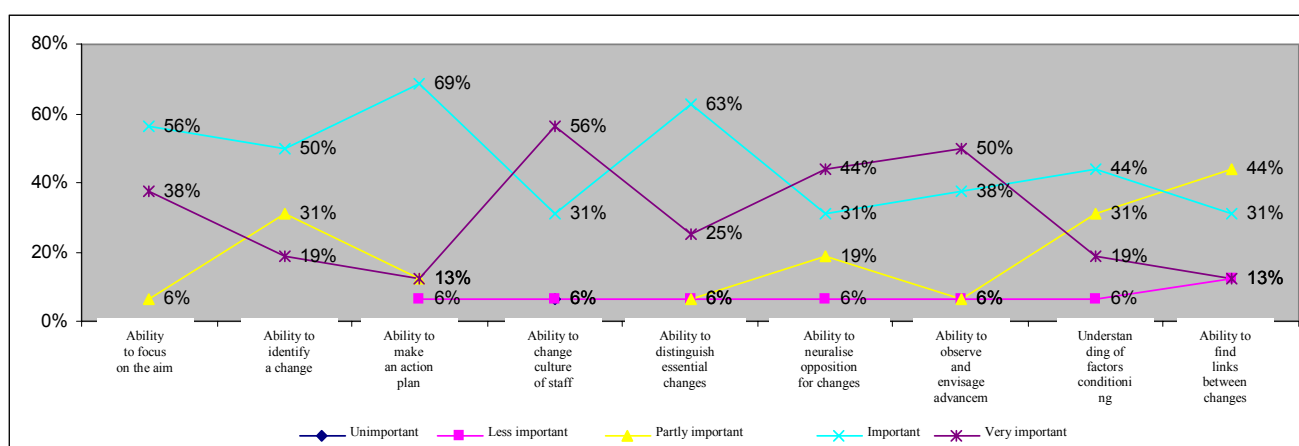
Figure 6. Influence of abilities to implement changes upon employees' motivation

Conclusions

1. In the changed society the role of an organization's manager has changed radically. It is not enough to effectively perform traditional functions of management. Today's activity highlights necessity for new functions: vision formation, initiation of changes and their implementation, effective communication, creation of employees' motivation system, ability to concentrate people on achievement of organization's aims, etc. Only a manager possessing managerial competence can perform this mission.

2. Managerial competence is the ability to successfully act in complex unexpected situations, which is determined by a wide list of high-level skills and actions, viewpoints, personal traits as well as values.

3. To motivate employees means not only to pay them a dynamic salary being proportional to their input.

Other not monetary stimulation means are not less important: respectful goals, information about organization's activity; freedom of employees' decision-making; contribution to advancement; expression of initiative possibilities; participation in management; right to speak and personal freedom; development of competences; support in seeking for success; complex application of all elements of a salary, as well as one of unique, not much surveyed possibilities – to motivate by manager's competence and trust.

4. To motivate by managerial competence means to be able to set aims because the feeling of active participation in the implementation of organization's aims obligates employees; to set real but effort-requiring goals for employees because this causes the feeling of being necessary; to provide self-control means because

this proves that employees are respected and treated as partners; to give a right to make a mistake because it becomes a source of knowledge; to delegate more responsible positions and responsibility because then they can feel as participants; to induce an initiative because this freedom allows self-assessing and disclosing internal abilities; to help employees to attain success. The harder it is reached, the more valuable it is for an employee; the more desired it is, the more useful for an organization; to take logical effective decisions because this stimulates trust in a manager; to create efficient motivational system because for everyone it is important to meet needs and interests; to effectively exchange information for employees have to know what it is going within the organization; to improve activity, to induce organization's growth, to see new possibilities for changes, innovations, to inform about current changes, to create the environment in which organization's members would face possibilities to disclose their competence, talent; to stimulate professional development because it inspires employees' loyalty.

5. *The empirical research revealed that:*

- Managerial competence of a manager is an important factor inducing employees' motivation.
- Managerial competence of managers as motivating factor influences more than a half of employees.
- The following managerial sub-competences and their correspondent characteristics influences employees' motivation: *decision-making* (manager's ability to take responsibility; ability to identify a problem; knowledge on decision-making styles; ability to define a decision; ability to distinguish the factors determining the problem; manager's intuition); *delegation of functions and responsibility* (manager's ability to emphasise the importance of the role being delegated; ability to effectively control; ability to create relations; ability to get support; ability to select function being delegated); *motivation* (manager's ability to evaluate an employee; to single out distinguished people; to support the initiative of staff's members; to motivate employees when they perform changes presumptive for them; to create tolerant culture); *leadership* (manager's ability to eliminate the emerged tension; to organise meetings; self-confidence; attention for own appearance; ability to estimate the moods of the people around); *communication* (manger's ability to effectively transmit and receive oral business information (to effectively instruct, to present reports, to advertise); ability to listen and to ask questions; ability to effectively transmit and receive (understand) written business communication (to prepare reports); to effectively advertise; to ability to impress; ability to negotiate); *change management* (manager's ability to make an action plan for change implementation; to distinguish essential changes; ability to change organisation's culture; ability to concentrate on the aim; ability to envisage advancement).

References

1. Alsop, A. Continuing Professional Development. A Guide for Therapists. London: Blackwell Science Ltd. 2001.
2. Barnett, R. The Limits of Competence: Knowledge. Higher Education and Society. 1993.
3. Boyatzis, R.E. The Competent Manager: A Model for Effective Performance. NY: Wiley. 1982.
4. Boyatzis, R.E. Core Competencies in Coaching others. Case Western Rezerve University. 2002.
5. Bryman, A. Charisma and Leadership in Organization. London: Southall. 1992.
6. Cheing, Mei-I., Dainty, A., Moore, D. The differing faces of managerial competency in Britain and America. *The Journal of Management Development,* 22 (5/6), 527-530. 2003.
7. Competency Dictionary for Leadership Roles in the Public Service of Nova Scotia, Nova Scotia Public Service Commission, 2004.
8. Competency Dictionary, Work itect, Inc., 2006, Retrieved from http://www.workitect.com/.
9. Cooke, H. Why teach sociology? *Nurse Education Today,* 13, 210-216. 2003.
10. Database of competencies for business curriculum development, K-14. National business education association. 1987.
11. DuBrin, A. Leadership. Research Findings, Practice, and Skills. Boston: Houghton Mifflin Company. 1995.
12. Fallows, S., Steven, C. Integrating key skills inhigher education: employability, transferable skills and learning for life. London: Kogan Page. 2002.
13. Grzeda, M.M. Managerial Competence: Considerations for Resolving Conceptual Ambiguity. Academy of Management, Annual Meeting. 2001.
14. Handy, C. The making of managers. London: NEDC. 1985.
15. Heller, R., Hindle, T., Kindersle, D. Essential manager's manual. 1998.
16. Hollander, E.P. Leadership and Power. Handbook. 1985.
17. Jucevičienė, P., Lepaitė, D. Kompetencijos sampratos erdvė. *Socialiniai mokslai,* 1 (22). 2000.
18. Jucevičienė, P., Lepaitė, D. Competence as Derived form Activity: the Problem of their Level. *Social Sciences,* 4 (36), 57-63. 2002.
19. Jucevičius, R. Organizacijų strateginis vystymas. Kaunas: Technologija. 1996.
20. Kasiulis, J., Barvydienė, V. Vadovavimo psichologija. Kaunas: Technologija. 2005.
21. Lloyd, C., Cook, A. Implementing Standards of Competence. London: Kogan Page. 1993.
22. Looy, B.V., Gemmel, P., Dierdonck, R.V. Services management: an integrated approach. 1998.
23. McClelland, D.C. Testing for Competence Rather Than for 'Intelligence'. *American Psychologist,* 28, 1. 1973.
24. McCredie, H., Shackleton, V. The Unit General Manager: a Competency Profile. Personnel Review, 29, 1, 106–114. 2000.
25. Porter, L.W., McKibbin, L.E. Management education and development: drift or thrust into the 21st century? NY: McGraw-Hill. 1988.
26. Spencer, L.M., Spencer, S.M. Competence at Work: Models for Superior Performance. NY: John. 1993.
27. Stevenson, C. The metamorphosis of the construction of competence. *Studies in Continuing Education,* 18, (1), 24-42. 1996.
28. Tett, R.P., Guterman, H.A., Beier, A., Murphy, P.J. Development and Content Validations of a 'Hyperdimentional' Taxonomy of Managerial Competence. *Human Performance,* 13, 3, 205–251. 2000.
29. Troter, A., Ellison, L. Understanding Competence and Competency. School Leadership for the 21st Century. London: Routledge Falmer. 2001.
30. Westera, W. Competence in education: a confusion of tongues. Curriculum studies, 33 (1), 75-88. 2001.
31. Wiley, J. The competent Manager: A model for effective performance. 1982.
32. Woodruffe, C. What is Meant by a Competency? *Leadership & Organization Development Journal,* 14, 1, 29–36. 1993.
33. Yukl, G. Leadership in organizations. NJ: Prentice Hall. 1994.

Virginija Chreptavičienė

Vadovo vadybinės kompetencijos ir darbuotojų motyvacijos ryšys: teoriniai ir praktiniai aspektai

Santrauka

Pakitusioje visuomenėje iš esmės pasikeitė organizacijos vadovo vaidmuo. Šiandieninė veikla išryškina naujų funkcijų būtinybę: vizijos formavimo, pokyčių diegimo, darbuotojų motyvavimo sistemos sukūrimo kt. Šią misiją gali atlikti tik kompetentingas vadovas; gebantis nuolatos tobulinti veiklos procesą, diegti naujoves, laiku pamatyti grėsmes ir jas neutralizuoti, kurti aplinką, kurioje visi organizacijos nariai galėtų atskleisti savo kompetenciją, o svarbiausia, gebantis sutelkti žmones užsibrėžtam bendram veiklos tikslui pasiekti.

Tyrimo tikslas – nustatyti vadovo vadybinės kompetencijos ir darbuotojų motyvacijos ryšius. Tyrimas atliktas naudojant mokslinės literatūros analizės, apklausos raštu ir statistinės tyrimų rezultatų analizės metodus.

Straipsnį sudaro dvi dalys. *Pirmoji, teorinė, kurioje* pateikiama vadybinės kompetencijos sąvoka, analizuojami ir palyginami įvairių autorių vadybinės kompetencijos modeliai, pagrindžiamas ir pateikiamas vadybinės kompetencijos teorinis hipotetinis modelis. *Antroji, empirinė,* pristatoma tyrimo metodologija ir empirinio tyrimo rezultatai, atskleidžiamas vadovo vadybinių kompetencijų ir darbuotojų motyvacijos sąveika. *Pabaigoje* pateikiamos išvados.

About the author

Virginija Chreptaviciene, PhD in Social Sciences (Educational Science), Associate professor at the Institute of Educational Studies, Faculty of Social Sciences, Kaunas University of Technology, E-mail: virginija.chreptaviciene@ktu.lt, Phone number: +370 37 300 135. Research interests: Social organization of enterprise; information management; communication; organizational behaviour; business communication.

LEADING A SCHOOL IN TIMES OF TURBULENCE AND COMPLEXITY: WORKING ON SCHOOL CULTURE

Ineta Daiktere

University of Latvia, Latvia

Abstract

The issue discussed in this paper is a part of larger school culture research project done in Latvia in 2007. The data used for this article were collected from 641 respondents representing five subgroups connected to general education schools. It was revealed that a positive atmosphere in is perceived as one of the main characteristics what makes this school better in comparison with other schools. There were also clear respondents hold diverse expectations for school leaders, but majority of them are related to daily routine not to system leadership and preparing a school for turbulent times.

Introduction

All over the world educators and school leaders are facing unprecedented challenges with the rise of global ecological, economic and social changes. Nowadays Latvia is going through dramatic changes in its economic and public management what leads to increasing emigration and it causes the problem of school-age children and their parents living in two different countries. The local government reform and migration within Latvia also underlay problem of closing and reorganisation of schools in order to make them more cost-effective. During the last ten years (1998- 2008) 89 schools were closed decreasing from 1047 schools in 1998 to 958 in 2007 (IZM, 2008). In 2009 about 50 schools out of 948 have been closed in Latvia what is four times more than before. Pressure for efficiency and economy is not the only one. As in a decentralised system official bodies in municipalities are allowed to make their decision with a guideline from the Ministry of Education and Science that those schools what attend less than 90 children are recommended to close. Municipality leaders face the problem about criteria to apply to this process and community members could help them with their opinion and suggestions. Some schools worked as a cultural and social centre for community and pupils performance is high although the amount of pupils is low. School leaders are expected to create a safe and supporting milieu of learning for both - pupils and teachers. Merging school communities and creation of healthy school culture is a challenging task for school leaders. Transforming school culture requires all school staff to develop new beliefs, attitudes and values about teaching and learning, and living together, that will lead to a change in their behaviour.

The issue discussed in this paper is a part of larger school culture research project done in Latvia in 2007 (Daiktere, 2007, Daiktere, 2009a, 2009b, 2009c, 2009d, 2009e). The study's main objective was to elicit an understanding of school community members' expectations from principals and predominant atmosphere in school as well as the perception of school strengths in general education schools in Latvia.

Conceptual Framework

School culture is a complex and elusive concept being difficult to define. Generalizing all discussions about the definition of school culture it embraces such organizational needs as shared concepts, defined organizational boundaries, common language, methods for selecting staff members for the school, methods of allocating authority, power, status, and resources, norms for handling interpersonal relationships, criteria for rewards and punishments, and ways of coping with unpredictable and stressful events, and covers such issues as the basic assumptions and beliefs shared by members of the organization (Schein, 2004). It also consists of the concepts, ceremonies, values, rituals, philosophies, ideologies, and norms shared by members of the organization that help to shape their behaviours (Kilman, Saxton, & Serpa, 1985; Lindahl, 2006; Owens, 2004; Rousseau, 1990).

School cultures are unique to every school (Deal & Peterson, 1999) although there is a reason to believe in education there should be common values and philosophy of education what is similar to majority of general educational institutions in the same geographical region.

Organizational changes and improvement in order to adapt to new settings occur in human systems, which already have beliefs, assumptions, expectations, norms and values, both - individual and shared. The question in this context is what are these assumptions and values? Do they support acceptance of new-comers and dramatic changes what a school is facing when a local government decides to merge several schools? Healthy school culture gives school members feeling of safety and unity. Scholars argue it takes time to develop strong and shared school culture (Kruse & Louis, 2009). Merging two or sometimes even three schools from the same municipality means creation of completely new school culture what takes time and extra efforts. It also needs clear vision and intensive communication process to ensure all members of school community accept at least major values and rules about instruction and school life. Nonetheless this process is without any conflicts and resistance. More

likely we can expect people frustration and unwillingness to accept the "new" culture.

Having a school culture that promotes student achievement and learning is critical at every school level. Culture does not remain static but can change within organizations or schools. The type of culture that the school has will depend primarily on the leadership of school administrators. Principals can shape the culture by being willing to make the necessary changes before asking teachers or staff to undertake any change efforts (Picucci, Brownson, & Kahlert, 2002).

School culture is also related to other issues regarding pupils attitude towards learning and education what is important in the light of their future and development of the whole society. Balcanisation and problematic school climate is associated with hight rate of employee change, burn-out and stress (Grayson & Alvarez, 2008).

School leaders can also perceive this situation of turbulence and complexity as a chance to improve their schools. This might be the right time to create a set of desirable values within a school. The process of merging schools also might be their opportunity to recruit the best teachers and equip school with more books and other materials.

Although the basic purpose of leaders within a school is to enhance teaching and learning, a leader is also expected to promote and influence the development of a shared vision and set appropriate values and beliefs for the school. No other person can do as much as a school leader to establish the quality of school's regimen (Sun-Keung Pang, 2006). Principals and assistant principals have a critical role in creating or shaping school culture by reinforcing the underlying values of a school (Kuck, 2000). They can become aware of the culture (Barth, 2002), and reinvigorate the culture of their schools (Deal & Kennedy 1999, as cited in Kuck, 2000). In the OECD recommendations for educational leadership, the importance of power decentralisation in schools is stressed. "Greater degrees of autonomy should be coupled with new models of distributed leadership, new types of accountability, and training and development for school leadership" (OECD, 2008).

For school leaders this is also the right time to work of their own attitudes and approach to school leadership and management. In their daily life managers of educational institutions mainly are involved in dealing with very practical issues. That leads to a situation that often is difficult for them to think in a more abstract, deeper way, to see patterns and structures of processes, and to be innovative (Rocena, Weijers, 2009). David Hopkins suggested school principal to become a *system leader* or a professional who have a broader view on their tasks (Hopkins, 2007). System leaders care about both their own school and wider community including other educational institutions. They have a moral purpose to develop every single school and support every pupil in their country. Whether they become a critical friend for educational institution leaders or they are involved in discussions about developing educational policy and curriculum or any other activities. System thinking is crucially important in learning organizations (Senge, 2000).

Many scholars argue that leadership in schools should be transformed to "distributed leadership" (Handy, 1996), "community of leaders" (Senge, 1997), "professional learning communities" (Verbierst & Erculj, 2006), "co-leadership" (Heenan & Bennis, 1999), and "parallel leadership" (Crowther, 2002).

Adding to that our society faces anachronistic demands as J. Erčulj presented in the ENIRDELM 2009 conference key note speech. She stresses out that principals are asked to create schools what meet the demands of both: student centred schools versus result centred environment; social solidarity vs. competition; ideal of uniform schools vs. stratified society; knowledge as a value vs. knowledge as power and intrinsic motivation vs. extrinsic motives. Dealing with these contrariwise demands is a difficult task itself, but school leaders are expected to help all school community to cope with those conflicting settings. In general most modern theorists and reflective practitioners of school improvement recognize the important roles played by organizational culture in the change process (Kruse & Louis, 2009).

Research objectives

This part of the study explores whether general education school principals in Latvia use HRM practices (recruitment, induction, and mentoring) systematically for all groups of school staff and if they have awareness how these activities can help to work on school culture.

Method

As it is mentioned above this paper covers only a part of school culture research done in Latvia. The mixed method research design of the study incorporates quantitative and qualitative means to elicit a comprehensive understanding of the school culture implementation practices in general education schools in Latvia, concentrating mainly on principals' tasks and responsibilities.

The data used for this article was collected from five groups of stakeholders (teachers , N = 152, non-teaching staff N = 78, parents N = 103; pupils N = 211 and alumni N = 92) of five general education schools (case study). Data were collected by administration of the School Culture Questionnaires (Daiktere, 2006). All questionnaires were distributed by researcher during during the spring semester in 2007.

Results

The main research areas were: (1) dominant atmosphere in a school; (2) what respondents expect from a school leader; (3) how respondents characterize areas in what their school is better in comparison to others.

The results of the analysis demonstrate that in all five schools most of respondents characterise the dominant atmosphere in a school as positive. As this question was formulated as an open-ended question in all six

questionnaires, the first step was to recode the primary data into the secondary data. Researcher chose four categories as (1) positive comments (attitude); (2) neutral attitude; (3) negative comments and (4) no answer or it was difficult to judge about the attitude (see Table 1).

Table 1

Perception of the dominant atmosphere in a school

	Positive attitude		Neutral attitude		Nagative attitude		Indefinite answer	
	N	%	N	%	N	%	N	%
Teachers N = 152	119	78.3	18	11,8	11	7,1	4	2,6
Pupils N = 211	146	69,2	21	10	37	17,5	7	3,3
Non-teaching staff N = 78	75	96	2	2,6	0	0	1	1,3
Parents N = 103	85	92,4	4	4,3	1	1,1	2	2,1
Alumni N = 92	78	75,7	13	12,6	8	7,8	4	3,9

There were no statistically significant differences between all five schools for this item. The most important conclusion after ranking the data mentioned above is that non-teaching staff members of a school and parents perceive school climate (predominant atmosphere) more positively. The group for in-depth analysis of the results could be the pupils' group due to more answers in all categories.

The second question addresses expectations from a school principal (pupils were not answering this question). In this case answers diverse more and it was difficult to organise them in few categories. The major areas were:

1. renovation of a school building, classroom or other rooms;
2. involvement in different projects regarding both teaching and learning, and also material supply of school;
3. more attention to school and parents cooperation;
4. international activities;
5. controlling and supporting teaching and learning;
6. dealing with discipline problems;
7. planning school's strategic aims and development and many more.

Although school principals are responsible for different responsibilities predominant amount of answers were related to material supply and development of a school with involvement in different projects. There were no answers regarding staff development or building cooperation with other educational institutions. According to these date school leaders are not expected to be pedagogical leaders or peer mentors.

The third open-ended question discussed in this paper shows respondents perception about their own schools strengths or elements of competitiveness. Here are

presented top 5 strengths and consequently the group's more popular answers (see Table 2).

Table 2

Perception of the areas where respondent's school performs better than other schools

	1	2	3	4	5
For all groups = 641	ood teachers	Healthy atmosphere (school climate)	High demands from everybody	School development	Traditions
Teachers N = 152	Helpful colleagues	Collaboration between groups	Traditions	Support from leaders	Active school
Pupils = 211	High demands from everybody	Active school	Healthy atmosphere	Good teachers	School development
Non-teaching staff N = 78	Healthy atmosphere	Traditions	High demands from everybody	"Keeping together"	Support from leaders
Parents = 103	Healthy atmosphere	Good teachers	School development	Traditions	High demands from everybody
Alumni N = 92	Healthy atmosphere	Good teachers	Traditions	School development	School's reputation

The main finding was that respondents tended to exhibit more the so-called social and academic strengths (collaboration, support, high demands for all, support and development) accompanied with fairness and kindness. Taking a strengths-based approach in working with pupils is more likely to achieve results in promoting their academic achievement and overall well-being. Such an approach includes highlighting individual and group assets, assisting to create a positive school and classroom climate, and viewing our students in their environmental and cultural contexts.

Discussion

These findings suggest that all five case study schools had healthy atmosphere at the time of research. It is important to stress all five of them were selected from a list of 47 as those schools with principals working constantly on school culture or the "best practice" schools regarding the research objective. These results can not be generalized to all general education schools in Latvia. All five of them differ from each other in terms of geographical location, amount of pupils and history as well as in very many other criteria. It is clear at least two of them will not face the question of closing in the near future. But all five of them might be involved in a process of inclusion of other school communities in their own. As the whole research findings confirm these five schools have strong and healthy school cultures. As it was said earlier strong school culture is a basis unity and identity on the one hand but on the other it forms resistance to

accepting others and can cause conflicts and longer period of merging. It also can lead to dissatisfaction with the new situation and undesirable comparison between subgroups of old and new members.

The expectation analysis shows existence of high and very diverse demands for school leaders. Some respondents reported a need well equipped schools what are not short in technical and other materials. This might be a call for school unification because then municipality is not dividing their budget to several schools in a particular area, but it is concentrated just for few schools. In reality then a budget would be eliminated anyway. Closing some schools might also mean children will not have a school close to their homes. According to the results of the research this is one of the major criteria in the process of school selection for pupils. Although respondents mentioned more common and popular roles as principal such as a resource allocator, visionary or problem solver in the context of relationships. It is clear in all five of them community members are generally satisfied with the performance of a school principal so their expectations are more focused on different areas what could be improved in the future. When describing areas in what school are succeeding in comparison to others respondents predominantly stressed their emotional satisfaction with school climate and culture.

There are several limitations of the study. First, other variables besides school culture might be associated with schools readiness to merge with other communities. Second, the present study was not causal comparative, and therefore, does not establish a cause-effect relationship. Third, the study was not designed to be predictive, and any results obtained should be viewed in light of this knowledge. Fourth, results of this study cannot be generalized to other geographic regions and to other populations.

Conclusion

In this complex world of change, schools are facing increasing pressures to perform successfully and to compete at a global level. It becomes then critical for schools to develop the ability to become a learning environment. From this brief examination of the school culture implementation plan it is clear that school principals can develop desirable school culture what includes healthy school climate suitable for their school. Although it might work contrariwise, they have to include new members to prevent school community to be adaptive in a situation. This study demonstrates that community members have very diverse expectations for school leaders but majority of them are related to a schools every day functioning. There is still a possibility to make demands for system leaders and school administrators' greater involvement in educational leadership and management in wider geographical area.

References

1. Barth, R. The Culture Builder. *Educational Leadership*, 59(8), 2002. 6-11.
2. Crowther, F. Big Change Question: Is the role of the principal in creating school improvement over-rated? Journal of Educational Change, 3(2), 2002, 167-173.
3. Daiktere, I. Skolas kā mācīties spējīgas organizācijas veidošana, pārveidojot organizācijas kultūru. Zin.rakstu krāj. Pedagoģija: teorija un prakse V. Liepāja: LiePa, 2007., 322-328. lpp.
4. Daiktere, I. (2009) Creating, Fostering, and Sustaining School Culture in Latvia: Communication with stakeholders. Problems of Education in the 21st Century. Education Policy, Management and Quality. Scientific Methodical Center "Scientia Educologica" /Lithuania/. 12(12):30-35.
5. Daiktere, I. (2009) Skolas kultūras veidošanas iespējas: Skolēnu viedokļu analīze. Proceedings of the 51th International Scientific Conference of Daugavpils University. Daugavpils, Latvia, 15.-18.04.2009. (In printing).
6. Daiktere, I. (2009) Skolas tēla veidošanas un izglītības iestādes reklamēšanas iespējas Latvijā. Proceedings of the 50th International Scientific Conference of Daugavpils University. Psychology & Didactics. Daugavpils: Daugavpils Universitātes Akadēmiskais apgāds "Saule", 2009., 26.-32. lpp.
7. Daiktere, I. (2009) Skolotāju kognitīvo modeļu analīzes nozīme izglītības vadībā. Liepājas Universitātes 12. starptautiskās zinātniskās konferences "Sabiedrība un kultūra: Citādība un mazākuma intereses", 23.-24. aprīlis, 2009. izdevumā. Liepāja, Latvija. Liepājas Universitāte. (In printing).
8. Daiktere., I. (2009) An Overview of the Use of Human Resource Management Procedures in Latvian Schools. Proceedings of Intensive Program ACEP (Analysis of Comparative Educational Policies) in Linz, Austria 2008., 17.-31.08.2008. (In printing).
9. Education and training policy- Improving school leadership- Volume I: Policy and practice. OECD, 2008. Available at: http://www.oecd.org/dataoecd/60/55/41200009.pdf (Accessed December 12, 2008).
10. Grayson, J.L. & Alvarez, H.K. (2008) School Climate Factors Relating to Teacher Burnout: A Mediator Model. Teaching and Teacher Education: An International Journal of Research and Studies. 24 (5) pp. 1349-1363.
11. Handy, C. The New Language of Organizing and Its Implications for Leaders. In F. Hesselbein, M. Goldsmith & R. Beckhard (Eds.), The Leader of the Future: New Visions, Strategies, and Practices for the Next Era. San Francisco: Jossey-Bass, 1996.
12. Heenan, D. A. & Bennis, W. G., (1999) Co-Leaders: The Power of Great Partnerships. John Wiley & Sons.
13. Hopkins, D. (2007) Every School a Great School: Realizing the potential of system leadership. Open University Press,.
14. Kilmann, R.H., Saxton, M.J., & Serpa, R. (1985) Introduction: Five key issues in understanding and changing culture. In R. H. Kilman, M.J. Saxton, & R. Serpa (Eds)., Gaining control of the corporate culture (pp.1-16). San Francisco: Jossey-Bass.
15. Krouse S. & Seashore Louis K. (2009) Building strong school cultures: a guide to leading change. - Thousand Oaks: Corwin Press.
16. Lindahl, R. The Role of Organizational Climate and Culture in the School Improvement Process: A Review of the Knowledge Base. Connexions. Available at: 2006
17. Owens, R.G. (2004) Organizational behavior in education: Adaptive leadership and school reform (8th ed.). Boston: Allyn & Bacon. http://cnx.org/content/m13465/1.1/ (Accessed December 15, 2008).
18. Rocena, I. & Weijers, E. (2009) Philosophical Inquiry. A Way to New Professional Mastery. ENIRDELM 2009 conference materials. University of Antwerp.
19. Rousseau, D.M. Assessing organizational culture: The case for multiple methods. In B. Schneider (Ed.), Organizational climate and culture (pp. 153 - 192). San Francisco: Jossey-Bass. 1990
20. Schein, E. H. *Organizational culture and leadership* (3rd ed.). San Francisco: Jossey-Bass. 2004
21. Schein, E. H. Organizational culture and leadership (4th ed.). San Francisco: Jossey-Bass. 2004

22. Senge, P. *Schools That Learn: A Fifth Discipline Fieldbook for Educators, Parents, and Everyone Who Cares About Education.* New York: Doubleday. 2000
23. Senge, P. M. Communities of leaders and learners. Harvard Business Review, 75(5), 1997. 30-31.
24. Statistics about general education in Latvia. Available at: http://izm.izm.gov.lv/registri-statistika/statistika-vispareja/3334.html (Accessed September 20, 2009.
25. Sun-Keung Pang, N. The Organizational Values of Gimnazija in Slovenia. Educational Management Administration & Leadership. 34(3), 2006. 319-343.
26. Verbiest, E. & Erculj, J. Building capacity in schools – dealing with diversity between schools. In: Pol, M. (ed.): Dealing with divesity. A Key issue for educational management. Proceedings of the 14th Enirdelm conference, 2005, September, 22-25, Brno & Telc, 2006, pp 65 -80.

About the author

Ineta Daiktere is currently employed in University of Latvia, Department of Educational Sciences. She is originally a psychologist who is taking a doctoral programme in Educational Leadership and Management in University of Latvia. Her special interest areas are human resource development and teacher and principal professionalism while her particular research area is school culture and it's implemantation. E-mail: ineta.daiktere@lu.lv.

CLUSTERS AND REGIONAL SPECIALIZATION

Birutė Daraškevičiūtė

Kaunas University of Technology, Lithuania

Abstract

There is no country in the world that could attain international competitive ability in all sectors of economy. In order for a certain region to be able to orient to global markets, it is necessary for it to be distinguished for its competitive advantages.

It is known in the world that cooperation can manifest in various forms, including clusters. In other words, cooperation or clusters can increase the efficiency of activities and competitive ability in the region and to create common activity expansion opportunities for the companies.

Basing on scientific literature analysis, this work reveals the role of clusters in specialization of regions, enabling the region to become competitive in certain business.

Keywords

Cluster, clusterization, regional specialization.

Introduction

Today clusters are gaining increasing importance in the global economy. This organizational form of companies' cooperation over the recent decades has turned from completely unknown area to science into an object of particularly active scientific studies, the pivotal axis, based upon which new policy initiatives of various fields are being developed. It was the challenge announced to the world to turn Europe into the most competitive and dynamic knowledge-based economy in the world that impelled the general need of the countries to apply the cluster approach in their economic policies, to promote the development of clusterization in order to enhance the competitiveness of economy. According to M. Kriaučionienė, S. Šimanauskas and P. Lindroos, "the use of clusterization opportunities is one of the key factors that will determine successful attainment of this objective" (Kriaučionienė, Šimanauskas and Lindroos, 2005, 72 p.).

The aim is to reveal the versatility of cluster theory and the influence of clusters to regional specialization.

The object of research – clusterization as a determinant of regional specialization.

Method of research – systemic and comparative analysis of scientific literature.

Cluster theories

Research of the cluster phenomenon has been carried out by different authors such as Ketels (2003) and others who, based on the Porter's (1990) "diamond model"; dynamic of innovative activities, creation and sharing of knowledge within clusters have been studied by Morosini (2004), Scheel (2002), Hansen (2002), Furman (2002), Lorenz (1992, 1996), Lawson (2000), Lawson and Lorenz (1999), Keeble and Wilkinson (1999). In their study, Gordon and McCann (2000) focused on the social nature of clusters, while substantiating the importance of social networks within clusters. Porter (1998a), Morosini (2002) and Rabellotti (1999) strived to disclose the connecting forces of cluster formations. Geographic distribution of network members and its importance have been examined by many authors

(Porter, 1998b, 1990; Scheel, 2002; Morosini, 2004; Feser and Bergman, 2000; Simmie and Sennett, 1999).

In Lithuania, the phenomenon of clusters and its different aspects of development have been actively researched on a scientific level by Jucevičius (2004), Jucevičius and Stankevičiūtė (2004), Jurgutis and Jucevičius (2004), Jucevičius (2004). Moreover, several studies of individual scientific groups examined the clusterization perspectives of Lithuania in various sectors of economy (Program Study of Lithuanian Industry Cluster Development (Lietuvos pramonės klasterių plėtros programinė studija, 2003); Preconditions and Recommendations for Cluster Development in Lithuania (Klasterių vystymosi Lietuvoje prielaidos ir rekomendacijos, 2002), and after implementing, in 2007, the measure "To promote clusterization and with this view to draw the map of Lithuanian industry and business clusterization" under the Programme of the Government of the Republic of Lithuania for 2006 – 2008, Business Strategy Institute of Kaunas University of Technology prepared a map of Lithuanian industry and business clusterization.

As stated by C. Bekar and R. G. Lipsey, "clusterization, encompassing the key carriers of innovations – companies, consumers, universities, public research institutions - is one of the most significant aspects of innovation-based economy" (Malakauskaitė, 2008).

Clusters have a significant impact on development of competitive advantage for individual companies as well as for the country or region: favorable conditions are created for the increase of efficiency and innovativeness of companies, improvement of performance, product quality and technological content as well as for the emergence of new businesses.

Clusters could be defined as means to increase the competitive ability of companies, enabling the development of specialized competencies of human resources through constant interaction of people and their learning during this interaction. They also grant different infrastructural advantages to companies – access to roads, telecommunications and IT infrastructure. According to Caron H. St. John and Richard W. Pouder (2006), the essence of cluster theory is the formation of concentration

of companies and promotion of development of the area with the strongest ties or spreading in a certain cluster. According to Christos Pitelis and Anastasia Pseiridis, is the "accelerated spreading of knowledge and innovations, i.e., the opportunity for the companies to be the first ones to find out about any improvements in their field. Furthermore, operating in a cluster is particularly attractive to small companies, seeing as operating within a common network of companies results for these companies in economy of scale and releases them from certain restrictions determined by small size" (Pitelis and Pseiridis, 2005, 13 p.). Operations in cluster build on the companies' knowledge about their field of activities as well as self-knowledge reduce the time, infrastructure maintenance and simultaneously transaction costs. It is noteworthy that cluster can function as a particularly innovative space of operations. The recognition of interdependence in the cluster creates the prerequisites for bigger efforts to create innovations; opportunities are created to get specialized companies in new activities, while technological improvements may be carried out with less cost and more effectively than in the case with single company. All this determines the increase of efficiency and competitive ability of companies.

Conception of cluster

Clusters are increasingly more often perceived as an attractive means to promote the development of economy and collective learning processes under the conditions of global knowledge economy. However, it is still difficult to find a consensus on definition of cluster in numerous works of researchers, across different disciplines and practices of different countries. Even such term as the confusion of definitions can be found in scientific articles. According to R. Jucevičius and G. Jucevičius, "regardless of certain variety of attitudes, it is basically concurred that clusters as innovative business systems based on collective learning of actors of the region, linked through social-economic ties, represent a suitable competitive response to the challenges of knowledge economy" (Jucevičius and Jucevičius, 2005, 27 p.). Furthermore, they are not of certain branch of industry, producing a certain product. Successful clusters unite many companies working in similar industries, suppliers and other institutions, located in the same place.

The term "cluster" is being used in many disciplines of science: mathematical physics, computer science, medicine, biology, sociology and astronomy. The analyzed literature allows concluding that in the most general case cluster is defined as a group of similar elements or phenomena, existing together and having similar features that convey their common origin.

In economics, the origination of term "cluster" is associated with the professor of Harvard Business

Perhaps the major infrastructural advantage of clusters,

School, M. Porter. He is considered to be the author and main theoretician of companies' and national competition strategies as well as cluster theory.

In the analyzed scientific literature of Lithuania, such definitions of cluster have been found: "cluster is the concentration of companies cooperating in inter-related industries, the necessary suppliers and associated institutions (universities, scientific research centres, standard and trade associations) in one location/region" (Jucevičius, 2008); "cluster (industrial group) refers to companies, which are concentrated according to geographic principle, interacting among themselves, engaging in common activities and complementing each other by their specific operations, specialized suppliers, service providers and different organizations" (Činčikaitė and Belazarienė, 2001, 72 p.); "cluster is the structure of relationships, existing within the boundaries of a certain region, creating the conditions for close cooperation of different forms" (Činčikaitė and Belazarienė, 2001, 72 p.).

The author of cluster theory, M. Porter, presents this as the most general approach "which claims to be applicable to file competitiveness of both national industry bundles and inter-linked regional industry networks" (Bathelt and Dewald, 2008, 163-179 p.). While upholding this approach, Robertas Jucevičius presents the following definition of cluster in his book "Klasterių ABC": "cluster refers to the geographic concentration of inter-related companies, specialized suppliers, companies of associated industries and associated institutions of certain nature (universities, standard and trade associations), which compete and also cooperate" (Jucevičius, 2008, 9 p.). Moreover, R. Jucevičius distinguishes the broad and the narrow definitions of cluster. According to him, "cluster in the narrow sense refers to economic agglomeration, comprising companies that operate in inter-related and supporting fields of activities (i.e., specializing in a certain link of product value chain and obtaining the benefit from cooperation with suppliers and customers operating nearby)". In the broad sense, according to him, cluster "is the social production and innovation system of the region/sector, which is characterized by high concentration of actors possessing different competencies (i.e., companies, universities, high schools, training organizations, municipal structures, financial institutions, etc.), whose close inter-relationships guarantee economic effectiveness of activities as well as promote the sharing of knowledge, transfer of technologies and new product development" (Jucevičius, 2008).

Different definitions of clusters were also distinguished in works of foreign scientists examined. They are presented in Table 1.

Table 1

Definitions of clusters

Author of the definition	Year	Description
M. Enright	1996	"Regional cluster is an industrial cluster, in which companies – members are situated in close proximity to each other" (Enright, 1996, 191 p.).
G. M. P. Swann,	1996	"Here, clusters are defined as existence of a group of companies within one industry in a

M. Prevezer		certain geographic location" (Swann and Prevezer, 1996, 139 p.).
S. A. Rosenfeld	1997	"Cluster is the merest representation of the concentration of companies, which can obtain the synergy effect due to their geographic proximity and inter-dependability even when the scale of occupation is not well expressed or visible" (Rosenfeld, 1997, 4 p.).
M. E. Porter	1998	"Cluster is a group of geographically closest connected companies and the related institutions in a certain domain, linked by affinity and mutual complementation" (Porter, 1998, 199 p.).
E. J. Fezer	1998	"Economic clusters are characterized by associated industries and institutions that support each other as well as by the fact that relationships of such nature determine their becoming more competitive" (Fezer, 1998, 26 p.).
G. M. P. Swann, M. Prevezer	1998	"Cluster denotes a large group of companies in affined industries in a certain locality" (Swann and Prevezer, 1998, 1 p.).
J. Simmie and J. Sennett	1999	"We characterize an innovative cluster as a large number of related industries and/or servicing companies, possessing high-level cooperation skills which generally emerge due to effective supply and run under similar market conditions" (Simmie and Sennett, 1999, 51 p.).
T. Roelandt, P. den Hertag	1999	"Clusters can be characterized as networks of tightly inter-related dependent companies (including specialized suppliers), the basis for which is comprised by value-creating production chains" (Roelandt and den Hertag, 1999, 9 p.).
L. Van den Berg, E. Braun, W. van Winden	2001	"The popular term "cluster" is mostly associated with the inherent dimensions of regional or local networks… The majority of definitions loan the description of cluster as representing specialized organizations based on local networks, the production process of which is mostly linked with the exchange of goods, services and/or knowledge" (Berg, Braun and Winden, 2001, 187 p.).
C. Crouch, H. Farrell	2001	"More generally, the conception of cluster denotes uncertainty: the tendency of companies in similar type of business being situated in the proximity of each other, even in absence of particularly important reasons for being in that territory" (Crouch and Farrell, 2001, 163 p.).

Such a variety of definitions only serves to confirm M. Porter's (1998) idea that "a large portion of scientific literature sources only skim over individual aspects of the cluster phenomenon – relationship networks, economy of agglomeration, urban and regional economics, economic geography, national systems of innovations, regional networks of science and industry zones" (Malakauskaitė, 2008). Although the considered definitions of clusters are distinguished for certain common features as well as differences, it can be stated that none of the authors proposed a finished or universal conception of cluster.

As stated by R. Martin and P. Sunley, "in the majority of examined cases, clusters are far from being formations of national scale" (Martin and Sunley, 2003, 12 p.). Furthermore, some authors (Baptista and Swann, 1998; Enright, 1996, 2001) use the terms 'cluster' and 'region' as synonyms, while in other works (Swann, 1998, 63 p.) cluster is matched to the town. This brings in some confusion into the perception of the notion, and the cause for this, according to P. Martin et al., is the "irresponsible use of geographic terminology" (Martin and Sunley, 2003, 12 p.).

According to the lecturer of Mastricht University Saeed Parto, "over the last few years, hundreds of articles have been written on clusters" (Parto, 2008, 1006 p.), however, the use of geographic terminology is not the only problem pertaining to definition of cluster concept. He singled out yet another problem – inadequate attention to the "role of institutions", which, according to him, is namely the driving force behind clusters.

The abundance of scientific works on the subject of cluster concept is a positive trend. A universal concept can be found only through common efforts. Moreover, as P. Maskell and L. Kebir suggest, "the theory development

authors offer the tools helping to identify and emphasize the factors ("what"), relationships ("how") and circumstances ("why") that together comprise the core of the theory" (Maskell, Kebir, 2008, 13 p.).

Based on the analyzed scientific literature and cluster conception highlights pointed out by the authors, it could be summarized that cluster refers to the concentration of geographically close and inter-related companies, which turned competition among them into cooperation, and of institutions working in a certain industry. Such a formation in a certain region determines the specialization, occurring due to such obvious forces as importance of local economics, intensity of price competition and the level of transportation prices.

Key characteristics of clusters

When speaking about clusters it is imperative to emphasize that they can be diverse. According to the initiator of cluster theory M. Porter "clusters vary by size, breadth and the stage of development" (Porter, 1998a, 204 p.). Some clusters may comprise small and medium companies, while others – small as well as large companies. This classification is based on *depth of the cluster*. There are clusters supported by universities; however, there are also clusters, which do not maintain any relationships whatsoever with universities. Another division is based on whether the cluster is in traditional or high technologies industry. Such division could be defined as classification by *production orientation of dominating companies*. Moreover, clusters could be grouped into those developing, new, known and at the end of their existence (R. Jucevičius divides the cluster life cycle into the following stages: embryonic, growing,

mature and dying). This kind of grouping refers to division by *cluster development level*. Other authors, according to R. Martin and Sunley, "try to base the classification on evolution of clusterization process. For "under-achieving" clusters show the opportunities, which have not yet been utilized. "Potential" clusters have wonderful opportunities, but lack efforts and critical mass" (Martin and Sunley, 2003, 13 p.). The typology, in which such categories are employed as "embryonic", "latent" and "potential" should be criticized due to the fact that in this case any company could be ascribed to one or another type of clusters.

R. Jucevičius proffers the following classification of clusters:

- micro-clusters or horizontal networks;
- value chains;

instance, Rosenfeld (1997) distinguished three types. "Working" or "over-achieving" clusters are self-acting and achieve more than the sum of their parts. "Latent" or

- supply chains;
- sectoral clusters;
- geographic clusters;
- macro-clusters (national) (Jucevičius, 2008, 17 p.).

By *geographic parameters (geographic scope of activities, geographic territory)* R. Jucevičius classifies clusters into international, national, regional, local and those of locality, town, region. This division is illustrated in Figure 1.
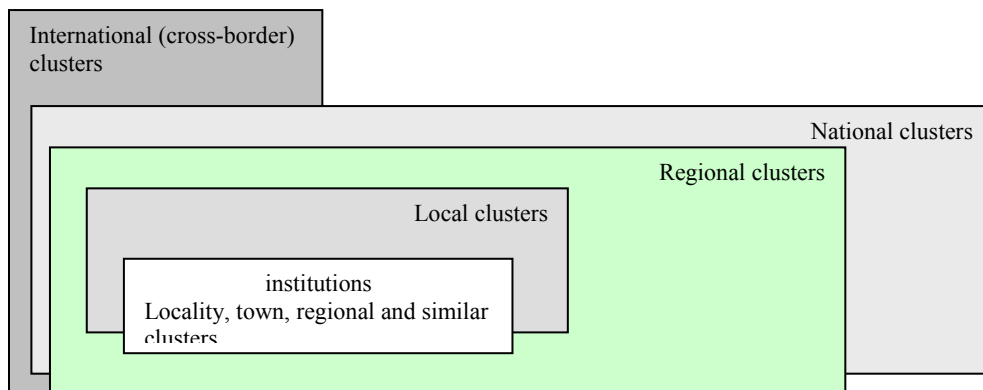
Figure 1. Types of clusters by geographic parameters

Clusters are also classified by *geographic distribution of production* (exporting and non-exporting clusters) as well as by *occupation dynamics* (the rate of the growth of employees within cluster).

Although there are different explanations of cluster definition and classifications, certain characteristics exist that make a cluster stand out in the environment. According to R. Klein Woolthuis, P. Boekholt and P. Sowden,

- "there is a final product or service to the creation of which all companies in the cluster contributed;
- there is a basic technology in the broad sense, which is applied by a significant number of cluster members to produce products or services;
- there is a certain combination of the two previous features" (Woolthuis, Boekholt and Soeden, 2000).

When characterizing cluster, R. Jucevičius distinguishes its actors (see Fig. 2). The author states that the composition of cluster depends on a variety of circumstances. It is only the main actor of the cluster who leaves no doubts – this is always a business enterprise (in the initial stage, preferably, a small company, unless all actors in the cluster are large). According to him, "the most successful composition of business enterprises will be obtained when companies engaging in as diverse activities as possible and covering many types of activities of the internal value – cost chain participate in the cluster. This will enable them to specialize and become the experts of these activities" (Jucevičius, 2008, 13 p.).
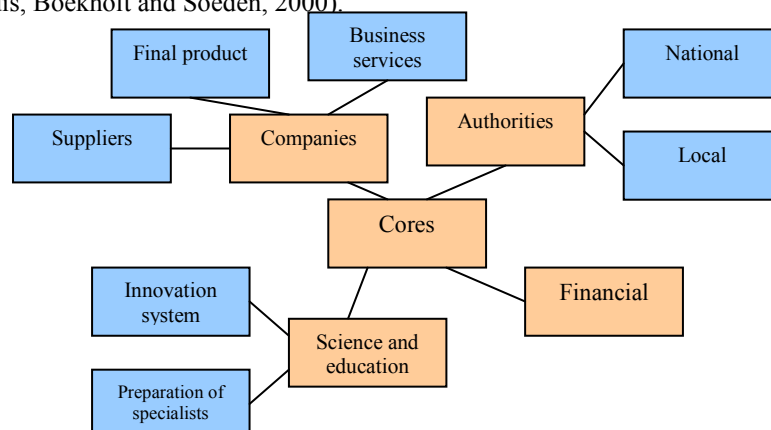
Figure 2. Cluster actors (Jucevičius, 2008, 13 p.)

As already mentioned when examining the cluster conception, authorities are also considered to be the actors of clusters. Their involvement, according to the global practice, is desirable.

Another group of interests (universities mentioned when examining the conception) refers to the science and education establishments. Their participation is particularly important in current knowledge-based economy.

The last group of interests ascribed to the cores – financial institutions. This group is of particular interest to business companies, although, in certain cases, the interest is mutual.

It is noteworthy that there is another way to characterize a cluster and that is to point out its features. Table 2 displays the main features inherent to clusters, forming due to geographic proximity and clusters forming due to increase of competitiveness in a certain industry.

Table 2

Features of clusters

| Feature	Description of feature
Geographic concentration	This is a fundamental feature of cluster, seeing as in many domains innovations and competitive success are geographically concentrated. However, the role of such concentration (localization) in modern economy should be approached slightly differently. Speaking about geographic localization with regard to accessibility of resources, nowadays companies can remove many obstacles impeding them to use the resources, because globalization facilitated the accessibility of resources. Due to this, now competitive advantage of companies is more related with more efficient use of resources, and for this purpose they must unrelentingly work on creating innovations. Geographic localization is also very important with regard to environment surrounding the companies. To companies, which constantly strive for competitive advantage, internal developments are very important; however, cluster analysis shows that business environment of companies also plays a vitally important role.
Clusters comprise business formations and organizations that have achieved competitive success	Large group of associated industry and business or other actors comprising the cluster in itself (all together) enhances the competitiveness of the cluster. For example, a cluster may include suppliers of specialized production resources and specialized developers of infrastructure. Furthermore, clusters often expand vertically to sales channels and customers, as well as horizontally – to complementing products and companies, functioning in industries linked by necessary competences, technologies or common resources.
Clusters include an adequate number of companies/organizations, necessary to form the critical mass	A sufficient number of companies/organizations constitute a certain weight of companies' concentration in global business context, which could be defined in terms of "critical mass" or "critical creative mass". This critical mass of companies (for instance, for its size or competencies) enables seeing them as the entirety of organizations creating competitive advantage. Often, companies in the cluster are ascribed the responsibility for the growth of economic indicators in a certain locality. Local clusters usually comprise few members. However, in international practice it is usual that the least number of companies to call the concentration of companies a cluster is 10-15 members.
Formation of clusters is determined by presence of unique resources in a certain location	Clusters in analogical fields of industry or business are similar, because value-cost chain when creating similar product or service is also very similar. Thus, long-term competitive success in global economy increasingly more depends on local resources or peculiarities such as knowledge, relationships, motivation, to which competitors that are located further cannot adapt. In this sense, each cluster is unique.
Cluster boundaries depend on its geographic nature	Cluster boundaries are defined by relationships arising from different industries and institutions, which are important to ensuring competitiveness. Because of this, local, regional, national or international clusters are distinguished.
Clusters rarely "fit" into one sector of economy or activity	This characteristic of clusters is of fundamental importance. For instance, furniture manufacturing cluster cannot do without participation of metal and plastic articles' production, textile and other sectors of industry. The same goes for such rapidly spreading clusters as those of creative industries or wellness. They are characterized by abundance of quite different technologies and even more competences.
Clusters are self-organized	Although local or national authorities, investors or other institutions can create

formations	impetus for the emergence of cluster, it is known, however, that many widely analyzed clusters were self-organized ("from the bottom"), following their own business interests and striving for more comprehensive and effective realization of these interests. Self-regulation also implies that there is no "head" in the cluster who would tell other participants what they should or should not do. All or majority participants of clusters are independent companies and organizations, cooperating with each other, because it pays off. Hence, there is no other control mechanism of common activities as agreements and coordination of interests.
Clusters promote competition as well as cooperation of companies	This feature of clusters could be described as paradoxical: companies cooperate among themselves in order not to compete or to withstand the pressure exerted by competitors, but here it is stated that clusters also promote competition. However, this is no paradox: first of all, competition between members of cluster initiative should be really avoided in the initial stages of cluster development, otherwise attempts to build mutual trust and cooperative climate will fail. In this stage, therefore, cooperation is of utmost importance, and must endure. However, the key point of competition promotion is that performance of cluster members must be superior to that of non-members. Otherwise they will be unable to compete with actors outside the cluster, and other members of the cluster will start buying services from outside the cluster. On the other hand, cluster members are interested in higher quality of products or services of cluster members and will, therefore, help to strive for that. It is always better to support the already-known and reliable partner instead of searching for others, yet untried. However, the attempt to "lock" in the cluster and not to compare outcomes of activities, products or services of cluster participants with those of competitors beyond the cluster would equal dooming oneself to failure. Hence, cluster should encourage all of its members to compete, inter alia, among themselves, because only this will enable them to become more productive and effective.

After reviewing the main features of clusters, a question arises, what features are necessary for the cluster to be characterized as stably-functioning? According to R. Klein Woolthuis et al., the following general characteristics of stably-functioning clusters could be distinguished:

- generally parties know each other well (particularly in clusters of smaller scale), information about the cluster is sufficient; companies of the cluster have common background, which enhances cooperation;
- main actors of the cluster, main competitors and the direction of cluster development are known;
- the cluster has a central body (or several of them), which possesses the key information about the cluster activities and is responsible for such important functions as intermediation, lobbying, awareness-raising, etc. Such a body is not necessarily the core of the cluster – this is the "main organization, which carries out the function of interest-uniting institution the best". (Jucevičius, 2008);
- the cluster has a strong image, recognized by companies within the cluster as well as beyond it;
- the cluster has reached critical mass or the so-called "creative density", due to which it starts attracting large foreign companies and highly skilled employees from other regions and countries.

It is also noteworthy that stably-functioning clusters are self-organized formations. Hence, this peculiarity enables them to operate with a small portion of support from the side of society.

Impact of clusters on regional specialization

As already mentioned in the first section, no country or region could be competitive in all fields. It is noteworthy that different regions vary by level of social and economic development. In order to countervail such inequalities, clear regional policy should be formed in the country and effective implementation thereof organized. In the world there are numerous countries, which rely upon cluster theory in regional policy formation, seeing as mutual cooperation and competition of companies comprising the cluster determine successful economic development of regions.

Although in the analyzed scientific literature division of regions into strong (operate actively thus even more strengthening their economic powers, because of rapid capital turnover helping to attract new capital and create even bigger added value) and weak (becoming even more unattractive due to increasing unemployment, diminishing income and purchasing power of residents, slowing turnover of capital due to scarcer financial resources and these regions falling into an even deeper economic crisis and economic stagnation) economically is noticed, "clusters exist in developed as well as developing economies" (Činčikaitė and Belazarienė, 2001, 73 p.).

According to R. Bagdzevičienė and J. Vasiliauskaitė, "regions ensure the potential of active, strategic development on closer, local level. They strive to occupy their niche in a global economy, organize, create their

strategies, mobilize themselves and finally create their future based on high technologies" (Bagdzevičienė and Vasiliauskaitė, 2002, 36 p.). Through communication relationships, regions gain an optimal opportunity to use the base of new technologies and knowledge, thus retaining and enhancing their economic superiority.

Regional cluster in the analyzed literature was described as concentration of geographically defined independent companies (summarizing such older notions as industrial district, specialized amalgamations of industries and local production systems). The success of such cluster is determined by the support of developed infrastructures of suppliers, science-knowledge and technology distribution organizations, which focus their services particularly on the dominating industry of a specific region.

While seeking to explain why it is worthwhile for companies to become a part of the cluster in the region and simultaneously competitive "specialist of their respective domains" instead of operating beyond the boundaries of the cluster on their own, J. Činčikaitė and G. Belazarienė (2001), G. Mačys (2005), pointed out the following reasons: better access to specialized factors of production, labour force and information, reciprocal complementation, benefit of cooperation and promotion of performance efficiency. The description of these factors and benefit to the region are listed in Table 3.

Table 3

Influence of determinants to the companies and the region

Determinant	Description of the determinant with regard to the company	Benefit to the region
Cluster offers better access to specialized production factors and labour force	Local resources cost a lot less – they minimize the need to keep a reserve of production resources and eliminate the import costs. Furthermore, local suppliers will not dare to raise the prices or default of their obligations due to the competition. Speaking about distant suppliers – this is an excellent option when local suppliers are uncompetitive. Thus, competitive advantage is acquired in the fields of expenses and quality. Clusters give an advantage in procuring specialized and qualified labour force, because here in particular large concentration is obtained. Thus, personnel recruitment and hiring costs are cut down.	Reduction of unemployment.
Better access to information	Companies in the cluster can faster and at lower cost access the information, while possessing of information implies important competitive advantage.	Number of educated people increases as well as the standard of living.
Reciprocal complementation	Clusters encompass the activities of different companies, which complement each other. While seeking to coordinate the activities and improve (which is possible when companies are located in the proximity), they significantly increase the efficiency and quality of performance. Short distances facilitate the formation of technical connections, constant coordination of works and enable the use of joint marketing. Furthermore, development of different activities of companies in the cluster promotes bigger volumes of sales, because buyers encounter a variety of sources of goods or services in the same place and this also affects the "retaining" of the customers.	Residents can satisfy their different needs in a qualitative manner.
Social benefit (cooperation)	Information existing within the cluster, concentration of technologies and reputation of the region – all this can be treated as the social benefit (benefit of cooperation). Private organizations and investments stimulating the cluster participants (willing to obtain some benefit from it) also contribute to this benefit.	Attracting investments.
Inducement and efficiency measurements	Clusters encourage the companies to increase the performance efficiency: through pressure exerted by equal "external" rivals, competition within the cluster and constructive promotion of cooperation.	Competitive advantage over other regions.

Besides the listed advantages it should be added that companies comprising the cluster can recognize the consumer need changing tendencies faster than individual ones. They also have competitive advantages in the access to the state-of-art technologies, use of modern methods of work and better procurement. A company belonging to the cluster can much faster find a source of components, services, equipment and other elements, necessary for the introduction of innovations, easily find qualified staff that would be able to work with the introduced novelties and experiment until it is finally sure that the introduced novelty will be profitable. Setting up a new business in a cluster will be much less expensive than beyond its boundaries. All this enables the region to become a serious rival in competitive battle.

After examining the benefit of companies' being within the cluster and benefit to the region in which the cluster exists, it is worthwhile to consider why undertakings

choose one or another locality for setting up. The legitimacy of this question is substantiated by M. Porter's (1998) idea that in certain geographic locations the concentration of certain businesses is higher than in others. In these locations, competitive potential appears and deepens; however, it is also characterized by the ability to endure a longer time.

Authors of scientific works explain the choice of locality by unequal distribution of climate, land, water and other natural resources. This is defined as *total or partial immobility of land and other factors of production.* This *immobility* constitutes the main comparative advantage used by different regions to specialize in production and sales.

However, it has to be noted that distribution of economic factors in the territory is determined by distribution of natural resources available as well as by other equally important factors – *territorial concentration or economy of agglomerations* and *transportation costs.*

Goods and services are not totally or instantaneously mobile: transport, communications and time costs sometimes account for a substantial portion of price. These costs limit the freedom of the market, while making use of advantages, granted by the available natural resources and economy of agglomerations.

Barter trade between regions is a good practice, allowing each region to entirely utilize their comparative advantages, to specialize in activities for which they are prepared the best according to available resources.

Regions short of capital in comparison to labour force could specialize in labour-intensive sectors of production, while regions with surplus capital could import capital-intensive products. Such regional cooperation (between specialized regions) could be advantageous to both parties.

Sales promote specialization of the region and thus spread the structural differences in the region. In the meantime, the movement of capital or labour resources weakens one of the bases of specialization, i.e., relative supply of capital and labour, thus impelling the reduction of structural differences in the region.

Immobile resources of the region in production process supplement the capital or labour resources; regional specialization and structural differentiation, based upon them, also entails stronger inter-regional capital and labour resource mobility.

Nowadays business companies, investors and skilled labour force first of all choose such local conditions, which ensure the need for highly specialized skills, selective buyers as well as the already-mentioned clusters. Efforts are made to create as good conditions as possible for modern production and investments thus increasing the regional specialization and preparation of

labour force. "The role previously carried out by amalgamation and planning of production, in knowledge economy is being taken over by clusters. " Access through the Internet: www3.lrs.lt [viewed on 20-02-2009]. As shown by the experience of the USA, these factors will only contribute to further regional specialization – concentration of individual industries in separate regions.

In summary, it could be stated that regions achieve specialization through clusters, because in them companies and organizations specialize in certain fields which express their basic competence and which they have the best knowledge of specialization of companies and organizations and innovative processes make clusters an attractive place for pooling of specialists of the highest competence.

Conclusions

1. In the age of modern technologies and under conditions of knowledge economy, business companies are forced for search for such forms of concentration which would enable them to compete successfully in the global markets. Clusters denote such forms of cooperation offering this opportunity.

2. Cluster refers to a group of companies and institutions, in the proximity of each other geographically, which are linked in a certain field through common technologies and knowledge, usually existing in a defined geographic territory, where communications, logistics and qualified labour force are easily available. Clusters generally concentrate in regions.

3. Based on scientific literature analysis, the following characteristics of clusters could be listed: geographic concentration; being comprised of competitively successful business formations and organizations; involving the sufficient number of companies/organizations to form critical mass; formation of clusters is the result of availability of unique resources in a certain locality; boundaries depend on geographic nature of the cluster, it rarely "fits" into one sector of economy or activity; cluster is a self-organized formation, promoting both competition and cooperation.

4. Regions reach specialization through clusters, because in them companies and organizations specialize in certain fields, which express their basic competence and which they have the best knowledge of. This offers an opportunity to gain special competitive advantage in certain business. Clusters, existing in the region, are, therefore, the source of long-term economic development and prosperity of the region.

References

1. Bagdzevičienė, R. Valstybės ir regionų vaidmuo inovacijų sklaidos procese/ R. Bagdzevičienė, J. Vasiliauskaitė // Viešoji politika ir administravimas. 2002 Nr. 3, p. 36-42.
2. Bathelt H., Dewald U. Relational aspects of regional economic support and cluster policy/ ZEITSCHRIFT FUR WIRTSCHAFTSGEOGRAPHIE,Volume: 52, Issue: 2-3, 2008, p. 163-179
3. Crouch, C. Great Britain: falling through the holes in the network concept. In C. Crouch, P. Le Gales, C. Trogilia, and H. Voelzkow (eds) Local Production System in Europe: Rise or Demise? // Oxford: Oxford University Press, 2001, p. 161-211.
4. Činčikaitė, J., Belazarienė, G. Klasteriai ir regionų konkurencingumas//Regionų plėtra – 2001: tarptautinės mokslinės konferencijos pranešimų medžiaga [Kaunas, 2001 m. gegužės 11 d.]. Kaunas, p. 72-76.

5. Enright, M. Regional Clusters and Economic Development: A research agenda. In U Staber, N. Schaefer and B. Sharma, (eds) Business Networks: Prospects for Regional Development. Berlin: Walter de Gruyter, 1996, p. 190- 213.

6. Feser, E.J. Old and new theories of industry clusters. In M. Steiner (ed.) Clusters and Regional Specialisation: On Geography, Technology and Networks. London: Pion, 1998, p. 18-40.

7. John Caron, H. St. Technology Clusters versus Industry Clusters: Resources, Networks, and Regional Advantages/ Caron H. St. John, Richard W. Pouder // Growth and Change Volume 37. 2006 No. 2, p. 141-171.

8. Jucevičius, R. Klasterių ABC. Kaunas. 2008, p 36.

9. Jucevičius, R. The Concept of an Intelligent Cluster/ R. Jucevičius, G. Jucevičius // Socialiniai mokslai. 2005 Nr. 2, p. 27.

10. Malakauskaitė, A. Klasterizacijos įtaka Lietuvos ūkio konkurencingumo formavimui Europos Sąjungos kontekste. Iš Socialiniai mokslai [interaktyvus]. 2008, vasaris [žiūrėta 2009-02-22]. Prieiga per internetą: <http://www.elibrary.lt/inf_res4.phtml?id=22242>.

11. Maskell, P. What Qualifies as a Cluster Theory?/ P. Maskell, L. Kebir. Copenhagen. 2008, p. 19.

12. Parto, S. Innovation and Economic Activity: An Institutional Analysis of the Role of Clusters in Industrializing Economies // Journal of Economic Issues Volume XLII. 2008 No. 4, p. 1005-1030.

13. Pitelis, C. Co-operation and Clusters of Firms: New Uses of Old Ideas/ C. Pitelis, A. Pseiridis // Socialiniai mokslai. 2005 Nr. 2, p. 13.

14. Porter, M. E. On Competition, Harvard Business School Press. 1998, p. 485.

15. Roelandt, T. Cluster analysis and cluster-based policy making in OECD Countries: an introduction to the theme/ T. Roelandt, P. den Hertog // In Boosting Innovation: The Cluster Approach. Paris: OECD: ch. 1. 1999, p. 9-23.

16. Rosenfeld, S. A. Bringing business clusters into the mainstream of economic development // European Planning Studies, 5(1). 1997, p. 3-23.

17. Simmie, J. Innovation in the London Metropolitan region./ J. Simmie, J. Sennett // In D. Hart, J. Simmie, P. Wood, and J. Sennett (eds) Inovative clusters and competitive cities in the UK and Europe. Working Paper no. 182, Oxford Brookes School of Planning. 1999, p. 51.

18. Swann, G. M. P. A comparison of the dynamics of industrial clustering in computing and biotechnology/ G.M.P. Swann, M. Prevezer // Research Policy, 25. 1996, p. 139-157.

19. Swann, G. M. P. The Dynamics of Industrial Clustering: International Comparisons in Computing and Biotechnology/ G.M.P. Swann, M. Prevezer, D. Stout // Oxford: Oxford University Press. 1998, p. 1.

20. Škiudas, K. Švedija naujame Europos ūkio žemėlapyje // Nepriklausomos SNS ekspertų grupės siūlymai dėl Švedijos ūkio strategijos. 2001. [žiūrėta 2009-02-20]. Prieiga per internetą: <http://www3.lrs.lt/owa-bin/owarepl/inter/owa/U0068849.doc>.

21. Van den Berg, L. Growth clusters in European cities: an integral approach/ L. Van den Berg, E. Braun, W. van Winden // Urban Studies, 38(1). 2001, p. 186-206.

22. Woolthuis, R. Klein. Developing Clusters in the East of England Region: Cluster Development in the Life Sciences and Multi-Media Sectors Situated in the East of England/ R. Klein Woolthuis, P. Boekholt, P. Sowden. EEDA, May 2000.

Birutė Daraškevičiūtė

Klasteriai ir regioninė specializacija

Santrauka

Pasaulyje nė viena šalis negali pasiekti tarptautinio konkurencingumo visose ūkio šakose. Norint, kad tam tikras regionas galėtų orientuotis į pasaulines rinkas, reikia, kad iš kitų jis išsiskirtų konkurenciniais pranašumais.

Pasaulyje yra žinoma, kad bendradarbiavimas tarp įmonių gali pasireikšti įvairiomis formomis, tame tarpe ir klasteriais. Kitaip tariant, kooperavimasis arba klasteriai gali padidinti veiklos produktyvumą bei konkurencingumą regione, sukurti įmonėms bendros veiklos plėtros galimybes.

Šiame darbe remiantis mokslinės literatūros analize atskleidžiamas klasterių vaidmuo regionų specializacijoje, kas įgalina regioną tapti konkurencingu tam tikrame versle.

About the Author

Birutė Daraškevičiūtė, lecturer, PhD Student of Kaunas University of Technology Economics and Management Faculty Department of Economics and International Trade; e-mail birute.daraskeviciute@ktu.lt; 845596257; clusterization, externalities, regional specialization.

THE PROFIT-STRUCTURE RELATIONSHIP IN BANKING INDUSTRY: AN EMPIRICAL ANALYSIS

Vilma Deltuvaitė

Kaunas University of Technology, Lithuania

Abstract

The wave of mergers and acquisitions in banking industry is fuelling an active debate among scientists on the effect of concentration on banking system profitability. The aim of this article is to analyze global trends in banking concentration and profitability and to investigate the existence of a profit-structure relationship in banking industry. The research methods were used in this article: the analysis and synthesis of scientific literature, correlation and regression analysis, statistical methods as well as empirical research of the information on 160 banking systems around the world during period of 1987-2007. An empirical analysis of the relationship between concentration and profitability provides evidence for the existence of a profit-structure relationship in banking industry.

Keywords

Banks, profit-structure relationship, concentration, profitability, market power.

Introduction

The structure of the banking sector has long been an issue of policy interest focused largely around a presumed tendency towards concentration and its effects on bank profitability. As noted Chortareas et al. (2009) serious policy concerns arise regarding the potential collusive behavior between the banks operating in highly concentrated markets and its effects on their conduct and profitability. Collusion activities can generate abnormal bank profits and ultimately burden consumers through higher than competitive loan rates, credit rationing and the downgrading of banking services.

According to Davis (2007) the topic has remained at the forefront of debate in recent years for several reasons. In many national banking markets there has been substantial consolidation, reflecting influences such as new technologies, deregulation, the globalization of the economy, economic integration change. Academic research into the implications for profitability, efficiency and performance of banking system structures has grown markedly, both at the theoretical and empirical level. As noted Davis (2007) and other researchers banks play central role in financial systems. For several decades the boundaries between banks and other parts of financial markets have been blurring as banks have expanded into other activities including in securities markets, funds management and insurance. According to Davis (2007) over the past two decades the dramatic growth in the size of the world's largest banks is observed. This increase in the size of the largest global banks has outstripped the growing importance of the banking sector overall, and suggests increased global concentration in the banking.

Scientific problem of the article. According to Berger (1995), Punt and van Rooij (1999), Casu and Girardone (2006), Claeys and Vennet (2008), De Jonghe and Vander Vennet (2008) the hypotheses explaining a profit-structure relationship in banking can be divided into two categories: the market-power hypotheses and the efficient-structure hypotheses. The market-power hypotheses imply that market power comes first in a timing sense followed by higher profits. The efficient-structure hypotheses imply that higher profits come first in a timing sense followed by increasing concentration.

The market-power hypotheses and the efficient-structure hypotheses have been tested extensively in the banking industry, with most of the research focusing on the USA and the EU. The results appear mixed and there is no conclusive evidence to indicate the superiority of one hypothesis over the other.

Scientific novelty of the article. Most of studies on profit-structure relationship in banking focus only on few countries for several years (Berger (1995), Berger and Hannan (1998), Punt and van Rooij (1999), Abreu and Mendes (2001), Beck et al. (2003), Fernandez de Guevara et al. (2005), Athanasoglou et al. (2006), Chortareas et al. (2009)) and only a few studies consider a large number of countries (Demirgüç-Kunt and Huizinga (1999), Jansen and De Haan (2003), Claeys and Vennet (2008), Gonzalez (2009), Flamini et al. (2009)). In this article was investigated the relationship between market structure and bank profitability in global context. This study focuses on a sample of approximately 160 countries over the period of 1987-2007. Relevant research testing the profit-structure hypotheses has typically examined the developed countries' banking markets (mainly USA and EU) while evidence for large number of countries is scarce. Some recent studies exist focusing on large number of countries (e.g. Demirgüç-Kunt and Huizinga (1999), Jansen and De Haan (2003), Claeys and Vennet (2008), Gonzalez (2009), Flamini et al. (2009)) but no comprehensive analysis of the above issues in the global context is available to my knowledge.

The aim of the article: to review literature on profit-structure relationship in banking and to test the existence of the profit-structure relationship in 160 countries during period of 1987-2007.

The research object: profit-structure relationship in banking.

The research methods: the analysis and synthesis of scientific literature, logic analysis and synthesis, statistical methods (correlation analysis, regression analysis, descriptive statistic).

The profit-structure relationship in banking industry: review of literature

According to Berger (1995), Punt and van Rooij (1999), Casu and Girardone (2006), Claeys and Vennet (2008),

De Jonghe and Vander Vennet (2008) the hypotheses explaining a profit-structure relationship in banking can be divided into two categories: *the market-power hypotheses (MP)* and *the efficient-structure hypotheses (ES)*.

Market-power hypotheses state that market power is the main variable that has influence on bank's profitability. According to Punt and van Rooij (1999) in more concentrated markets, market imperfections are present. Because of these imperfections, banks' do not operate under the perfect competition conditions and that enables them to exert influence on prices charged and/or paid. Through price setting banks can achieve higher profits at the expense of their customers. Punt and van Rooij (1999) distinguish two main types of market-power hypotheses: *the structure-conduct-performance (SCP) hypothesis* and *the relative-market-power (RMP) hypothesis*. *SCP hypothesis* states that the positive relationship between profit and market structure reflects non-competitive pricing behavior in more concentrated markets. Through market-wide price setting, each individual bank is able to realize higher profits. *RMP hypothesis* states that only banks with large market shares, irrespective of market concentration, are able to exercise market power and earn abnormal profits. In this case there is no market-wide price setting, but only price setting by dominant banks with large market shares. Banks with smaller market shares are forced to operate as if under perfect competition conditions and are unable to earn the same supernormal profits. The difference between two main types of market-power hypotheses revolves around whether market power proves generic to a market or specific to individual banks within a market. Punt and van Rooij (1999) distinguish a third additional hypothesis, which is mainly used to explain the possible absence of a significant profit-structure relationship, is the so-termed *quiet life (QL) hypothesis*. Some researchers consider *QL hypothesis* as a special case of the market-power hypotheses. The reasoning of this theory is that as banks' have more market power the management is less focused on efficiency, since setting prices can increase revenues. *QL hypothesis* states that banks do increase revenues as a result of increased market power, but because of higher inefficiencies this does not lead to higher profitability.

According to Punt and van Rooij (1999) *the efficient-structure (ES) hypotheses* explain the positive relationship between profitability and either concentration or market share with reference to efficiency measures. Efficiency of individual banks causes high profits and a high market share. *The ES hypotheses* state that more efficient banks' will be capable of expanding their market share and will have higher profitability. *The ES hypotheses* can be divided into *the efficient-structure-X-efficiency (ESX)* and *efficient-structure-scale efficiency (ESS) hypotheses*. *ESX hypothesis* states that banks with superior management or production technologies have lower marginal costs and subsequently can offer more competitive interest rates on loans and/or deposits. Since these banks are also assumed to gain larger market shares, the market may become more concentrated as a result of competition. *The ESS hypothesis* assumes that some banks operate at a more efficient scale than others.

These banks may experience cost and/or revenue advantages, leading to lower unit costs and higher profits. Again, these banks are assumed to increase their market share, which would lead to higher market concentration.

The hypotheses explaining a profit-structure relationship have been tested extensively in the banking industry, with most of the research (Clark (1986), Bourke (1989), Goldberg and Rai (1996), Valverde and Fernández (2007), Lakstutiene (2008), Tregenna (2009), Hannan and Prager (2009), Coccorese (2009)), focusing on the USA and the EU. The results appear mixed because all profit-structure relationship hypotheses were confirmed at least once and there is no conclusive evidence to indicate the superiority of one hypothesis over the other. Thus, it is impossible to accept one hypothesis as the dominant explanation of the profit-structure relationship in banking.

The profit-structure relationship in banking industry: research methodology and empirical results

This section provides an empirical evaluation of the existence of a profit-structure relationship in 160 banking systems around the world. The existence of a profit-structure relationship in banking is investigated using correlation and regression analyses. In this study only SCP hypothesis will be tested because there is impossible to test others profit-structure hypotheses using these data.

Research methodology. The research of a profit-structure relationship in banking around the world was organized as following:

Stage 1. In the first stage global trends in banking concentration and profitability were analyzed.

Stage 2. In the second stage the existence of the profit-structure relationship using correlation analysis was testing.

Stage 3. In the third stage the existence of the profit-structure relationship using regression analysis was testing.

In order to test empirically the SCP hypothesis were used the following equations:

$$ROA_{it} = \alpha_i + \beta_1 CR_3 + \sum_{n=1}^{3} \delta_n Z_{n,t} + \varepsilon_{it}, \qquad (1)$$

where:

ROA_{it} – a profitability ratio calculated as net income over total assets (average across all banks of a country for a given year);

CR_3 – the ratio of three largest banks' assets to total banking sector assets;

$Z_{n,t}$ – a vector of country-specific macroeconomic variables;

ε_{it} – standard error;

α_i, β_1, δ_n – regression coefficients.

$$ROE_{it} = \alpha_i + \beta_1 CR_3 + \sum_{n=1}^{3} \delta_n Z_{n,t} + \varepsilon_{it}, \qquad (2)$$

where:

ROE_{it} – a profitability ratio calculated as net income over total equity (average across all banks of a country for a given year).

In addition the vector of the macroeconomics variables was specified as:

$$\sum_{n=1}^{3} \delta_n Z_{n,t} = \delta_1 GDP_t + \delta_2 EDEV_t + \delta_3 INFL_t, \quad (3)$$

where:

GDP_t – GDP (gross domestic product) growth, %;

$EDEV_t$ – economic development level (GNI (gross national income) per capita, Atlas method (current US$));

$INFL_t$ – inflation, %.

Data. The data used for this study relate to information from World Bank Financial Structure Dataset and World Development Indicators (WDI) Database. The sample contains annual data of commercial banks in 160 countries for the period 1987-2007. The total number of observations equals 2240, with a minimum of 3 countries in 1987 and a maximum of 160 countries in 2005. Measures of banks' profitability (ROA and ROE) are calculated as unweighted averages across all banks of a country for a given year.

Empirical results. The results of research on a profit-structure relationship in banking are presented below.

Stage 1. In the first stage global trends in banking concentration and profitability were analyzed. The results of this analysis are presented in table 1.

Banking sector concentration ratio (CR$_3$) has shown a decreasing trend over time but in general concentration level is sill very high (the ratio of three largest banks' assets to total banking sector assets is more than 71 percent in 2007). The changes in banking sector concentration during analyzed period vary from country to country. During period of 1997-2007 concentration level had decreased most of all in these countries: Moldova (-46 p.p.), Armenia (-46 p.p.), Nepal (-40 p.p.),

Bulgaria (-38 p.p.) and Russian Federation (-37 p.p.) but in some countries concentration level had increased significantly: Panama (+45 p.p.), Portugal (+43 p.p.), Guatemala (+36 p.p.), Hong Kong (+35 p.p.) and Belgium (+33 p.p.). The rising concentration level in these countries could be explained by significant banks mergers and acquisitions during analyzed period however, decreasing level of concentration is a consequence of rising competition level, new foreign banks entries, etc. High coefficient of variation indicates that concentration level in different countries various. In 2007 the lowest concentration level was observed in Russian Federation (16.07 percent) and Luxembourg (27.29 percent), the highest – in Namibia, Swaziland and other 9 countries (100 percent).

The results of this research show that there is no clear correlation between concentration and income level of countries. The median country in upper-middle income category has the lowest concentration ratio while the median country in the low-income category has the highest ratio. In all countries classified by income level concentration decreased during analyzed period (more significant fall is observed in low income countries). The highest concentration level is observed in Sub-Saharan Africa and lowest – in North America.

The results of this study show that in most countries (126 countries) concentration in banking system is very high (more than 60 percent). Even in 33 countries the concentration level (CR$_3$) ranges from 90 to 100 percent. Only in 2 countries (Luxembourg and USA) the concentration level is below 30 percent.

Table 1

Descriptive statistics for banking concentration and profitability measures during period of 1987-2007

Year	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Concentration Ratio (CR$_3$)																					
Mean	95	85	84	82	84	76	75	71	70	70	70	70	69	71	71	70	70	70	69	69	71
Median	96	90	86	85	86	79	78	73	73	74	73	72	70	72	72	73	72	72	69	69	75
Minimum	89	54	51	40	36	26	21	21	20	20	20	22	21	21	23	23	15	22	18	19	16
Maximum	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Std. Deviation	6	16	15	17	16	20	21	22	22	22	22	21	21	21	20	20	19	20	20	20	20
Var. Coefficient	6	19	18	21	19	27	29	31	31	31	31	31	30	29	28	28	27	28	28	29	28
ROA																					
Mean	0.3	0.7	1.2	1.0	1.0	1.0	1.3	1.3	1.4	1.7	1.5	1.1	1.2	1.1	1.2	0.9	1.1	1.4	1.5	1.6	1.6
Median	0.2	0.6	0.7	0.8	0.7	0.9	1.2	1.2	1.3	1.3	1.2	1.2	1.1	1.1	1.0	0.9	1.1	1.2	1.4	1.4	1.4
Minimum	0.1	0.2	-1	-4	-1	-5	-5	-10	-7	-3	-5	-14	-8	-19	-19	-15	-43	-29	-23	-3	-6
Maximum	0.7	2.2	9.9	4.3	5.7	7.5	9.1	1.5	7.7	10	11	7.5	10	11	11	8.6	14	16	13	15	14
Std. Deviation	0.3	0.5	1.9	1.5	1.4	1.5	2	2.2	1.7	1.8	2	2.6	2.1	2.5	2.6	3	4.4	3.2	2.7	1.7	1.8
Var. Coefficient	96	68	161	143	135	144	154	171	128	107	132	244	177	226	215	333	387	237	181	104	112
ROE																					
Mean	6.2	10	8	7.2	3.9	14	13	17	18	14	13	11	10	13	12	12	13	14	14	15	15
Median	6.4	8.7	10	8.4	7.3	11	13	14	13	13	12	12	11	11	10	10	11	12	14	14	16
Minimum	2.4	-15	-91	-61	-106	-24	-184	-70	-17	-139	-92	-144	-78	-66	-48	-36	-44	-94	-53	-31	-28
Maximum	10	28	34	31	31	115	198	282	136	76	166	61	96	118	71	119	119	111	101	82	49
Std. Deviation	3.8	8.3	21	19	22	19	37	33	22	20	23	25	19	18	15	18	15	17	14	12	11
Var. Coefficient	61	82	260	269	551	142	280	200	117	141	175	235	187	140	124	143	119	122	0	75	71
Observations	3	23	29	32	43	81	101	107	116	126	134	133	135	146	141	144	148	153	160	153	137

Note: all variables presented in this table are expressed in percent.
Source: author's calculation, data source – World Bank (2009a).

There has been little variation in ROA over time, with no clear trend (ranging from 0.3 percent in 1987 to 1.6 percent in 2007). ROE shows quite some variation over time, declining from 10.2 percent in 1988 to 3.9 percent in 1991 and rising again to 18.4 in 1995. During period of 1995-1999 ROE declines to 10.2 percent and then increased to 15.1 percent in 2007. Very high coefficient of variation indicates that profitability level in different countries various very strong. In 2007 the lowest profitability level was observed in Côte d'Ivoire (ROE - 28.26 percent and ROA -3.18 percent), Senegal (ROE - 17.66 percent and ROA -1.77 percent) and Mexico (ROE -6.95 percent and ROA -5.95 percent), the highest – in Malawi (ROE +41.12 percent and ROA +6.43 percent), Namibia (ROE +31.38 percent and ROA +14.14 percent) and Uganda (ROE +32.46 percent and ROA +3.86 percent).

The highest ROA level is observed in low income countries and the lowest – in lower middle income countries. In middle income countries ROA decreased while in high and low income countries this ratio increased. The highest ROA level is observed in Sub-Saharan Africa and lowest – in North America and East Asia and Pacific. While banks in the median country in high and middle-income country have a ROE around 15 percent with little variation between high, upper-middle, and lower-middle income countries, the median ROE was over 20 percent in low-income countries. The highest ROE level is observed in Sub-Saharan Africa and lowest – in North America. In all countries ROE has shown a decreasing trend (except high income countries, Middle East, North and Sub-Saharan Africa, North America).

The frequency distribution of ROA shows that in most countries (117 countries) ROA ranges between zero and +2.5 percent. Only in 13 countries (Ecuador, Lao PDR, Nicaragua, Afghanistan etc.), ROA level is below zero. In most countries (123 countries) ROE ranges between zero and 20 percent. Only in 3 countries (Papua New Guinea, New Zealand and Zimbabwe) ROE level is above 40 percent.

The analysis of descriptive statistics shows a very small difference between mean and median values of concentration and profitability measures that indicates that there are no exceptions in this sample. The coefficient of variation is useful because the standard deviation of data must always be understood in the context of the mean of the data. When comparing between data sets with different units or widely different means, one should use the coefficient of variation for comparison instead of the standard deviation. The ROA and ROE coefficients of variation are higher than others because of very large range. The coefficient of variation of CR_3 is lowest in comparison to other coefficients of variation.

Stage 2. In the second stage the existence of the profit-structure relationship using correlation analysis was testing.

The empirical results of the profit-structure relationship using correlation analysis are presented in table 2.

The empirical results of the profit-structure relationship in banking using correlation analysis

Ratio	Correlation coefficients	CR_3	ROA	ROE
CR_3	Pearson correlation coefficient	1.0000		
	Spearman rank correlation coefficient	1.0000		
ROA	Pearson correlation coefficient	0.1515	1.0000	
	Spearman rank correlation coefficient	0.1504	1.0000	
ROE	Pearson correlation coefficient	0.1056	0.3436	1.0000
	Spearman rank correlation coefficient	0.1430	0.6860	1.0000

Note: in all cases p-value is significant at zero percent level, number of observations 2240.
Source: author's calculation, data source – World Bank (2009a).

The correlations documented in table 2 suggest that the profit-structure relationship exists in banking sector. All profitability ratios have the right sign and are significant at the zero percent level. The two measures of profitability do show some differences in results. ROA seems to be more strongly correlated with the concentration measure (CR_3) than ROE. This suggests that return on assets is clearly positively related to the level of market concentration. The significant positive correlation between market structure and profitability has been found and the existence of the profit-structure relationship in banking has been confirmed. Although the profit-structure relationship in banking is significant but very weak SCP hypothesis can be confirmed.

Stage 3. In the third stage the existence of the profit-structure relationship using regression analysis was testing.

To check the results based on bilateral correlations, simple and multiple regressions are run. A regression analyses is more advanced than a correlation analysis because it may provide insights into the relation underlying the co-movement of variables. The functional specification of the multiple regressions is given by equations (1, 2 and 3). To accept the SCP hypothesis and confirm the existence of the profit-structure relationship in banking β_1 has to be significantly positive. The multiple regression analysis uses ROA and ROE as dependent variables and market concentration ratio as independent variable. By including the annual growth of GDP, a correction is made for the cyclical stance in each country. Besides country's economic development level and inflation rate are also taken into account.

The results of the profit-structure relationship using simple regression are presented in table 3.

The estimated linear, logarithmic and hyperbolic relations indicate that over the whole period, ROE and ROA are positively related to market concentration (except hyperbolic function).

Table 3

The empirical results of the profit-structure relationship in banking using simple regression

Independent variable – CR_3	Dependent variable					
	ROA			ROE		
Function classes	Equation	R	R²	Equation	R	
Linear	ROA = -0.0001 + 0.0184 • CR_3	0.1515	0.0230	ROE = 0.0581 + 0.1038 • CR_3	0.1056	.0111
Logarithmic	ROA = 0.0171 + 0.0105 • ln(CR_3)	0.1425	0.0203	ROE = 0.1557 + 0.0607 • ln(CR_3)	0.1015	.0103
Hyperbolic	ROA = 0.0202 - 0.0046/CR_3	0.1221	0.0149	ROE = 0.1756 - 0.0276/CR_3	0.0899	.0081
Observations	2240			2240		

Source: author's calculation, data source – World Bank (2009a).

Positive relationship between ROE and market concentration is stronger than relationship between ROA and concentration. An interesting aspect of these estimates is the low value of the R². Although concentration ratio is significant a larger part of the return fluctuations remains unexplained.

The empirical results of the profit-structure relationship using multiple regressions are presented in table 4.

The estimated linear relations indicate that over the whole period, return on equity and return on assets are positively related to the concentration ratio (CR_3). Positive relationship between ROE and market concentration is stronger than relationship between ROA and concentration. The low value of the R² indicates that a larger part of the return fluctuations remains unexplained. However, in multiple regressions the value of the R² is higher than in case of simple regression.

The correlation and regression analyses show that the existence of the profit-structure relationship in banking sector around the world is supported strongly for return on equity and concentration relationship. The existence of a profit-structure relationship based on return on assets is less clear. The empirical results allow confirm SCP hypothesis.

Table 4

The empirical results of the profit-structure relationship in banking using multiple regression

Independent variables	Dependent variable							
	ROA				ROE			
	Coefficient	Std. Error	t-statistics	p-value	Coefficient	Std. Error	t-statistics	p-value
Country-specific variables:								
Concentration (CR_3)	0.0160	0.0027	5.9350	0.0000	0.0779	0.0221	3.5257	0.0004
Macroeconomic variables:								
GDP growth, %	0.0002	0.0001	1.7419	0.0817	0.0009	0.0010	0.9263	0.3544
Economic development level	0.0000	0.0000	-2.1918	0.0285	0.0000	0.0000	-3.8935	0.0001
Inflation, %	0.0000	0.0000	7.5059	0.0000	0.0003	0.0000	8.4412	0.0000
Constant	0.0007	0.0022	0.3105	0.7562	0.0796	0.0177	4.5021	0.0000
No. of observations	2060				2060			
R	0.2248				0.2288			
R²	0.0505				0.0523			
Std. Error	0.0248				0.2035			

Note: Economic development level – GNI (gross national income) per capita, Atlas method (current US$))
Source: author's calculation, data source – World Bank (2009a, 2009b).

Conclusions

1. According to Berger (1995), Punt and van Rooij (1999), Casu and Girardone (2006), Claeys and Vennet (2008), De Jonghe and Vander Vennet (2008) the hypotheses explaining a profit-structure relationship in banking can be divided into two categories: the market-power hypotheses and the efficient-structure hypotheses. The market-power hypotheses imply that market power comes first in a timing sense followed by higher profits. The efficient-structure hypotheses imply that higher profits come first in a timing sense followed by increasing concentration. The market-power hypotheses and the efficient-structure hypotheses have been tested extensively in the banking industry, with most of the research focusing on the USA and the EU. The results appear mixed and there is no conclusive evidence to indicate the superiority of one hypothesis over the other.

2. The significant positive correlation between market concentration and profitability has been found and the existence of the profit-structure relationship in banking has been confirmed. The estimated linear, logarithmic and hyperbolic relations indicate that over the whole period, ROE and ROA are positively related to market concentration (except hyperbolic function). Positive relationship between ROE and market concentration is stronger than relationship between ROA and concentration. An interesting aspect of these estimates is the low value of the R². Although concentration ratio is significant a larger part of the return fluctuations remains unexplained.

3. The estimated linear relations indicate that over the whole period, return on equity and return on assets are positively related to the concentration ratio (CR_3). Positive relationship between ROE and market concentration is stronger than relationship between ROA and concentration. The low value of the R² indicates that

a larger part of the return fluctuations remains unexplained. However, in multiple regressions the value of the R² is higher than in case of simple regression.

4. The correlation and regression analyses show that the existence of the profit-structure relationship in banking sector around the world is supported strongly for ROE and concentration relationship. The existence of a profit-structure relationship based on ROA is less clear. The empirical results allow confirming SCP hypothesis.

References

1. Abreu, M., Mendes, V. (2001). Commercial Bank Interest Margins and Profitability: Evidence from Some EU Countries. In: Paper presented at the Proceedings of the Pan-European Conference Jointly Organized by the IEFS-UK & University of Macedonia Economic & Social Sciences, Thessaloniki, Greece, May 17–20, 2001.
2. Athanasoglou, P., Delis, M., Staikouras, Ch. (2006). Determinants of Bank Profitability in the South Eastern European Region. MPRA Paper 10274, University Library of Munich, Germany.
3. Beck, T., Demirgüç-Kunt, A., Levine, R. (2003). Bank Concentration and Crises. National Bureau of Economic Research, Working Paper No. 9921.
4. Berger, A.N. (1995). The Profit-Structure Relationship in Banking – Tests of Market-Power and Efficient-Structure Hypotheses. Journal of Money, Credit and Banking, Vol. 27, p. 404–431.
5. Berger, A.N., Hannan, T.H. (1998). The Efficiency Cost of Market Power in the Banking Industry: A Test of the 'Quiet Life' and Related Hypotheses. Review of Economics and Statistics, Vol. 80, p. 454–465.
6. Bourke, Ph. (1989). Concentration and Other Determinants of Bank Profitability in Europe, North America and Australia. Journal of Banking & Finance, 1989, Vol. 13, Issue 1, p.65-79.
7. Casu, B., Girardone, C. (2006). Bank Competition, Concentration and Efficiency in the Single European Market. The Manchester School, Vol. 74, No. 4, July 2006, p. 441-468.
8. Chortareas, G.E., Garza-Garcia, J.G., Girardone, C. (2009). Banking Sector Performance in Latin America: Market Power versus Efficiency. University of the West of England, Department of Economics, Discussion Papers No. 0905.
9. Claeys, S., Vennet, R.V. (2008). Determinants of Bank Interest Margins in Central and Eastern Europe: A Comparison with the West. Economic Systems, Vol. 32, Issue 2, June 2008, p. 197-216.
10. Clark, J.A. (1986). Single-Equation, Multiple-Regression Methodology: Is It an Appropriate Methodology for the Estimation of the Structure-Performance Relationship in Banking? Journal of Monetary Economics, Vol. 18 Issue 3, p. 295-312.
11. Coccorese, P. (2009). Market Power in Local Banking Monopolies. Journal of Banking & Finance, Vol. 33, Issue 7, July 2009, p. 1196-1210.
12. Davis, K. (2007). Banking Concentration, Financial Stability and Public Policy. Reserve Bank of Australia, RBA Annual Conference Volume, No. 2007-16.
13. De Jonghe, O., Vander Vennet, R. (2008). Competition versus Efficiency: What Drives Franchise Values in European Banking? Journal of Banking & Finance, Vol. 32, p. 1820–1835.
14. Demirgüç-Kunt, A., Huizinga, H. (1999). Determinants of Commercial Bank Interest Margins and Profitability: Some International Evidence. World Bank Economic Review, Oxford University Press, Vol. 13(2), pages 379-408, May.
15. Fernandez de Guevara, J., Maudos, J., Perez, F. (2005). Market Power in European Banking Sector. Journal of Financial Services Research, Vol. 27, No. 2, pp. 109-137.
16. Flamini, V., McDonald, C.A., Schumacher, L. (2009). The Determinants of Commercial Bank Profitability in Sub-Saharan Africa. IMF Working Papers 09/15, International Monetary Fund.
17. Goldberg, L.G., Rai, A. (1996). The Structure-Performance Relationship for European Banking. Journal of Banking & Finance, May96, Vol. 20, Issue 4, p. 745-771.
18. Gonzalez, F. (2009). Determinants of Bank-Market Structure: Efficiency and Political Economy Variables. Journal of Money, Credit and Banking, Vol. 41, No. 4, June 2009, pp. 735-754(20).
19. Hannan, T.H., Prager, R.A. (2009). The Profitability of Small Single-Market Banks in an Era of Multi-Market Banking. Journal of Banking & Finance, Feb2009, Vol. 33, Issue 2, p. 263-271.
20. Jansen, D.J., De Haan, J. (2003). Increasing Concentration in European Banking: A Macro-level Analysis. De Nederlandsche Bank Research Memorandum Paper No. 743, September 2003.
21. Lakstutiene, A. (2008). Correlation of the Indicators of the Financial System and Gross Domestic Product in European Union Countries. Inzinerine Ekonomika-Engineering Economics(3), pp. 7-18.
22. Punt, L.W., van Rooij, M.C.J. (1999). The Profit-Structure Relationship, Efficiency and Mergers in the European Banking Industry: An Empirical Assessment. Netherlands Central Bank, Research Memorandum WO&E No. 604, December 1999.
23. Tregenna, F. (2009). The Fat Years: The Structure and Profitability of the US Banking Sector in the Pre-Crisis Period. Cambridge Journal of Economics, Vol 33 Issue 4, p. 609-632.
24. Valverde, S.C., Fernández, F.R. (2007). The Determinants of Bank Margins in European Banking. Journal of Banking & Finance, Vol. 31, Issue 7, July 2007, p. 2043-2063.
25. World Bank (2009a). Financial Structure Dataset. World Bank, Washington, USA.
26. World Bank (2009b). World Development Indicators (WDI) database. World Bank, Washington, USA.

Vilma Deltuvaitė

Pelno-struktūros tarpusavio ryšiai bankininkystėje: empirinis tyrimas

Santrauka

Pasauliniu mastu vykstantys spartūs bankų susijungimų ir įsigijimų procesai paskatino aktyvias mokslines diskusijas dėl koncentracijos įtakos bankų sistemos pelningumui. Šio straipsnio tikslas – išanalizuoti bankų sektoriaus koncentracijos ir pelningumo tendencijas globaliame kontekste ir ištirti pelno-struktūros tarpusavio priklausomybę bankininkystėje. Rengiant šį straipsnį buvo naudojami tokie tyrimo metodai: mokslinės literatūros analizė ir sintezė, koreliacinė ir regresinė analizė, statistinių duomenų analizė bei atliekami ekonominiai empiriniai tyrimai, analizuojant ir apibendrinant 160 šalių bankų sistemų duomenis 1987-2007 m. laikotarpiu. Apibendrinant atliktų empirinių tyrimų rezultatus galima daryti tokias išvadas: koncentracijos ir pelningumo tarpusavio priklausomybės tyrimas patvirtino pelno-struktūros priklausomybės egzistavimą bankininkystėje.

About the author

Vilma Deltuvaitė. Master degree of Management and Business Administration, Lecturer at the Department of Finance, Faculty of Economics and Management, Kaunas University of Technology. Address: Laisvės av. 55-409, LT-44309 Kaunas. Ph. (8-37) 30-05-61, e-mail: vilma.deltuvaite@ktu.lt. Scientific interests: systemic risk management in banking, financial stability in banking, concentration and consolidation processes in banking industry, banks' efficiency.

THE IMPACT OF INNOVATIONS ON QUALITY OF LIFE: A THEORETICAL ASPECT

Rasa Glinskienė[1], Ieva Adomėnienė[2], Sören Andersson[3], Dalia Susnienė[4]

[1, 2, 4]Kaunas University of Technology, Lithuania, [3]Insurance company „Folksam", Sweden

Abstract

One of factors determining the fullness of an individual's life is innovation – an essential condition in the social and economical development and increase in living standard. With the help of innovations an individual is encouraged to improve all aspects of his/her social life related to the increase of quality of life which is directly affected by practical application of innovative activities. Bearing in mind the *life standard evaluation indicators* and the *main features of innovations* distinguished in research literature, the article aims at determining what sort of influence to the quality of life is made by innovations.

Keywords

Quality of life, innovations.

Introduction

An ever changing social, economical, cultural, political and environment (both on the micro-level (a separate individual's) and macro-level (all the society's) situation gains an increasing significance in solving the majority of issues taking place in the society in order to find out their origins, looking for means and opportunities in establishing conditions to ensure the minimum quality of life (mainly related to fulfilling the individual's main (physiological) needs), but which would also encourage seeking for higher quality of life in ensuring the well-being for each member of the society.

In contemporary world forecasting events is becoming an especially complicated process. Emerging revolutionary technologies, new products, unpredictable needs of consumers, and new ways of funding encourages the whole society to look for new ways to ensure their own successful activities in improving all spheres of their social life, with the increase of quality of life, which is in its turn directly affected by the possibility of the innovation activity practical application. Therefore, a question arises: *how do innovations may positively influence the quality of life?*

The issues of innovative activities have been analyzed by the whole range of foreign as well as Lithuanian researchers (A. Jurkauskas, 2007, B. Martinkus, S. Žiukienė, 2006, J. A. Staškevičius, 2004, A. Jakubavičius, 2005, B. Melnikas, 2000, W. R. Maclarin, 1953, J. R. Bright, 1953, C. Margerison, K. Elliot, 1978, F. S. Butkus, 1996 et al.). In their research they emphasized the benefits of implementing the elements of innovative activities. The quality of life evaluation issues have also been analyzed by numerous researchers (E. Vilkas, 2006, V. Milaševičiūtė, V. Pukelienė, 2006, P. Juškevičius, 2005, T. Fahley, B. Nolan, C. T. Whelan, 2003, F. M. Andrews, A. C. McKennel, 1980 ir kt.), who revealed the expressions of the quality of life and its evaluation aspects. There is little research in literature in which the influence of innovations on the quality of life is analyzed, therefore the article deals with innovations in a new aspect – that of influence on life quality. This article intends to solve a scientific problem that could be formulated in the

following questions: *can innovations influence the quality life? Is it possible to improve people's quality of life?*
The object of the article: innovations and their influence on the quality of life.
The article aims at carrying out the study of innovation influence on the quality of life.

The concept of the quality life evaluation

Quality of life with its dynamic nature often confronts with everything that is old and destroys the established norms and traditions, is becoming more and more relevant. Recently, in its broader meaning, the **quality of life** is understood as a political and economical ideal, with its created means not only ensuring the fulfilment of the basic needs, but also the desired well-being: economic prosperity, social security, adequate health care and maintenance of the natural environment. (Fahey, Nolan, Whelan, 2003).
P. Fayers ir D. Machin (2000) state that the **quality of life** is an individual's perception of his/her position in a society he/she resides. A. Jurkauskas (2006) interprets the **quality of life** twofold: it is how an individual perceives his/her quality of life or how he/she is happy with the quality of life and how the society appreciates its member's quality of life or how he/she is useful to the society. In other words the quality of life is a whole of the most essential factors determining the subjective opinion of most individuals regarding what good life. According to the authors' opinion it is the most generic and detailed definition of the quality of life fusing all the abovementioned definitions.
Three main characteristics relate to the quality of life concept:

1. The evaluation of the quality of life is subjective and inseparable from a definite individual, society of a country he/she resides in;

2. The concept of the quality of life is multiple, requiring both the qualitative and quantitative evaluation;

3. Only an integrated and compound index, rather than a multitude separate indicators may decently evaluate the quality of life. (Milaševičiūtė, Pukelienė, Vilkas, 2006).

It is getting clearer that a different presentation of the concepts of the quality of life reveals new features of the quality of life and presents new meanings, therefore a question arises – how could we measure the quality of life, as each individual is either happy or unhappy with his/her life due to his/her personal constitution. Only few could be satisfied with the quality of life living in poverty, normal individuals need at least the minimum material wealth which seems to be different to different individuals. Material wealth does not make a person happy: money isn't everything. An individual finds life better if he/she is able to solve the problems that arise. The thinks that contribute to satisfying individuals' needs are not difficult to name. The confusion appears when the needs and attitudes depend on the country's level of development and history, also due to the fact that "the positive factors" are numerous. To measure the quality of life the most important and universal factors are selected. The well-known human development is made up of only three indicators: life expectancy, education and GDP per capita.

The human development index was designed based on the presumption that the quality of life is determined by not only living conditions but the individual's attitude to them (The Economist Intelligence Unit, 2005). Most attention is paid to the evaluations of people's life and its various qualities – health, successful employment, environment, leisure, etc.

Analysing the aspects of the quality of life evaluation it appears that nine indicators are used to define a country's quality of life: GDP per capita in USD, life expectancy in years, the level of political stability and security, the number of divorces per 1,000 of population, church attendance, the average annual air temperature, unemployment level in percent, the average index of political and civil rights, and the ratio male/female average work pay. Based on these indicators the quality of life is defined in all countries.

The indicators presented demonstrate that such an evaluation of the quality of life is more comprehensive and allows perceiving the quality of life in a broader sense.

The expression and relevance of innovative activities

In order to know innovations, the majority of researchers (Strazdas, Jakubavičius, Gečas, 2003; Melnikas, Jakubavičius, Strazdas, 2000 et al.) suggest relating it to the concept of activity. The authors state that an activity is a specific form of people's active attitude to the reality, characterized by the expediency, single-mindedness and attitudes to reform, as each activity has its own objective, is characterized by its means and results and describes the action process. Therefore, an innovative activity is interpreted as a purposeful formation of innovations and implementation.

Analyzing the interpretation on innovation concept and definition P. Kulviecas (1991) names innovations as a complex creation, development, general spread and the efficient application of novelties in different spheres of life. The author suggests the innovation evaluation in two aspects:

- As a phenomenon (an innovation is any purposeful change aiming at changing the object in question by improving it).
- As a process (having in mind the fact that a process is an activity, and an innovative activity is the one that aims at applying the results or scientific research and inventions in order to develop and renovate the range of goods and services, to improve technologies and their further implementation in home and foreign markets.

V. Paškevičius (2001) notes that innovation is not only researchers', industrialists' or entrepreneurs' interest, it is a diverse process employing different enterprises (government: government institutions, business partners, suppliers, clients, consultancies, service providers implementing innovations: agencies for economical development, business associations, research institutions, financial institutions, etc.). Therefore, it is essential to name innovations in the assimilation context as a process of progress, in which enterprises and their partners purposefully co-operate.

Research and development, as a source of acquiring fresh knowledge is an inseparable part of the innovation process. Innovation activity is treated as an important factor of scientific and technical progress, as well as a factor social, economical and technological modernization, closely related to the individual's abilities to improve all the areas of social life.

The variety of innovations encourages grouping them according to certain features, formulating a universal innovation classification model, pointing out all possible groups of classification.

Researchers K.Ališauskas, H. Karpavičius, J. Šeputienė (2005) name the **content of innovation** as the main classification feature:

The product. A new product is developed, manufactured, or an existing one is improved. The idea behind such innovations is the development, manufacturing and consumption of new final products (capital goods, material or intellectual products, etc.) Social. The development and implementation of new and improved economical, management, organizational, etc. structures and forms.

Complex: the idea behind such innovations is a synthesized complex of products and technological and social innovations.

The analysis of research literature (Jukubavičius et al., 2003; Melnikas et al., 2000; Strazdas et al., 2003; Martinkus et al., 2002) demonstrated **in terms of innovation implementation level the classification is**: a human, an enterprise or institution type of organization, an industry or another type of organization noted for some kind of activity; a society and state; an ecosystem; the entire world;

Classification in terms of innovation implementation scope:

- Single; the idea behind such innovations is that they are implemented only once;
- Multiple; such innovations are implemented several and more times (Strazdas ir kt., 2003).

A very important innovation classification is according to the level of their novelty. S. Valentinavičius (1997) presents a distribution of innovations into three groups

according to the "level of novelty" (updated by Y. Bareyre (1975)):

1. Absolute, radical innovations, when the break-up is carried out deliberately; the product is completely new, never existed before or the existing product is used in a new way;

2. Innovations which are somewhat related to the existing products and are to some extent improved.

3. An imitation of the innovations of the first group or their "diffusion in different markets" (Valentinavičius, 1997, 19 p.).

The diffusion of innovations is related to the fact that novelties tend to spread over different markets through mass media, promotion, members of society (Snitka, 2002).

Classification of innovations in terms of **organizational characteristics:**

- Internal organizational. The meaning of such innovations is that the process of implementation (creation, development, implementation) is carried out in one organization only;

- interorganizational. The meaning of such innovations is that the separate parts of implementation are distributed among various organizations, e.g. research institutes, R&D firms, enterprises, etc. (Jakubavičius et al., 2003).

B. Melnikas et al. (2000) differentiate these innovations **in terms of their nature**:

- quantitative: the idea behind such innovations is the increase of productivity, scopes of manufacturing in quantitative aspects;

- qualitative, i.e. the quality improvement of manufacturing, management, etc.

The analysis of research literature (Jukubavičius et al., 2003; Strazdas et al., 2003; Martinkus et al., 2002) demonstrated that the innovation classification **in terms of the end result** is:

Fundamental: the meaning of its end result being a scientific theory presented in a written form. The organization and management of this innovation activity is well advanced and drawn apart from other innovations;

Experimental: the meaning of its end result being a sample of an experimental product (a technique, a technological line, etc.);

Basic: the meaning of its end result being the application of the experimental product in mass production in a definite organization for the first time;

Diffusion: the meaning of its end result being that the production of an existing product is applied in a definite enterprise, in a definite area characterized by its specific characteristics;

Conditional: the meaning of its end result being the mass product's partial modernization and renovations, based on which a different or similar, although containing other technical specifications product is obtained.

Classification in terms of innovation impact:

- economical; its meaning being increasing work productivity, profit, decreasing inputs, growing exports;

- social: decreasing unemployment, growth of social services, decreasing differentiation among social groups;

- ecological: decreasing environment pollution, solving environmental problems;

- Complex: the meaning behind it being the synthesized complex of economical, social and ecological impact (Melnikas et al., 2000).

Melnikas B. et sl. (2000) emphasized that that the presented classification model may be perceived as a traditional one: its separate elements in different aspects are mentioned in different sources. At the same time it is maintained that this classification model reflects the specifics of innovation activity and enables to perceive its the multiple nature. It is also emphasized that innovations are not only new products or services, but it is also their improvement. Innovations do not appear out of nowhere; new ideas occur from old and well-verified truths. The novelty of an invention compared with what it is all related is just a drop in the ocean. This is proved by the research carried out by J. R. Bright. He notes that the most significant effect of a new technology application takes place not in the place it was used first, but in the areas they were not considered at all at the moment of the original idea (Melnikas et al., 2000.).

Impact of innovations on quality of life

New society interacts with the permanent knowledge flow and at the same time influences unpredictable changes which stimulate rise of innovative activity and its topicality. All this offers dozens of new possibilities. Innovations are not a single action but a continuous response to changing circumstances. Good innovation implementation system helps not only to solve problems at a certain social environment but gives opportunity for development too.

After theoretical research of quality of life and management of innovative activities it is possible to reveal the impact of innovations on quality of life. The completeness of person's life is determined by many factors whereas innovations (as one of the criterion determining higher quality of life) are the main reason of science, technology and social advance and modernization. Referring to this a person itself with the help of innovations is stimulated to use all his/her capabilities, improve all areas of social life that are closely connected to practical application of innovative activities.

Considering *assessment of quality of life indices* (living standard, health, political stability and security, family life, social life, geographical conditions, works security, political freedom, equal gender opportunities) and the *main attributes of innovations* in academic literature (content, implementation level, extent of implementation, novelty, organizational features, influence) it is intended to determine the influence of innovations on quality of life. For the implementation of this purpose a certain model was designed to convey innovations impact on quality of life indices (Pic. 1).

From the designed model it can be seen (regarding classification features of innovation and quality of life dimensions in academic literature) that innovations have direct influence on all quality of life indices and the only difference is characteristic of direct influence and at the same time having in mind that quality of life dimensions have its own particularity. Scientific literature analysis showed that innovations are classified into certain groups according to

their attributes. Every innovation (product, technological, internal organizational, quality, quantity, social, etc.) that is applied into practice influences quality of life because new and improved mechanisms of management interact in that environment (family life, social life, work security, living standard, etc.) and with its appropriate elements (indices) of that environment (i.e. GDP per capita, average life expectancy, level of unemployment, ratio of average earnings of men and women and other) and lastly they become more productive and better assimilated.

Scientific literature analysis suggests that implementing innovations, which allow to modernize manufacturing processes, trade, service supply, improve products and technologies, using intellectual potential enhances organization's competitiveness and increases not only GDP per capita but also employment, stimulates economic growth and consumption.

Significance of the **modernization** processes is concurrent with development of innovative activities striving to achieve long range perspective and maximum productivity, motivating organizational cooperation between organization and state institutions because all these factors enable efficient usage of manufacturing resources in order to satisfy the demand for goods and services.

Operative change of innovation process, adaptation to volatile market conditions, and guarantee of innovations viability which is vital for economic growth production capacity and decrease of unemployment rate are assured. In that case standard of living grows when quality of life improves because there is an increase of cheaper goods and services as the result of competition and consequently society and culture prosper. Living standard increases when quality of life improves because rational calculation of innovation need takes away the risk of market overfilling.

Implementing innovation management mechanisms in different environments it is possible to pursue additional control, to define new control management criteria especially these that are relevant in political environment. Political stability and security (especially when economic situation is unstable) play the important role in the state's purposeful functioning because people expect these things in order to feel safe and experience efficient political structure which should pursue integrated impact when fulfilling the obligations to electorate.

With the help of innovations pursuing political stability and security every political structure should set the objectives with the help of which new improved government mechanisms should be implemented in different government spheres in order to ensure cooperation and dialogue between society and state, to improve governing quality of all state institutions. Quality of life is strongly influenced by territorial implementation of innovations because these innovations have direct impact on population and its economic and social stability. The lack of trust in the government by democratic society is an issue because after election of the leaders the influence to leaders' actions diminishes significantly especially in making decisions that have impact not only on person's life but its quality too. The law assures discipline but this discipline is not for citizens' welfare but for influence of political party. Therefore injustice can occur or undeserved winners. Radical change of attitude to society applying innovative governance mechanisms, using innovative

communication channels would reduce distrust between society and people in government.

Implementation and application of innovations give advantage to every state and organization in comparison to other participant in that environment. For example, it is known that geographic conditions determine state's **competitive advantage** in business sector, whereas creation of favorable conditions to investment can become a crucial factor for state advancement exploiting favorable geographical position and investing in it. The state will be more competitive in comparison to other states increase, when cooperating between businessmen and experts, sharing experience, looking for innovative technologies and application of them chances, because it will be able to better use favorable geopolitical position. When looking for better perspectives of geographical position it is necessary to ensure permanent funding. In order to achieve multifold maximal results in exploiting geographical position, investing in quality improvement and applying innovative methods it is necessary to exploit not only positive features of geographic position but also to assure if geo-economic position of the state is ready to profit from new merchandise and investment flows.

Big influence to the indices of quality of life has people's opinion about themselves and society in which they live, social relationships between groups and migrants, tension between men and women, between young and elderly, the importance of social factors that are formed by attitudes, values, traditions, religion, etc., because values itself can differ in their commonness and abstractness. Creation and development of innovations determine the efficient usage of innovations in every sphere of life that assures the usage not only of more **productive** human resources but emergence of new opportunities too.

Analysis of academic literature revealed that innovations cannot be separated from a man because a man is the most important subject of every activity and the subject of innovations too as a man can express itself by applying his/her capabilities and knowledge with the help of innovations.

The speed of change increases and has influence on person's (who permanently develops when training his/her individual skills and therefore giving perspective and effectiveness to the activity) ability to adapt to changing environment and emphasizes significance of personal qualities because there is a need of independent thinkers, creative and responsible people in modern labor market. Successfully work these people who express their advantage in comparison to others at feels responsibility not only for their actions but also environment and are capable to evaluate the importance of situation and can impersonally to react to critical accidents. Competition between people and their environments is necessary because competition itself is the outcome of mankind development as the person in his/her strive for career wants to show his/her advantages, i.e. how he is better and what he can change in order to become the best. Every organization should pursue to motivate its employees which can reveal people creative potential. If once or permanently organization purposely applies innovative management and organizational methods it can achieve efficient results which can reduce costs of executive activities and will give the possibility for employees for **self-expression**. When the employees feel

that company needs them in order to be successful every employee's satisfaction with his/her work increases as well as assessment of his/her quality of life.
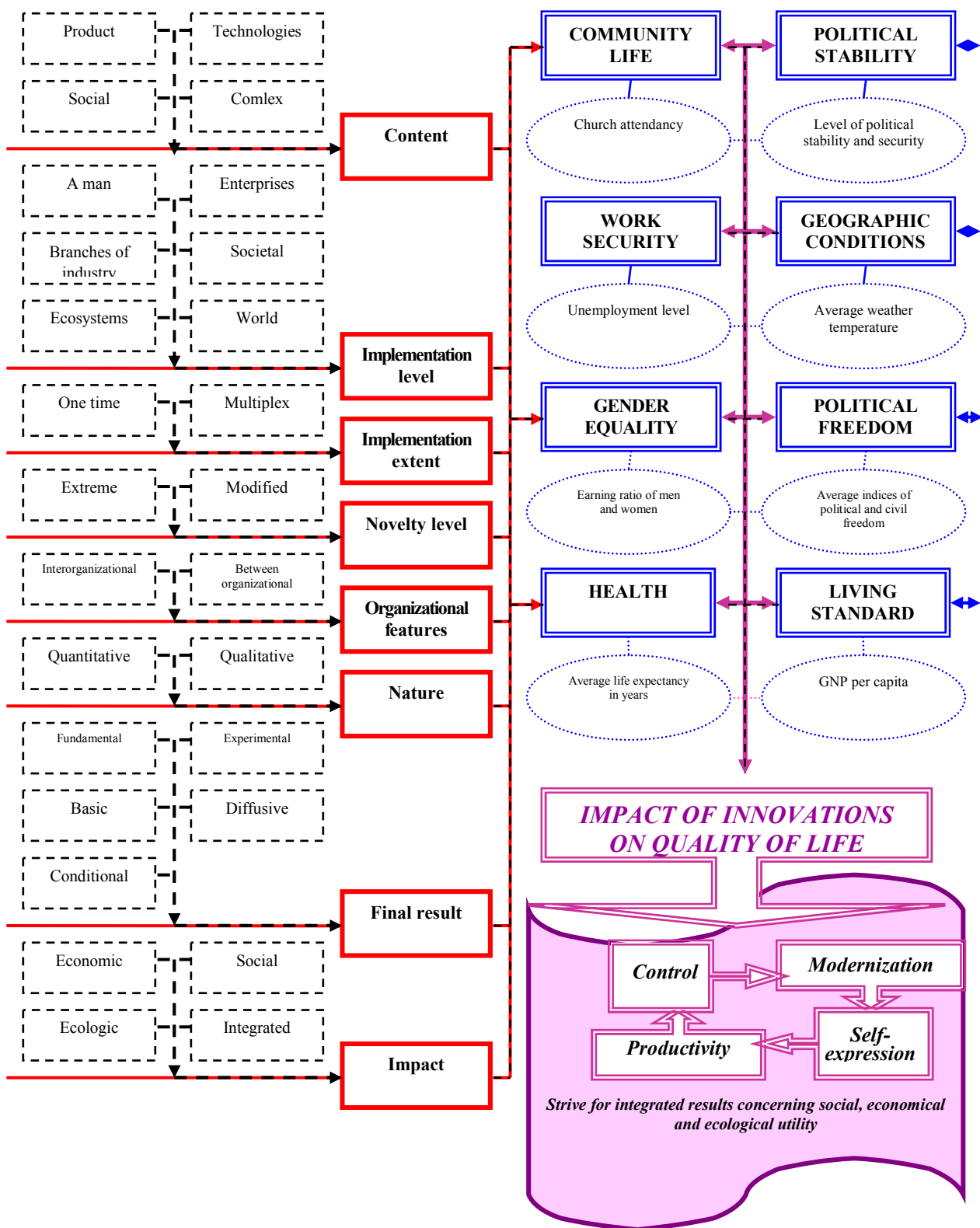

Figure 1. Impact of innovations on quality of life indices

Summarizing it can be stated that every innovation concerning quality of life has different expression from the aspect of influence of political stability or health on assessment of quality of life. However there is on common feature (attribute), i.e. impact of innovations on quality of life which when designing the model is depicted in a simple way and is not specified. Using this way it is intended to show that ha main need for innovations for quality of life manifests through modernization, control, competitive ability and self-expression. The outcome of all these influences is pursue of integrated result concerning economic, social and ecologic utility because innovation itself is not the object only for scientists or businessmen; it is a multidimensional process which is taken as advancement process where people, companies, their partners and state institutions purposefully communicate in order to achieve different goals.

Conclusions

1. When analyzing quality if life it can be noticed that it is multidimensional. Generally quality of life is related with person's perception of his position in the society he/she lives. Firstly this is subjective feeling of well-being covering physical, psychological, social and spiritual levels. Quality of life is the whole of main factors which determine the subjective comprehension of good life by people.
2. After performance of theoretical studies it can be stated that in order to understand innovative activity better it is necessary to link it with activity concept because every innovative activity joins all social change processes stimulating new innovations which influence essential success criteria of economic growth and community well-being.
3. Innovative activity can be perceived as important advancement of science and technology and as social, economic and technologic factors as well which can be associated with person's opportunities to develop all his/her social spheres of life. Therefore innovation

development should be taken as crucial factor of community modernization which affects the successful social and economic processes and innovative activity should be considered as purposeful shaping and implementation of innovations which must be classified, comprehended and assessed as a system together with the anticipation of niche for this activity.

4. It is established that impact of innovations to quality of life manifests through:

- *Modernization*. Implementation of innovations allows modernizing manufacturing processes, governance mechanisms, trade activity, supply of services, perfection of products and technologies, exploiting intellectual potential. From the development and activation of innovative activity the significance of modernization processes are inseparable because it allows to achieve a long-range perspective.
- *Control*. Implementing different governance mechanisms in different environments control is assured with the help of new control management criteria. It is difficult to separate innovative activity development from the significance of additional control because control plays very important role in purposeful functioning of all types of organizations.
- *Productivity*. Creation and development of innovations determine efficient innovation usage in different spheres of people' activities and that assure more **productive** application not only of human resources but new opportunities as well.
- *Self-expression*. Competition between people and their environments is necessary because competition itself is the result of mankind development. It is difficult to separate the significance of self-expression from the development of innovative activity because every person is treated as a subject of every activity and innovative activity as well and he/she employs the skills and knowledge with the help of innovation and therefore reveals his/her creative potential.

Refernces

1. Andrews F. M. Models of cognition and affect in perceptions of well-being // F. M. Andrews, A. C. McKennel. Iš deepblue [interaktyvus]. 1980 rugsėjis. Prieiga per Internetą: < http://deepblue.lib.umich.edu/bitstream/2027.42/43703/1/11205_2004_Article_BF00292640.pdf.
2. Bright J. R. Some management lessons from technologocal innovation research // National Conference on The Management of Technological Innovation sponsored by the Ministry of Technology, Management Today, and the University of Bradford [USA, 1989 m. kovo 12, 13 d.] p. 36 – 41.
3. Jakubavičius A. Inovacijos. Procesai, valdymo modeliai, galimybės / A. Jakubavičius, R. Strazdas, K. Gečas. Kaunas, 2003. p. 5 - 32
4. Fayers P. Quality of Life: Assessment, Analysis and Interpretation / P. Fayers, D. Machin. Iš content.carger [interaktyvus]. 2000. Prieiga per internetą: < http://content.karger.com/produktedb/produkte.asp?typ=fulltext&file=HRE2005064001046.
5. Fahley T. Monitoring Quality of Life in Europe/ T. Fahley, B. Nolan, C. T. Whelan. Iš Eurofound [interaktyvus]. 2003. Prieiga per Internetą:< http://www.eurofound.ie/publications/EF02108.htm.
6. Jurkauskas A. Visuotinės kokybės vadyba. Kaunas, 2006. 248 p.
7. Kulviecas P. Inovacinis procesas. Vilnius, 1991. p. 5 – 11.
8. Martinkus B. Verslo organizavimas / B. Martinkus, S. Žiūkienė. Šiauliai, 2006. p 22 – 45.
9. Valentinavičius S. Inovacinio proceso teoriniai principai. Vilnius, 1997. 83 p.
10. Melnikas B. Įmonės ekonomika / B. Melnikas, A. Jakubavičius, R. Strazdas. Vilnius, 2000. 188 p.
11. Qizilbash M. On the Measurement of Human Development [interaktyvus]. 2002. Prieiga per internetą: <http://hdr.undp.org./docs/training/oxford/presentations/Qizilbash_HDIcritique.pdf
12. Snitka V. Mokslinių tyrimų, technologijų, inovacijų politika ir žinių ekonomikos plėtra: nacionalinio plano metmenys. Kaunas, 2002. p. 53 – 71.
13. Susnienė D., Jurkauskas A., The Concepts of Quality of Life and Happiness - Correlation and Differences, Inzinerine Ekonomika-Engineering Economics. 2009, 3, 58-66.
14. The Economist Intelligence Unit's quality-of-life index [interaktyvus]. 2005. [žiūrėta 2008-05-05].Prieiga per internetą: <http://www.economist.com/media/pdf/QUALITY_OF_LIFE.PDF.
15. Milaševičiūtė V. Indeksas gyvenimo kokybei matuoti: analizė, vertinimas ir tyrimas Lietuvos atveju/ V. Milaševičiūtė, V. Pukelienė, E. Vilkas// Organizacijų vadyba: sisteminiai tyrimai. 2006, nr. 30, p. 161 – 176.

Rasa Glinskienė, Ieva Adomėnienė, Sören Andersson, Dalia Susnienė

Inovacijų įtaka gyvenimo kokybei: teorinis aspektas

Santrauka

Gyvenimo kokybė yra daugialypė ir suvokiama labai įvairiai. Kintantis požiūris į teisingą gyvenimo kokybės suvokimo svarbumą, palaipsniui tapo tiek politinių, tiek mokslo, tiek visuomenės diskusijų objektu, nes tai daugeliu dimensijų vertinama, visus žmogaus gyvenimo aspektus apimanti koncepcija, tiesiogiai susijusi su žmogaus gerove, kurią lemia daugybė kriterijų. Vienas iš žmogaus gyvenimo pilnatvę lemiančių veiksnių yra inovacijos – esminė socialinės ir ekonominės raidos bei gyvenimo lygio kilimo sąlyga. Žmogus inovacijų pagalba skatinamas kryptingai tobulinti visas socialinio gyvenimo sritis, susijusias su gyvenimo kokybės didinimu, kuris tiesiogiai yra veikiamas inovacinės veiklos praktiniu pritaikymu. Mokslinės literatūros analizė leidžia teigti, kad šiomis dienomis plačiąja prasme gyvenimo kokybė suprantama kaip politinis bei ekonominis idealas, sukurtomis priemonėmis užtikrinantis visuomenei ne tik esminių poreikių patenkinimą, bet ir trokštamą gerovę, nes gyvenimo kokybė yra visuma svarbiausių faktorių, kurie lemia daugumos žmonių subjektyvų gero gyvenimo supratimą. Todėl siekiama išanalizuoti gyvenimo kokybę indeksuojančius rodiklius bei inovacijų daromą įtaką gyvenimo kokybei, atsižvelgiant į pagrindinius gyvenimo kokybės indeksą formuojančius rodiklius ir pagrindinius inovacijų bruožus, kurie tiesiogiai įtakoja ir charakterizuoja gyvenimo kokybės lygį.

About the authors

Rasa Glinskienė, Associated Professor. Kaunas University of Technology Panevėžys Institute. E – mail: Rasa.glinskiene@ktu.lt. tel. nr. +370 45 596257. International trade, marketing.
Ieva Adomėnienė, master degree in management. Kaunas University of Technology Panevėžys Institute. E – mail: ieva.adomeniene@ktu.lt. tel. nr. +370 45 596257. Management, human resource, psychology.
Sören Andersson, master degree in economy. Insurance company "Folksam", Stockholm, Sweden. E - mail: andersson2@rocketmail.com. Economy, stock, market.
Dalia Susnienė, assoc. prof., Kaunas University of Technology, Panevėžys Institute, Centre of Languages, dalia.susniene@ktu.lt, tel.8-45 596259, scientific research areas: translation, students' motivation, social language development.

STRUCTURE OF STUDY PROGRAM DIRECTOR'S COMPETENCE: THEORY AND VIEWPOINT

Ausma Golubeva
University of Latvia, Latvia

Abstract

Structure of program director's competence is being discussed in the article. Study program is higher educational program, that is developed for a higher educational institution – short description of main study tasks, content and activities – and that is managed by a study program director from the moment of its elaboration throughout its existence.

Role of the manager – study program director – and his/her competence is crucial for good/effective management. Therefore it is essential to define study program director's competence and to elaborate its description.

Research in the theory of competence reveal that concept „competence" is still defined in different ways, notwithstanding efforts of many researchers and authors to elaborate a holistic definition. Therefore, often the approach used to interpret „competence" is to look at is as a „vague concept", and, besides, approaches vary in different scientific fields.

Dominant approaches of „competence" – behavioral, functional and multidimensional - are analyzed in this article. Also, based on the researches in the theory of competence and viewpoints obtained during research of the author in the higher educational institutions of Latvia, main traits of competence of manager in the higher education are discussed in the article.

Keywords
Study program, study program director, competence, individual competence.

Introduction

One of the most important characteristics of today's education is quality. Unmistakably, it concerns all educational institutions, all levels, areas and directions of education, inter alia, also study programs that are implemented in the higher education.

Study program is a higher educational program that is developed for a higher educational institution – short description, summary of all main study tasks and most significant study content, as well as sequence of actions that need to be taken. It is managed by a study program director through all its existence – from the preliminary idea and moment of its elaboration through the *zig-zag* line of its approval till and throughout its implementation. Study program director is the manager of a program in higher educational institution or person responsible for an educational program in a higher educational institution.

Study program directors are not specially trained to manage study programs. It is usually assumed that anyone from teaching staff of the higher educational institutions after having worked for certain time in a higher educational institution, having obtained a particular academic degree and professional and social status, at the same time acquire also the basics of management. Therefore, anyone from the teaching staff of a higher educational institution can manage a study program, of course, according to the regulations on the study program director that are adopted by the higher educational institution. Thus, frequently a person that is being invited to manage a study program or nominates her/himself to do it clearly possesses outstanding competence in a certain domain of science, is a very knowledgeable lecturer, organizes and directs seminars and practical tasks very skillfully, has obtained academic degrees, successfully carries out researches, takes part in conferences etc. However, in reality study program director in the process of management of a study program encounters wide range of difficulties and problems that can be linked to organizational, communicational issues, as well as issues of cooperation and many other things.

Hence, one of the questions that should be considered as important is the competence of a person who manages the program – study program director.

Research in the competence theory reveal, that the term – *competence* – notwithstanding efforts of many authors to elaborate a holistic definition, is still defined in different ways. Therefore, often the approach used to interpret „competence" is to look at it as a „vague concept", and, besides, approaches vary in different scientific fields.

Taking into an account the issue described above, the author of this article has carried out a research on competence of the study program director in a higher educational institution.

Literature review

Term *competence* from the perspective of the theory of personal and organizational management is often used, firstly, in the sense of organization – describing the accumulation of all knowledge and skills in the organization as the core competence (concept "*core competence*" was introduced by Prahalad and Hamel (Prahalad; Hamel, 1990); secondly – describing a person - as individual knowledge, skills and abilities.

In this article, the aim of which is to analyze the competence of study program director, it will be examined through the individual perspective.

Competence on the individual level according to Spencer and Spencer (Spenser and Spencer, 1993) is characterized by five features: (1) motives that promote and direct to certain activities; (2) personal traits, that ensure certain manifestation of activities in certain situations; (3) attitudes, values, self-image, that form self-concept; (4) knowledge and information that an individual possesses in certain areas; (5) skills (analytical, conceptual thinking) that are necessary for performing specific tasks. Based on most characteristic traits, Spencer and Spencer (Spencer and Spencer, 1993)

defines competence of the employee as the combination of personal traits, attitudes, skills, knowledge and abilities that are interconnected and can be observed in the behavior of the individual and that ensure outstanding work performance.

According to Green (Green, 1999) notion of individual competence consists of four elements: (1) knowledge and specific information, that is obtained in the process of formal education; (2) skills, that are acquired in educational environment or informally by practice; (3) abilities – specifics, such as intelligence, reaction time etc.; (4) other, that include additional characteristics required for good performance of a particular job. Based on the components mentioned above, P.C. Green (Green, 1993) defines competence as the combination of knowledge and skills that are used to achieve job aims.

Also Sveiby (Sveiby, 2003) describes individual competence in a similar manner. According to Sveiby, competence can be characterized by five interconnected elements: (1) knowledge that is mainly acquired through information accumulation and process of formal education; (2) skills, that are mostly gained through training; (3) experience that is mainly obtained through learning from previous successes and failures; (4) values and attitudes that are individual assumptions about what is right and what is wrong; (5) social ties – relations that an individual has with others, they are formed grounding on family ties, job relations and other linkages.

Taking into account the wide range of theoretical schools and conceptual ambiguousness about the term *competence*, lately (Francoise Delamare le Deist, Jonathan Winterton, 2005) three dominant approaches can be singled out: (1) behaviorist approach which emphasizes the significance of behavior and incorporates attitudes, abilities, motives and job habits; (2) functional approach which focuses on professional skills and informal knowledge obtained through practice; (3) multidimensional, holistic approach which views competence of a person, an employee from a wider perspective. According to this approach three elements form competence: cognitive element – knowledge, skills and abilities, experience that can be used either in one particular professional area or in general; social element – it is linked to the relations a person has with others and can be described as the ability and willingness to interact with others; personal element – ability and willingness to evolve, to develop one's personality, as well as skills; it also includes motivation, attitude towards work, surrounding environment and society.

Davidsone (Dāvidsone, 2008) notes, that competence can be defined as manifestation of knowledge, skills, attitudes, personal traits and motivation in one's behavior. In the document of European education information (Eurydice, 2002) the importance of knowledge, skills, abilities and attitudes in every person's preparation for active participation in the knowledge society has been emphasized. It has been concluded in the document that „... in order to label a competence as key, significant, necessary or basic, it has to be requisite and useful for every individual and society as a whole. It has to enable the individual to integrate successfully in many social systems, while at the same time preserve independence,

and become personally effective both in well known and new, unexpected circumstances."

Wisniewski (Wisniewski, 2007) as the most important features of competence of a manager in higher education names (1) values and vision for further development; (2) effective communication; (3) analytical skills; (4) creation and maintenance of positive atmosphere; (5) facilitation of cooperation; (6) problem solving and challenge, including taking risks; (7) persistence.

Several elements that characterize the competence of a „good" manager are underlined by Spendlove (Spendlove, 2007) in the research on the competence of manager in higher education: (1) attitude – good manager is careful and open towards others, flexible, frank, honest, precise, considerate, ready to give advise, communicable, friendly and discreet; (2) knowledge – good manager has a comprehensive understanding about the life of the university - knows "ins and outs" of the academic process and is aware of how the university as a system operates; (3) behavior – good manager promotes good relations among the academic personnel, thinks strategically, hears others out, directs negotiations, possesses good communication skills, delegates duties, motivates others, promotes and facilitates team work.

Duties of the study program directors are prescribed by the Regulations on study program directors adopted by the higher educational institutions of Latvia. In some of these Regulations also rights and responsibilities of study program directors are mentioned. Among them practical tasks that are linked to the elaboration, management, evaluation and improvement of a study program can be found. However, these Regulations do not mention knowledge, skills, abilities etc. that a study program director should possess and that could be significant, if not vital to the good management of a program. Namely, no description of required competences can be found. Yet, it is the study program director's competence, displaying itself in the process of study program implementation, that might play an important role contributing to a qualitative and effective running of a study program, as well as ensuring its existence and further development.

Therefore, besides the necessary formal qualifications, as well as responsibilities and duties of the study program director, it would be also relevant to define competence of a study program director and elaborate the description of its structure.

Davidsone (2008) stresses that to define competence means to describe behavior of personnel that is anticipated or desirable in performing their jobs or professional roles.

Results and discussion

Based on the review of relevant literature on theories, schools of thought and researches on the issue of competence, the author of this article has outlined the structure of study program director's competence and its characteristics: (1) general and professional knowledge and skills (including experience); (2) attitudes; (3) social skills; (4) personal traits and abilities.

In practice – in the process of program management – elements of competence are usually hard to be strictly

distinguished one from another. Indeed, they overlap and strengthen each other, therefore there is a small practical possibility to group or prioritize them. Thus the list, but not a sequence of important elements of competence can be found below:

- to use professional knowledge and skills;
- to use experience (a study program has been managed before);
- to obtain relevant information by using various channels of information;
- to plan and organize study process;
- to prepare different documents for program evaluation (accreditation, self-evaluation);
- to analyze data and apply it in the further development of the program;
- to plan development of the program;
- to make decisions (within the program);
- to delegate authority and responsibilities in the case of necessity (to a lecturer who takes part in the program, a colleague);
- to improve competence in order to manage program effectively (further education courses, seminars, exchange of experience etc.);
- to use creative approach in the management process;
- to take part in development projects, management of such projects, especially, if they are linked to the development and improvement of the study program;
- to cooperate with colleagues in work related matters;
- to develop positive relations with colleagues, administration, students, structural units of the higher educational institution;
- to engage in an effective, clear and understandable communication with colleagues (both oral and written);
- to solve problems and conflicts in a constructive and flexible manner;
- to motivate and inspire lecturers involved in the implementation of the program to take part in courses and other activities connected with further education;
- to involve lecturers who take part in implementation of the program into cooperation, decision making, realization of changes;
- to assume responsibility as regards functioning of the program;
- to demonstrate professionalism;
- to evaluate one's and colleagues' work performance critically;
- to motivate one-self for better work performance;
- to be convinced about one's abilities;
- to be goal orientated and persistent;
- to be tolerant;
- to have a good sense of humor;
- to promote personal health.

Along with conclusions that can be drawn from the theoretic discussion, also viewpoints of study program directors and lecturers about competence and its characteristics are important.

In order to explore what knowledge, skills, personal traits and abilities should be relevant for study program directors to possess, as well as to study, whether study program directors should take part in further education and training activities on program management, the author of the article carried out an empiric research in year 2008-2009. Study program directors and lecturers of two universities of Latvia were chosen to form the representative sample for this research – altogether it consists of 292 respondents. Two university type higher educational institutions with different geographical locations and distinctive quantitative indicators were selected.

Anonymous questionnaire forms were developed both for study program directors and lecturers involved in the implementation of the program. The content of the questionnaire was elaborated based on the theoretical discussion about elements of competence on the individual level (Spencer and Spence, Green, Sveiby, Wisniewski, Spendlove, Davidsone, Dombrovska). 260 respondents filled in the questionnaire, 91.9% of all forms were received. No other data sources – interviews – will be used in this analysis.

Absolute majority of the respondents that took part in the research were women: program directors – 87.5% women, 12.5% men; lecturers – 80.6% women, 19.4% men; program directors were mostly older than the age of 41 (31 -40 years old - 4.2%, 41-50 years old - 47.9%, older than 51 - 47.9%); length of work experience for program directors was usually longer than 21 year (58.3% - more than 21 year, 33.3% - 11-20 years, only 8.3 % - 6-10 years) and the experience in managing study program was mostly longer than 5 years (58.3% - more than 5 years, 39.6 % - 1-5 years and only 2.1% have just started to manage a program).

Summing up answers given on the questions in the questionnaire, not only the opinion of study program directors about the knowledge, skills, personal traits, abilities etc. that are relevant elements of the competence, is important. It is also significant to find out the viewpoints of lecturers involved in the implementation of the program on the issue of the competence of a director under guidance of which they would like to work in the study process.

Although not huge, still noticeably differences between the viewpoints of these two groups on the elements of the competence were observed during the research. Besides, respondents were asked to prioritize the characteristics of competence while expressing their opinion on them.

Thus, for example, in the opinion of the program directors very important or important elements are:

- to analyze data and apply it in the further development of the program;
- to prepare different documents (licensing, accreditation, also self-evaluation reports);
- to assume responsibility in the process of program management;
- to cooperate successfully and to promote cooperation with and among lecturers, students and other personnel;

- to evaluate one's and colleagues' work performance critically;
- to plan study program;
- to hear others (colleagues, students etc.) out;
- to be tolerant;
- to have a good sense of humor.

It can be claimed that the analysis of how program functions, as well as evaluation of it and use of obtained data for effective and qualitative implementation of the program and further development, is significant for the existence of program. This task is mostly performed or organized by the program director. Also well-disposed communication with all colleagues involved in the program, as well as with students, and good sense of humor, tolerance, critical approach towards job performance is relevant for good cooperation within the program. Program directors are well aware of that and it explains their viewpoints on the competence which can be seen from the way they have distributed its elements.

Decision making within the program is considered to be partially important. Indeed, during the process of study program management there are only few decisions that could be taken by study program director unilaterally without the consent of head of the structural unit/department, dean of the faculty or any other representative of administration. Also extra self - motivation, personal initiative and creative approach in work is only partially relevant or not relevant at all, because – according to the opinion of program directors – "when a person undertakes the management of a program, he/she already shows that he/she has enough motivation to work creatively and with initiative".

On the other hand, lecturers name directors' cooperation with personnel and students, and conflict resolution skills as the most important features of a competent director. Certainly, in any job environment positive emotional background is important in creating good working conditions, it motivates employees, increases their job performance.

Also, great importance is allocated to the further development of the program, acquisition of different information and usage of it for further improvements in the program, preparing necessary documentation (licensing, accreditation, also self-evaluation reports), control of study program, responsibility and accountability of the director. This is also self-evident, because the existence of a program, especially, existence of a competitive program, ensures competition and work places for lecturers in the market of higher education.

On the contrary, knowledge and skills on preparing project applications and project management are not considered by lecturers to be a significant part of program directors' tasks. Probably, it is due to the reason that lecturers have not had any chance to use all the possibilities that participation in a project might render, or the opinion dominates that only an employee from the administrative staff can manage a project. However, also program directors think that skills related to the management of projects on development or improvement of the program is only partially necessary. Possibly, it is for the same reason as for the lecturers. However, it has to be pointed out that directors have participated in such projects before and are quite eager to take part in projects managed by someone else in the future.

It seemed also relevant to explore whether study program directors should receive further education, training in order to be competent program managers.

85.2% of the lecturers and 68.8% of directors, namely, more than a half, believe that it is important. Besides, more support to such statement was given by younger and less experienced program directors – 78.3% in the age of 41-50 years, with 1-5 years of experience – 77.0% However, the opinions about the issues in which program directors should receive further education among directors and lecturers differed.

Study program directors are of the opinion that relevant issues for them to acquire further knowledge in are quality of study process and study programs, knowledge of foreign languages, competences of a manager and personnel, communication and cooperation. Apparently, increasing requirements from the students and society in general to receive qualitative education, as well as growing competitiveness among study programs make program directors put greater emphasis on promoting quality of study process and programs themselves and attracting highly professional lecturers to work in the program.

Notwithstanding the fact that managing a program requires major mental efforts, creative approach, often creates tensions and not rarely causes even exhaustion, program directors do not feel that extra information of health promotion issues would be necessary. Apparently, long working experience and professional approach help to deal with stress and tensions caused by problems in the work place.

It has already been said before that lecturers find communication and cooperation with program director, colleagues and students relevant. Therefore they are of the opinion that program directors should acquire additional knowledge on facilitation of cooperation and communication among lecturers and students, as well as qualitative study program implementation and program management.

Conclusions

The aim of the research was to determine knowledge, skills, personal traits and abilities relevant to the management of a study program, which therefore study program directors should possess. Additionally, goal was to explore whether it would be important for study program directors to acquire additional education, knowledge, information and on what issues.

During the research:
- structure of the competence was outlined, consisting of general and professional knowledge and skills (as well as experience), attitudes, social skills, personal traits and abilities;
- viewpoints of program directors and lecturers were obtained on the most significant elements of competence (they differed): directors prioritized those that are linked to professional activities (analysis of the study process and use of obtained data in the further development of

the program; preparation of different documents; ability to assume responsibility in the process of program management; successful cooperation and promotion of cooperation with and among the lecturers, other personnel and students; critical evaluation of one self's and other's job performance; study process planning, hearing others out, tolerance; good sense of humor. On the other hand, lecturers emphasized those elements that are linked to the social activities such as director's cooperation with personnel and students, conflict resolution.

Both study program directors and lecturers agree that further education is important for program directors. However, views differ on the content of such additional education – program directors choose those issues that are connected to their professional competences, but lecturers feel that program directors should improve their cooperation and communication skills.

References

1. *Beļickis I.,Blūma D., Koķe T., Markuss D., Skujiņa V.,Šalme A.* (2000) Pedagoģijas terminu skaidrojošā vārdnīca: termini latviešu, anģļu, vācu, krievu valodā.- Rīga: Zvaigzne ABC.
2. *Dāvidsone G.*(2008) Organizāciju efektivitātes modelis.SIA O.D.A.
3. *Dombrovska L.R.(2009)*.Cilvēkresursu kapitāla vadība.Teorija un prakse. - Rīga: Apgāds Zvaigzne ABC.
4. *Giesecke J.,NcNeil B.* Core Competence and the Learning Organization.//Library Administration and Management. Vol.13,No.3, pp.158.-166.
5. *Green P.C.*(1999) Building Robust Competencies:Linking human resource systems to organizational strategies.San Francisko: Josey-Bass.
6. *Le Deist F.D., Winterton J.* What is Competence? //Human Resource Devopment International.Vol.8,No.1, p.27-46, March 2005
7. Pamatkompetences.Eurydice, 2002. [Electronic Resource]: http://www.euridice.org/resourses/eurydice/pdf/0_integral/032LV.pdf - accessed January,11,2008
8. *Spendlove M.* Competencies for effective leadership in higher education.//International Journal of Educational Managment. Vol.21,No.5,pp.407 -417, 2007
9. *Spencer L.M., Spencer S.M.*(1993) Competence at Work. Models for Superior Performance. John Wiley&Sons, Inc.
10. *Sveiby K.E..* Organising for effective Knowledge Work.[Electronic Resource]: http://sveiby.com/articles/Kworkerdvlpment.htm - accessed December 11,2008
11. *Wisniewski M.A.*Leadership in Higher Education:Implications for Leadership Development Programs. [Electronic Resource]: Http://www.academicleadership.org/leader_action_tips?LEADERSHIP_IN_HIGHER –accessed May,11,2007

Ausma Golubeva

Structure of study program director's competence: theory and viewpoints

Summary

Study program is a higher educational program that is developed for a higher educational institution – short description, summary of all main study tasks and most significant study content, as well as sequence of actions that need to be taken. It is managed by a study program director through all its existence. Hence, role of the manager – study program director – and his/her competence is crucial for good/effective management. Therefore it is essential to define study program director's competence and to elaborate its description.

However, researches in the competence theory reveal that the term – *competence* – notwithstanding efforts of many authors to elaborate a holistic definition, is still defined in different ways. Therefore, often the approach used to interpret „competence" is to look at it as a „vague concept", and, besides, approaches vary in different scientific fields.

Taking the above mentioned in an account, the aim of the research was to determine knowledge, skills, personal traits and abilities relevant to the management of a study program, which therefore study program directors should possess. Additionally, goal was to explore whether it would be important for study program directors to acquire additional education, knowledge, information and on what issues.

During the research structure of the competence is outlined, consisting of general and professional knowledge and skills (as well as experience), attitudes, social skills, personal traits and abilities. Also viewpoints of program directors and lecturers were obtained on the most significant elements of competence (they differed): directors prioritize those that are linked to professional activities such as analysis of the study process and preparation of different documents; but lecturers emphasize those elements that are linked to the social activities like director's cooperation with personnel and students, conflict resolution.

Both study program directors and lecturers agree that further education is important for program directors. However, views differ on the content of such additional education.

About the author

Ausma Golubeva, Mag. paed, lecturer in the University of Latvia, Faculty of Pedagogy and Psychology, email: ausma.golubeva@lu.lv, scientific interests: concern issues of educational management, particularly qualitative and effective management of study programs.

INNOVATION COMPETENCIES OF MURES REGION INDUSTRIAL ENTERPRISES

Simona Grama

IAE de Lyon, France

Abstract

The objective of this study was to investigate the situation of the technological innovation in Romania and to measure how many innovation competencies exist in Mures Region industrial firms. Our study was a replica of a study realized in France by SESSI in 1997, "Competences pour innover dans l'industrie". Our measuring instrument had 73 items and 9 dimensions which were the innovation competencies. The population of the study was formed by 100 managers from industrial enterprises of Mures Region. The results of the study show that Mures Region industrial firms use in average 3 out of 9 innovation competencies. The study confirms that the large firms and the high technological firms appear to be the most endowed with innovation competencies. Also the results show that the characteristics of the innovation companies are: an efficient human resources management, a strong strategy and a good selling strategy. Technological innovation is a key factor for the enterprises performance and demands the mobilization of the key competencies. Romania is a new member in the European Union and it is important to concentrate its resources in an innovation direction in order to gain a strategic position on the market. This study reveals the advantages and the problems in the technological innovation field for Mures Region industrial firms and will help them to find solutions in improving their performance level.

Introduction

The Romania's integration in the European Union was crucial because of the introduction of the national economy in the largest integrated economic system. In this context of European integration, innovation becomes a priority and the development of innovation competencies will assure a strategic position on the market for Romania.

According to François et al. (1999), technological innovation is a source for the company's performance and competitiveness. The existence and profitability of innovation require the mobilization of company's core competencies. These core competencies represent what company knows to do on its own way and the essence of its activity (Johnson, Scholes Frery, 2002). The competitive advantage of a business is based on these core competencies (Prahalad et Hamel, 1990). As you can see in the model of Javidan (1998), these core competencies suppose the existence of more elements:
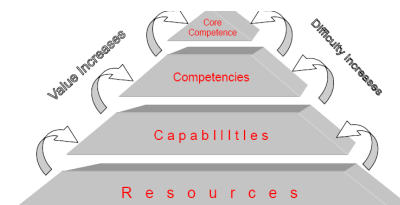
Figure 1. Core competence building blocks. Adopted from (Javidan, 1998).

The core competencies are the result of an original combination of the company's competencies which are based on the employee capabilities that arise from the exploitation of resources. Companies must fight to develop their core competencies in order to obtain a privileged position on the market. These core competencies are directly implied in the process of innovation and for this reason they are called also innovation competencies.

The features of an innovative enterprise are represented by the firm's ability to transform itself, by the company's ability to manage its human resources, the ability to manage its knowledge and the ability to make strategic decisions in a very short time (Johnson, Scholes and Frery, 2002).

Today's company must learn to precede the market and the competition rather than follow them by developing and putting in action the innovation competencies. Instead of managing daily operations, the actual enterprise should reconsider its manner of acting in designing, manufacturing, launching and selling new products. Companies must encourage the increase of creativity process, must facilitate teamwork and efficiency of action.

This study was a replica of a large survey done in France in 1997 "Compétences pour innover dans l'industrie "by the Service of Industry Statistics and Studies (SESSI). The survey was conducted by J.P. Francois in 1997 and identifies the competencies needed for technological innovation in industrial French industry. In the vision of Francois & al. (1998), the core competencies are called complex competencies and they are essential for technological innovation. These complex competencies are the result of the basic competencies combination. Our study refers to 9 complex competencies which are the following: innovation strategy, market knowledge, creativity, knowledge management, learning process, knowledge conservation, people management, innovation financing, and innovation selling.

The innovation strategy summarizes all the competencies needed for the transformation and differentiation of the

firm on the market. These competencies will help the firm to enter in a process of differentiation and to come with the new product that will give it the competitive advantage on the market. These competencies refer to the control of production quality, to the technological evaluation of the products, to the appraisal of firm's procedures, to the evaluation of firm's reorganization, to the inventory of employee competencies, to a global vision for all employees regarding the business objectives.

The market knowledge competence is essential for a firm which is implicated in an innovation direction. This competence refers to monitoring, predicting and measuring what happens on the market. To be on the top of the consumer preferences, the company must learn the market trends, must know how to promote its competitive advantage and must identify the future opportunities of the market to be ahead of its competitors. The firm should analyze the products, the publications from competing companies and should evaluate the consumer needs in order to identify new ideas to improve its products and to create other products that will satisfy the client preferences.

The creativity competence enables the organization to engage itself in a process of technological innovation. The company which posses this competence focuses its activity around innovation projects, involve people to come with new ideas, promote teamwork sessions, encourage mobility between departments and analyze the failures of new processes in order to conduct the improvements.

Knowledge management competence refers to the capacity to process information in order to redefine problems and provide solutions. This competence has two dimensions. The first dimension refers to competencies required for the creation of new knowledge. The expression of this dimension can take many forms: to encourage the formulation of new ideas, to provide a degree of autonomy in realizing the tasks, to accept creative behavior not directly productive, to reward innovative ideas, to focus on an integration of knowledge. The second dimension refers to company's ability to evaluate the production of knowledge. This assessment concerns the evaluation of personnel knowledge, but also the evaluation of competitor's knowledge.

Learning competence is very important for the innovation process. To gain the competitive advantage, companies must focus not only on their internal knowledge, but they must also take into consideration the external knowledge and technological changes. In order to innovate the firm must recruit high qualified employee with a good knowledge background. To manage the external change the enterprise can think to build strategic unions with other firms or to outsource some process in order to become more efficient.

The knowledge conservation competence consists in identifying and protecting the strategic know-how of the firm and in keeping the key people that have the strategic knowledge. The protection of intellectual property imposes to take security measures to maintain and defend strategic competencies. To avoid the departure of key people, the company must reward this people possessing the strategic knowledge.

People management competence refers to the ability to identify and develop the employee competencies in order to touch the strategic objectives of the firm. People management refers to the appraisal competencies like assessing the training needs of each employee, evaluating the employee capacity to work in a team and their propensity to innovate and measuring the impact of training for innovation. People management takes into consideration also the motivation competencies which imply to reward the performance of employees and to keep the strategic people in the company.

Financing innovation competence refers to all aspects related to the anticipation of all costs concerning innovation projects, to the funding opportunities for innovation and communication with potential financiers of innovation. This core competence is reflected in the ability of firms to assess and ensure the financing of innovation.

Selling innovation competence consists in three basic competencies: the development of a promotional offering, the target determination and the investment in communication networks. Only the first basic competence is linked to the ability of companies to sell the innovations. The other two are more related to a marketing strategy.

The purpose of this study was to investigate the situation of the technological innovation in Romania and to measure how many innovation competencies exist in Mures Region industrial firms.

Research Hypotheses

1. There will be a significant difference between high technological firms and low technological firms regarding the number of innovation competencies.
2. There will be a significant difference between large and small enterprises regarding the number of innovation competencies.
3. There will be 4 characteristics that define the innovative companies respecting the theory: the firm's ability to transform itself, the company's ability to manage its human resources, the ability to manage its knowledge and the ability to make strategic decisions.

Methodology

Generally, the survey respects the rules of SESSI's investigation, but implies a more simplified context, taking into consideration just the case of Mures Region industrial firms. Compared with the French study, our investigation uses a smaller number of enterprises and a more simplified results treatment. The questionnaire was translated in Romanian and then applied to our sample. To simplify the questioner completion, we decided to cut some additional information that initial questioner demanded. This additional information refers to the use

of specific procedures and the need for out sourcing intervention for innovation competencies.

The questioner was applied to 100 managers from 100 industrial firms of Mures region. These firms were selected by random and classified by two criteria, the size and the technological degree. From this point of view we had large/small enterprises and high/low technological firms. For the selection of these firms we used the "Top of the Firms 2008" realized by Commerce Chamber of Mures Region. Managers interrogated had ages between 35-50 years. They were in top and middle management positions because the questioner needs a global vision of the firm.

The measuring instrument had 73 items and 9 dimensions which were the innovation competencies. The 9 dimensions are the core competencies or the complex competencies. Each complex competence is formed by a set of basic competencies. Totally we have 73 basic competencies. These 9 dimensions are the following: innovation strategy, market knowledge, creativity, knowledge management, learning process, knowledge conservation, people management, innovation financing, and innovation selling.

The questioner was applied by email to all managers with all instructions needed to complete it. The time given to complete the survey was 2 weeks.

Results

Mures Region industrial firms use in average 3 out of 9 innovation competencies. These three competencies are related to the people management (86%), the innovation strategy (84%) and innovation selling (74%). The less used innovation competencies are related to the creativity (19%) and knowledge conservation (18%).
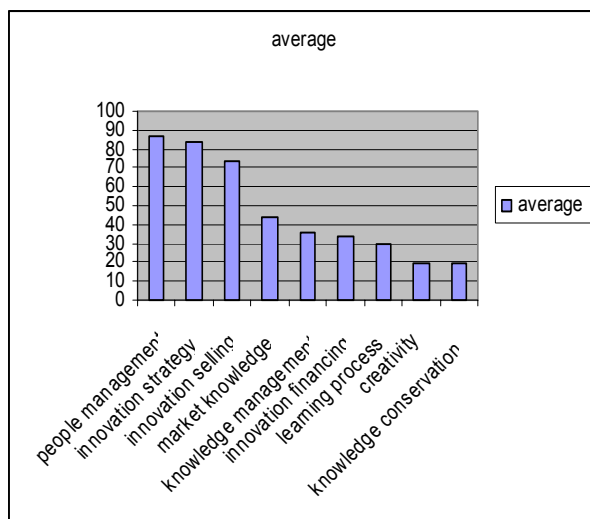
Figure 2. The distribution of innovation competencies in Mures Region industrial firms

Hypothesis I: There will be a significant difference between high technological firms and low technological firms regarding the number of innovation competencies. This hypothesis is tested by the Student's T Test. The

results obtained from the test are summarized in the Table I. For variables, people management [t (98) = 3.53, p< .05], financing innovation [t (98) = 1.93, p< .05] and selling innovation [t (98) = 2.92, p< .05], the value of t test is significant and shows that there is a significant difference between the industrial high and low technological firms. The variable knowledge conservation gets a value of t test [t (98) = -0.75, p> .05] not significant. This value shows that there is no significant difference between high and low technological firms. The value of T test is negative which means that this competence is more prevalent in low technological firms.

Table 1

Student's T Test

| Variables | Levene Test | | | |
	F	Sig.	t	Sig. (bilateral)
Innovation strategy	,111	,740	,316	,752
Market knowledge	1,613	,207	-1,023	,309
Creativity	2,072	,153	-,532	,596
Knowledge management	4,702	,033	-1,584	,116
Learning process	,183	,670	-,880	,381
Knowledge conservation	7,313	,008	-,751	,454
People management	23,777	,000	3,535	,001
Innovation financing	30,428	,000	1,936	,056
Innovation selling	9,094	,003	2,920	,004

Hypothesis II: There will be a significant difference between large and small enterprises regarding the number of innovation competencies. This hypothesis is tested by the Student's T Test. The results obtained from the test are summarized in the Table II.

For variables, people management [t (98) = 3.50, p< .05], financing innovation [t (98) = 1.90, p< .05] and learning process [t (98) = -2.81, p< .05] the value of t test is significant and shows that there is a significant difference between the industrial large and small industrial firms.

Table 2

Student's T Test

| Variables | Levene Test | | | |
	F	Sig.	t	Sig. (bilateral)
Innovation strategy	,101	,730	,215	,652
Market knowledge	1,424	,200	-1,010	,203
Creativity	1,070	,140	-,432	,683
Knowledge management	4,500	,020	-1,500	,101

Learning process	9,000	,003	-2,810	,002
Knowledge conservation	1,050	,130	-,520	,570
People management	21,555	,000	3,505	,001
Innovation financing	29,400	,000	1,901	,051
Innovation selling	,183	,670	-,880	,381

Hypothesis III: There will be 4 characteristics that define the innovative companies respecting the theory: the firm's ability to transform itself, the company's ability to manage its human resources, the ability to manage its knowledge and the ability to make strategic decisions. This hypothesis is tested by the factorial analysis (CFA). The results obtained from the test are summarized in the Table III.

The first factor is defined by the following competencies: knowledge management, learning process, knowledge conservation, people management. The second factor is defined by: innovation strategy, market knowledge and creativity. The third factor is defined by innovation selling and financing.

Table 3

Factor Analysis-Factors after rotation

	Composantes		
	1	2	3
Innovation strategy	,501	,638	-,006
Market knowledge	-,197	,802	-,116
Creativity	,029	,876	,279
Knowledge management	,812	-,064	,015
Learning process	,828	,207	,442
Knowledge conservation	,762	-,332	-,045
People management	,658	,405	-,324
Innovation financing	-,060	-,004	,961
Innovation selling	,631	,200	,604

Discussion

Mures Region industrial firms use in average 3 out of 9 innovation competencies. These three competencies are related to the people management, the innovation strategy and innovation selling. The less used innovation competencies are related to the creativity and knowledge conservation. People management is related to human resources field of the company and its relation with innovation. Innovation strategy is related to the strategy of the company and its conexion with innovation. The innovation selling includes all strategies used by the company the sell the new products.

The industrial firms from Mures Region have a good use of these three competencies that means that they know to manage their employee in an innovation perspective, they use the innovation in their strategy and they know how to sell and promote the new products. They have to improve the creativity process and the knowledge conservation. That means that industrial firms must encourage more sessions that facilitate the creativity and they have to take more measures for protecting and conservation of the knowledge capital.

We can see a significant difference between high and low technological firms regarding the people management, innovation financing and innovation selling. The high technological firms are more endowed with innovation competencies that low technological firms. Technology is the essence of the competitive advantage of a business. According to Hamel and Prahalad (cited by Matmati, 2005), technology has a central place for the "core competence" defined as "a set of knowledge and technologies" having like objective the gain of the competitive advantage.

The innovation competencies are more numerous in large companies compared to small enterprises. Compared to small firms, large firms have more innovation competencies related to people management and innovation financing. These results join the Schumpeter's theory (cited by Munier, 1997), that affirms that large firms are more innovative than small firms. In Schumpeter's vision large firms have more resources to innovate. Regarding the learning process we can see from the t test result that small firms are more tempted to learn new things. Generally small firms don't have a R&D department so their management encourages the learning process in order to create new products.

The first characteristic of an innovative company in Mures Region generally refers to the organizational aspect, concerning the management of people, intellectual resources and the learning process of the organization. The second characteristic is related to the strategic aspect that includes the innovation strategy of the company, the anticipation and knowledge of market changes and the development of innovations. The third characteristic is more related to the business side of innovation, sales and financing. In comparison with the theory we found only three characteristics not four (Johnson, Scholes and Frery, 2002). Johnson, Scholes and Frery (2002) said that an innovative firm is distinctive by its ability to transform itself, the company's ability to manage its human resources, the ability to manage its knowledge and the ability to make strategic decisions. In our study, the first characteristic includes the both people and knowledge management. The second one touch the strategic aspect and the third one which is more business related can be connected with the ability of the firm to transform itself.

We found some similarities between the French survey (SESSI, 1998) and the survey conducted in Mures Region. In this sense we can say that large firms and high technological are more endowed with innovation competencies then small enterprises and low technological firms. The French industrial firms had 4 from 9 innovation competencies and two from them were

represented by people management and innovation strategy like in the Mures Region case. The others two were the knowledge management and the creativity process.

Conclusions

This study showed a panorama of innovation competencies in Mures Region industrial firms. We saw that industrial firms posses 3 out from 9 innovation competencies. These 3 competencies are represented by people management, innovation strategy and innovation selling. The results of the study revelled also that the large and high technological firms are more endowed

with innovative competencies that small and law technological enterprises. Creativity and knowledge conservation have to be improved in order to increase the level of technological innovation. In this direction, we will present the results to the Commerce Chamber of Mures Region in order to propose an intervention for the improvement of technological innovation level of industrial firms. Each firm that participated to the study will receive a particular feedback concerning its innovation competencies and its problems.

An extension of this study is planned in order to see the situation of innovation in services. A comparison with the present study is planned also to see the differences between the industrial and services field.

References

1. Francois J-P., Goux D., Guellec D., Kabla I. & Temple Ph. (1999), « Décrire les compétences pour l'innovation : une proposition d'enquête », in Foray D., & Mareisse J. (eds.), *Innovations et performances. Approches interdisciplinaires*. Editions de l'Ecole des Hautes Etudes des Sciences Sociales, pp.283-305

2. Hamel G., & Prahalad C., K. (1990), « The core competence of the corporation », *Harvard Business revue*, vol.68, no 3, p.148-161

3. Javidan M. (1998), « Core competences: What does it mean in practice », *Long Range Planning*, vol.31, no1, Great Britain, p. 60-71

4. Johnson G., Scholes H., and Frery F. (2002), *Stratégique*, 2e edition, Pearson Education France, p. 193-240

5. Matmati M. (2005), « L'apprentissage de la technologie dans les organisations », in Matmati M. and Le Berre M. (eds.), *Moderniser la gestion des hommes*, Editions Liaisons, Paris, p. 2

6. Munier F. (1997), « Taille de la firme et compétences relationnelles pour innover : Une vérification empirique sur la base de données individuelles d'entreprises industrielles françaises » *Revue Internationale PME*, volume 14, Canada, no 149-287

7. SESSI (1998), « Les compétences pour innover », Les 4 Pages des Statistiques Industrielles, no 85

About the author

Simona Grama, PhD , Site Universitaire de la Manufacture des Tabacs , IAE de LYON, Centre de recherche Magellan, Laboratoire ICOD, LYON. E-mail. : simona.grama@gmail.com, phone: 04. 78. 78. 70. 66.

ENTREPRENEURSHIP AND SMALL AND MEDIUM ENTERPRISES SUCCESS FACTORS: GENDER DIMENSION

Jūratė Guščinskienė, Jadvyga Čiburienė
Kaunas University of Technology, Lithuania

Abstract

The article analyzes the entrepreneurship and small and medium enterprises (SME) success factors from a gender perspective. It reflects the employment policy in the labor market from a gender equality aspect. On the ground of *Eurostat survey of small and medium business success factors in Lithuaia and European Union countries,* determine the business results of gender related factors causing the success of SMEs in Lithuania and the EU. In order to ascertain the attitudes of young people to entrepreneurship and their innate characteristics a survey was carried out in Kaunas University of Technology.

Introduction

Countries around the world, including Europe, the market competitiveness of economy and the growth rate leads to small and medium enterprises (SME) development, and it is promoted by entrepreneurship. In the Lithuanian economy SMEs are playing an increasingly important role. This is evidenced by the growing number of employees in the SME sector, increasing its contribution to the country's economy. SMEs play a crucial role in the implementation of the Lisbon Strategy objectives to promote various innovations, partnerships, competitiveness and employment development.

Researchers show interest in various SME aspects: SME theory and policy were analyzed by C. Levicki (Levicki); attention to the growing importance of SMEs in the context of globalization showed D. Audretsch (2002) and O. Jones and F. Tilley (2003), the international SMEs were investigated by S. Chetty D. Holm (2000); the role of SMEs in the economic system was discussed in current conditions by D.Hitchens (2003), the concept of entrepreneurship, entrepreneurship education and leadership were studied by M.J.Cetron, W.Rocha, R.Lucken (1988); W.G.Nickels, J.M. McHugh, S.M.McHugh (1996); N. Siropolis (1994); R.Jasinavičius, (2006), definitions of entrepreneurship, entrepreneurial competencies, entrepreneurial traits were dealt by M.Kučinskiene (2006), Z. Gineitienė (2005), L. Gegieckienė, A.Gaikšienė (2009); K. Lukaševičius, Br.Martinkus, R.Piktys (2005); women's entrepreneurship education analysis was carried out by R.Venckūnas (2005); the issues of business development were explored by A.Kličius (2001); business development in rural regions was studied by R.Dapkus (Dapkus), small and medium business multi-dimensional analysis were made by I.Mačerinskienė, L. Ivaškevičiūtė G. Sabaite (2002), I.Mačerinskienė, L. Ivaškevičiūtė G. Railienė (2004) and L.Mažylis (2006); the strategy on gender equality, women's entrepreneurship and employment policies in the European Union (EU) was investigated by J.Reingardienė (2004) and others.

The problem of the research. The theme of the study is due to the fact that business is one of the major growth factors having a significant impact on the overall national economy. One of the most important economic policies in Lithuania is entrepreneurship, SME development, leading to job creation and equal opportunities for gender development.

The subject of the paper – small and medium enterprises.

The objective of study – study the success factors of small and medium enterprises and entrepreneurship by gender aspect.

Research methods: scientific literature and online sources analysis, comparative statistics and secondary data analysis of the questionnaire, logical analysis, conclusion formulating.

The importance of SME

Small and medium enterprises are often used as a synonym for business organizations. The importance of SMEs in the country is indicated by the statistical data. The density of SMEs for one thousand of Lithuanian population in January, year 2008, was accounted for 19 companies, and per one square kilometer in Lithuania 0.97 were active. The gross value added of SME in 2006 was 52.4 percent. (Small-and medium-sized enterprises ..., 2008) and employed more than 70 percent of Lithuanian companies labour force (Small and Medium Business, 2009). According to the World Bank's report "Doing Business 2008" Lithuania among 181 countries is under the conditions in favor to develop business occupies 28 place, ahead of countries such as Latvia, France, Portugal, Spain, Italy, Slovenia, Turkey, Greece, Poland and many others (Small & Medium Business, 2009).

On the one hand, Lithuania has the favourable conditions to develop SMEs, as shown by the survey of the World Bank, and, on the other hand, our residents are not keen on doing business. This is reflected by the market analysis and research group "Rait", a study in which the results showed that only 18 percent of Lithuania's population consider themselves as business people. Even a smaller number of people are going to do business in the future - just 5-6 percent. Meanwhile, Professor R. Jasinavičius (2006) argues that in other countries the people that are wishing to do business have a much higher percentage than in Lithuania. For example, in Italy to start a business intends 80 percent of the population. In

The United States - 50 percent of the population. Therefore, the number of 5-6 percent of people planning to start a business in Lithuania is "abnormal" (Viltrakytė, 2007).

Entrepreneurship and SME development are the keys to increasing employment and jobs. On the other hand, even more visual is the analysis of business potential of non-use of gender-based human activity. It is women's intellectual potential and their contribution in the EU's competitiveness that is not fully used.

In 1997 for the first time the EU Intergovernmental Conference in Amsterdam there was declared the goal of full employment and unemployment was declared as the common European problem. The European Council in 1997 confirmed the Employment Guidelines package consisting of 4 pillars (EU Employment ..., 2001, 6):

- Employment – the objective that the labor market would be open to all; it involves two basic moments of strategies: the preventive effect on the fight against unemployment and activity promotion (active labor market policies);
- Entrepreneurship and job creation – objective, innovation-based on business creation, job retention of old and new ones, more favorable tax system on employment creation;
- Adapting – goal: in the conditions of globalization and growing scientific and technological progress to promote the modernization of work, to create conditions for workers to adapt at the workplace;

- Equal opportunities – the goal: to ensure gender equality in access to employment, providing work-related guarantees, and so on.

Global economic development results to postmaterialistic values such as gender equality (equal employment opportunities, and conduct at work, equal pay), discrimination exclusion on age, gender, women's and minority rights and so on, changed materialistic values. In the current period, female employment, independence, wage growth trend is observed both in the EU and Lithuania.

Entrepreneur traits and tendencies of SME development

Significant attention in literature (Nickels, McHugh., McHugh, 1996, 145; Lukaševičius, Martinkus, Piktys, 2005, 170; Gineitienė, 2005, 110-111; Gegieckienė, Gaikšienė, 2009, 12) is devoted for the entrepreneur's traits. The scientists show that the entrepreneur has to be a strong personality: confident, be responsible for their business and their decisions, has to be bold and do not fear risks (see Table 1). Siropolis (Siropolis, 1994, 47) suggested that in the US the business men devote more attention during the first year of business: 12 percent of entrepreneurs devoted at least 80 or more hours per week, 13 percent spent 70-79 hours of work, 28 percent – 60-68 hours of work, 23 percent 50-59 hours, and 23 percent – less than 50 hours.

Table 1

The main features and characteristics of entrepreneurs

Nickels, McHugh, 1996, 145		Lukaševičius, Martinkus, Piktys, 2005, 170		Gineitienė, 2005, 110-111		Gegieckienė, Gaikštienė, 2009, 12	
Traits	Characteristics	Traits	Characteristics	Traits	Characteristics	Traits	Characteristics
self-control	Self-confidence, responsibility for own business	Self-targeting	Self-confidence and discipline	Skills	Manage own business	Innate	Intuition passion, self-seeking, adventurism, reaction, honorary stuffy, self-confidence
Self-confidence	Leadership, constant optimism, and support of objectives	Self-education	Belief in own ideas, the ability to infect the entire team				
Activity	The steady development and implementation of ideas into practice	Targeting action	Make ideas come into practices	Collaboration	Employ and maintain good labour force		
Energy	Emotionality, the ability to work intelectual and physical work is important for business performance	Energy	Ability to work hard, emotional, spiritual and physical vitality			Achieved	Knowledge and practical experience
Uncertainty	The ability to take predictable risks and business uncertainties	Uncertainty tolerance	The ability to take risks and tolerate uncertainty	Views	Thinking, reasoning, personality		

In 2007, Eurostat has initiated a study of success factors of SMEs in the fifteen EU countries (Small and Medium Business Conditions, 2008). In this paper the success of business activities have been assessed only in the activity sphere of choice, the motivation to start businesses and professional activities before the establishment of the company. Some EU countries by gender of entrepreneurs in main activities are shown in Table 2.

The data shown in Table 2 suggest that both in EU and in Lithuania SME men and women often are engaged in services (the EU, women – 98.29 percent., and in

Lithuania – 85.10 percent; accordingly, men: 65.9 percent, and 70,63 percent). By the main spheres of activity, in the EU the least of women (2.16 percent.) and in Lithuania (2.87 percent) specialize in construction business. The least of the activity that men are engaged in both in the EU and Lithuania is financial intermediation (respectively: 2.76 percent and 1.05 percent). Thus, women and men in the EU and Lithuania are mostly engaged in the service business, because the success in this area does not always need huge financial resources.

The sex of the entrepreneurs in EU by main activity spheres

	Gender	All industry	Building	Trade	Services	Hotels, restaurants	Transport, ware-hou-sing, communica-tions	Financial mediation	Real estate, renting, etc
EU	Women	8.55	2.16	41.37	98.29	8.08	2.16	3.89	33.62
	Men	13.08	21.02	27.44	65.90	4.16	5.97	2.76	25.57
AT	Women	4.96	2.12	27.52	92.92	13.10	4.59	0.61	47.08
	Men	8.23	14.34	23.24	77.43	6.04	5.81	1.74	40.60
CZ	Women	7.43	0.60	33.72	91.97	10.10	2.64	1.76	43.74
	Men	21.08	20.77	25.18	58.16	3.27	5.48	1.85	22.39
EE	Women	11.34	3.15	34.45	85.50	4.83	8.82	3.57	33.61
	Men	11.83	9.63	39.14	78.54	3.65	7.51	3.19	25.05
LT	Women	12.03	2.87	47.42	85.10	9.60	5.87	3.87	18.34
	Men	18.75	10.63	39.25	70.63	2.96	11.58	1.05	15.79
LV	Women	8.56	2.90	46.59	88.53	10.60	4.35	1.45	25.54
	Men	16.86	8.00	37.13	75.14	4.20	8.87	1.11	23.83
BG	Women	7.63	2.64	63.43	89.73	10.04	3.78	0.28	12.21
	Men	12.55	5.21	52.33	82.24	9.39	10.58	0.37	9.57

Note: AT – Austria, CZ – Czech Republic, EE – Estonia, LT – Lithuania, LV – Latvia; BG – Bulgaria.
Source: Smulkių ir vidutinių įmonių ..., 2008

During the study of the reasons for fostering the development of Lithuania and other EU countries, entrepreneurs to start a business were recorded. Interestingly, except for the three main reasons which encouraged people to do business in Lithuania and the EU, men and women have identified the same: „desire to be the boss of himself", „the perspective to earn more money" and „willingness to try his hand at business". The main and most important reason that encourages women and men in Lithuania and EU to do business was the „desire to be boss of him".

These results suggest that regardless of the country's economic, cultural and social situation, tradition and experience in business, regardless of the sex, the most important determinant of success in starting a business is the „desire to be the boss of himself". Mostly during the investigation reported in Lithuania and other EU countries, business occupation before the establishment of the company is shown in Table 3.

In most cases reported business occupation before the establishment of the company
in Lithuania and other EU countries

Lithuania	Activities before the establishment of the enterprise	European Union
Women – 63.90 percent	*He/she was an employee*	Women – 51.82 percent
Men – 54.94 percent		Men – 58.11 percent
	He/she led by another company	
Women – 12.34 percent		Women – 11.28 percent
Men – 32.38 percent		Men – 18.42 percent

Source: Smulkių ir vidutinių įmonių ..., 2008

The success of Lithuania and other EU countries entrepreneurs when creating a business was impacted by previous activities before starting SMEs (see Table 3). Both men and women in Lithuania and EU, before starting their own SME activities have already had working experience, moreover, some of them have already led an another company. This experience had an impact on the newly launched business success.

Results and analysis

In order to ascertain the attitudes of young people to entrepreneurship and entrepreneurial inborn characteristics, the KTU Economics and Management Faculty students of II year full-time and evening studies form were questioned. The survey was conducted in 2009 February. The survey consisted of 30 question form

questionnaire, which was based on Kenneth R. (1980) methodology. The distribution of respondents according to the study of forms and sex is shown in Table 4.
85 students were interviewed. The average age of respondents according to the study forms of full-time students –- 20.2 years, on the evening studies – 21.9 years. More characteristic of respondents by sex is given in Table 4. In the full-time study form among students 30.8 percent of men and 2.7 percent of women are employed. The entrepreneurship of full-time students in the form of study is one point higher (10, 5 points) than the unemployed students (9.5 points). The entrepreneurship of full-time working women (6, 0 points) is much lower than the non working student's women that are willing to become entrepreneurs, entrepreneurship (9.9 points). Total women entrepreneurship rates 9.3 points; it is lower than men – 9.8 points.

50 percent of men studying in the evening study form work, women, accordingly – 52 percent. Students attending evening studies have higher entrepreneurship score (11.0 points) than non-working students (10.2 points). The entrepreneurship of women working and willing to become entrepreneurs and studying in the evening form is 9.9 points and is slightly higher than the non working women studying in the evening study form score (9.5 points), which are willing to become entrepreneurs, entrepreneurship.

Table 4

The main characteristics of respondents and their attitudes towards entrepreneurship

Forms of study	Number of res-pondents	Respondents according to gender		Men				Women								
								E+	E				N			
		M	W	vn	E	N		no	vn	no	ne	n	vn	no	ne	n
					no	no	n									
Full time	50	13	37	12	4	8	1	18	1	1	-	-	35	17	2	17
- age, years	20.2	20.2	20.1													
- points	9.4	9.8	9.3	9.8	10.5	9.5	9	9.2	6	6	-	-	9.4	9.9	8.5	8.9
Evening studies	35	10	25	5	5	5	-	14	13	8	1	4	12	6	-	6
- age, years	21.9	22.0	21.9													
- points	10.0	10.6	9.8	10.6	11	10.2	-		10.1	9.9	10	10.5	9.5	9.5	-	9.5
Total	85	23	62	10.2												

The means of symbols indicated in the table: M – men, W – women; E - working students; N – non working, students, *N* – non working students; *vn* – want to become entrepreneurs, both working, both non working students, total; *no* – want to become entrepreneurs; *ne* – do not want to become entrepreneurs; *n* – do not know, like to become an entrepreneur, or not.

The study shows that in the evening study form the entrepreneurship of men is 10.6 points and is more than full-time male student – 9.8 points. The entrepreneurship of women studying in the evening study form has the total score of 9.8 and is higher, than full-time women student entrepreneurship total score, which is 9.3 points.

In further research it is necessary to identify the factors leading to entrepreneurial opportunities growth, because of the current students, both on the evening studies form, and both full-time, both in terms of gender; entrepreneurship is nearly equal and quite low. According to R. Kenneth's point of view, which methodology was used in the investigation, argues that entrepreneurship below 10 points indicates that it is doubtful that success in business will be achieved. While the entrepreneurship score is among 11 to 15, according to the author's methodology, it shows that the score value is in a transitional area, but serious work and effort can bring good results in business. The survey shows that students have weak innate entrepreneurial characteristic (intuition passion, self-seeking, adventurism, reaction, honorary stuffy, self-confidence). Such situation of non developed innate entrepreneurial characteristics is possible due to jet existing, „old or command economy" economic thinking remnants and "new" emerging and developing private-property relations interaction. The destructive external environment force in Lithuania weakens the innate entrepreneurial characteristics.

Conclusions

1. Lithuania has favorable conditions to facilitate the development of SMEs. This is evidenced by the World Bank study in 2007, which results show that in terms of business friendliness Lithuania takes place as the 28th of the 181 countries that participated in the study. However, only 5-6 percent of the population of the country is planning to do business in the future. This rate is very low compared with rates in other countries (for example, Italy – 80 percent).

2. The equal opportunities for women and men in labor markets, in microeconomic, macroeconomic, regional and global levels, in terms of time, affect the economic development and are essential for both individual countries and groups of countries point of view.

3. According to the 2007 Eurostat initiated survey on SME success factors in the 15 EU countries, it was determined that the success depends on the choice of suitable activity. Men and women in the EU and Lithuania mostly are engaged in service business.

The assessment of the success in business activity according by choice, the primary motivation to start businesses and professional activities of entrepreneurs before establishing the enterprise, it was determined that the most important business motive is the „desire to be the boss of himself", regardless of the economic, cultural, social situation, tradition, experience in business and gender differences (such a response option was chosen as best suited opinion for both sexes in Lithuania and the EU). Both sexes in Lithuania and the EU before the start of their own SME activities have already had working experience, moreover, some of them have already led another company. This experience had an impact on the newly launched business to succeed.

4. The R. Kenneth methodology was used in order to ascertain young people attitudes to entrepreneurship and entrepreneurial characteristics. The study included the students of KTU Economics and Management Faculty of II year full-time and evening studies forms. During the study, it was found that despite the gender and study form, the entrepreneurship was relatively low. The survey shows that students have weak innate entrepreneurial characteristic (intuition passion, self-seeking, adventurism, reaction, honorary stuffy, self-confidence).

References

1. Audretsch D. Entrepreneurship: A survey of the literature, a report prepared for the European Commission, Brussels, 2002.
2. Cetron M.J., Rocha W., and Lucken R. Special report: Into the 21st century, 1988.
3. Chetty S., Holm D. Internationalization of Small Manufacturing Firms: A Network Approach'International Business Review. 2000. No. 9, p. 73-93.
4. Dapkus R. Verslo plėtra kaimiškuose regionuose. Prieiga per internetą: http://baitas.lzuu.lt/~mazylis/julram/14/14.pdf
5. Davulis, T. Darbo teisė: Europos Sąjunga ir Lietuva. Vilnius: VĮ Teisinės informacijos centras. 2004.
6. EU employment and social policy. 2001.
7. Gegieckienė L., Gaikšienė A. Verslumas Vilnius: UAB Ciklonas, 2009.
8. Gineitienė Z Verslo kūrimas ir valdymas. Vilnius: Rosma, 2005.
9. Hitchens D. (ed.) Small and medium sized companies in Europe: Environmental performance, competitiveness and management: International EU case studies, Berlin&Heidelberg: Springer Verlag. 2003.
10. Jasinavičius R. Verslumas ir lyderystė. 2006, Prieiga per internetą: http://209.85.129.132/search?q=cache:aLo9jFZTEJcJ:finansai.dtiltas.lt/engine/download.php%3Fid%3D20+verslumas&hl=lt&ct=clnk&cd=1&gl=lt&client=firefox-a
11. Jones O., Tilley F. (eds.) Comperative advantage in SME's: Organizing for innovation and change Chichester: John&Sons. 2003.
12. Kučinskienė M. Verslumas ir aplinkos dinamiškumas, 2006. Prieiga per internetą: http://www.vtvk.lt/index.php?n=407&l=lt
13. Kličius A. Verslo raida: vingiai ir problemos. Filosofija, sociologija. 2001, p.26-34.
14. Levicki C. Small Business: Theory and Policy. Prieiga per internetą: http://books.google.lt/books?id=nJo9AAAAIAAJ&dq=small+business+theory&printsec=frontcover&source=bl&ots=TT_vKgKrLJ&sig=U7Q6YNYzSNNzz8PFnozRkjccG14&hl=lt&ei=VUmsSbP1KM-J_gaJzeXXDw&sa=X&oi=book_result&resnum=1&ct=result
15. Lukaševičius K., Martinkus Br., Piktys R. Verslo ekonomika. Kaunas: Technologija, 2005.
16. Mačerinskienė L., Ivaškevičiūtė, G. Railienė. External financing of small and medium-sized business in Lithuania // Ekonomika ir vadyba / Vilniaus universitetas. Kauno humanitarinis fakultetas 2004, nr. 2(8), p. 80-87.
17. Mačerinskienė I., Ivaškevičiūtė L., Sabaitė G. Smulkaus ir vidutinio verslo plėtros galimybės ir jų problemos // Socialiniai mokslai. – 2002, Nr. 2(34).
18. Mažylis L. Paramos smulkiajam ir vidutiniam verslui administravimo Lietuvoje europinis kontekstas // Viešoji politika ir administravimas. 2006, Nr. 16, p. 37-45.
19. Nickels W.G., McHugh J.M., McHugh S.M. Understanding business. 2nd ed. Boston, MA, IRWIN, 1996.
20. Reingardienė J. Lyčių lygybės strategija ir užimtumo politika Europos Sąjungoje, 2004. Prieiga per internetą: http://www.gap.lt/lt/jrll
21. Smulkių ir vidutinių įmonių verslo sąlygos. Vilnius, 2008. Prieiga per internetą: http://www.stat.gov.lt/lt/catalog/viewfree/catalog/list/?cat_y=1&cat_id=4&id=1386&PHPSESSID=4cf290939b1cea2872a917dfdbcfb2c2
22. Siropolis N., Small business management. A guide to entrepreneurship. 5th ed. USA: Houghton Mifflin Company, 1994.
23. Smulkaus ir vidutinio verslo sėkmės veiksniai Lietuvoje ir Europos Sąjungos šalyse. Prieiga per internetą: http://www.stat.gov.lt/uploads/docs/Verslo_sekmes_veiksniai_2007_1.pdf?PHPSESSID=4e7014f3866ae174422b75229450ac7e
24. Smulkusis ir vidutinis verslas. Prieiga per internetą: http://www.ukmin.lt/lt/svv/
25. Venckūnas R. Atskirų tikslinių grupių (jaunimo, moterų) verslumo ugdymo būdų analizė. Kaunas, 2005 Prieiga per internetą: http://www.ukmin.lt/lt/svv/doc/verslumas_galutinis_priedai.doc
26. Viltrakytė S. Menkas verslumas atsiliepс šalies ūkiui. 2007. Prieiga per internetą: http://www.vtv.lt/naujienos/ekonomika/menkas-verslumas-atsilieps-salies-ukiui.html

Jūratė Guščinskienė, Jadvyga Čiburienė

Verslumas ir smulkaus bei vidutinio verslo sėkmės veiksniai: lyčių aspektas

Santrauka

Straipsnyje analizuojama verslumas ir smulkaus bei vidutinio verslo (SVV) sėkmės veiksniai lyčių požiūriu. Aptariama užimtumo politika darbo rinkoje lyčių lygybės aspektu. Remiantis. Eurostato atlikto tyrimo *Smulkaus ir vidutinio verslo sėkmės veiksniai Lietuvoje ir Europos Sąjungos šalyse* rezultatais nustatyti su verslininkų lytimi susiję SVV sėkmę lemiantieji veiksniai Lietuvoje ir ES (pagrindinės ūkinės veiklos, verslo motyvai). Siekiant išsiaiškinti jaunimo požiūrį į verslininkystę ir jų įgimtas savybes buvo atliktas empirinis tyrimas KTU.

About the authors

Jūratė Guščinskienė, assoc. prof., dr. of Social Sciences, Kaunas university of techology, Faculty of Social Sciences, Lithuania. E-mail: jurate.guscinskiene@ktu.lt, mob. tel.: + 370 685 51910. Research interests: organization sociology, conflicts' sociology, gender problems, social inequality.
Jadvyga Čiburienė, prof., dr. of Social Sciences, Kaunas University of technology, Faculty of Management and Economics, Lithuania. E-mail: jadvyga.ciburiene@ktu.lt, mob. tel.: + 370 613 43624. Research interests: macroeconomic rates, state's political economy, small and medium business and so on.

STUDIES IN CHANGING TECHNOLOGICAL UNIVERSITY IN THE ASPECT OF SOCIALIZING TECHNICAL SCIENCES

Jolita Horbačauskienė, Dalija Gudaitytė

Kaunas University of Technology, Lithuania

Abstract

The article analyses manifestation of values of liberal education in studies of technological university, emphasizing the possibilities of liberal education to socialize technical studies. Socializing of technical studies gives premise to technological university's change. The first part of the paper presents the discussion about engineering education in the light of changing society's requirements as well as components of liberal education conditioned by needs of modern complex world for university graduates. The results of carried research about conditions and possibilities for values of liberal education to manifest, is presented in the last part of the paper. The results revealed technological university students' approach to values of liberal education and the significance of their manifestation in study process as the precondition for successful future professional career.

Keywords
Liberal education, technological university, manifestation of values of liberal education, socializing of technical science studies.

Introduction

Students majoring in engineering should be prepared to live and work as global citizens, understand how engineers contribute to society. They must develop a basic understanding of business processes; be adept at product development and high-quality manufacturing; and know how to conceive, design, implement and operate complex engineering systems of appropriate complexity. They must increasingly do this within a framework of sustainable development, and be prepared to live and work as global citizens. As E. Crawley (2007) notes that is a tall task… perhaps even an impossible one. The aim of the paper is to high lighten the aspect of socializing technical sciences through liberal education in changing technological university studies.

The article analyses manifestation of values of liberal education in studies of technological university, emphasizing the possibilities of liberal education to socialize technical studies. Socializing of technical studies gives premise to technological university's change. The first part of the paper presents the discussion about engineering education in the light of changing society's requirements as well as components of liberal education conditioned by needs of modern complex world for university graduates. The results of carried research about conditions and possibilities for values of liberal education to manifest, is presented in the last part of the paper. The research methods are analysis of scientific literature, written enquiry, statistical data analysis using SPSS. The results revealed technological university students' approach to values of liberal education and the significance of their manifestation in study process as the precondition for successful future professional career.

Liberal education as possibility for socializing of technical science studies

The ground is shifting beneath the contemporary university, and it is a time to take a stock of its precarious situation. The cultivation of intellect, long a central objective of university life, is threatened by political and economical pressures that are redefining and reshaping the functions of higher learning. Politicians, business leaders, academics, students need to think critically about these educational directions.

As M. Nussbaum (2003) argues universities have a variety of roles, but their most crucial is the nourishing of intellectual life. Once accessible almost exclusively to privileged elites, the academic world is now open to a significantly larger proportion of the population. Yet a variety of forces has conspired to shrink the space that the university provides for fostering the life of mind. More than ever, higher education is expected to cater directly, quickly, and continually to the demands of the marketplace. In the eyes of many, economic performance, not intellectual enlightenment, is the university's main aim.

Preparing graduates for employment is an undeniable part of the university activity, historically it has fulfilled this responsibility fairly well and continues to do so. But in the race for the need for a country/society to become globally competitive, technologically advanced, and proficient at producing "knowledge workers" for the 21st century, something significant is being lost. Universities are narrowing their educational vistas, and government policy is forcing them to do so. The decision-making autonomy that universities require fulfilling a range of cultural, intellectual, community-service, and training functions, is quickly eroding. In particular, liberal education is at risk (J. Heywood, 2005).

"Liberal education" is a frequently used but seldom defined concept. It owes its origins to the philosophers and educators of Ancient Greece and Rome; an, remarkably, it has endured for more than 2 millennia. It is the primarily means by which intellectual life has flourished in universities, and over the centuries this has been done in a variety of ways. Indeed, scholars themselves have always disagreed about what liberal education is and how it ought to be pursued, and those debates still carry on. The stated goals of liberal education are sometimes so all-encompassing that everything, including job training and applied research, appear to fall within its domain. This is problematic when universities simultaneously proclaim their undying

devotion to the ideas of liberal education while marrying more and more of their academic life to the assumed needs of the marketplace. As they feel compelled to respond to what one author has called the new "economic fundamentalism", universities incrementally marginalize the humanities, the social sciences, and the fine arts.

As noted by P. Axelrod (2002), M. Nussbaum (2003) there are creative ways to strengthening liberal education and the university as a whole by combining intellectual and employment based education as it is not wrong for students to view the university as a stepping stone to interesting, relatively secure, and well-paying occupations, or important role universities have in preparing graduates for the labor force. But to foster within the university a kind of narrow vocationalism tied to the capricious dictates of the market is exceedingly short sighted and it is culturally costly to the individual and society at large. Among other things, it overlooks the fact that particular intellectual and cultural qualities that liberal education attempts to foster are, directly or indirectly, valuable in virtually all occupations.

As P. Axelrod (2002) notes liberal education in the university refers to activities that are designed to cultivate intellectual creativity, autonomy, are resilience; critical thinking; a combination of intellectual breadth and specialized knowledge; the comprehension and tolerance of diverse ideas and experiences; informed participation in community life; and effective communication skills.

The purpose of engineering education is to provide the learning required by students to become successful engineers – technical experts, social awareness and a bias toward innovation (Ollis D. F., Neeley K. A., Luegenbiehl H. C. (2004)) . This combined set of knowledge, skills, and attitudes is essential to strengthening productivity, entrepreneurship, and excellence in and environment that is increasingly based on technologically complex and sustainable products, processes, and systems. It is imperative that quality and nature of undergraduate engineering education would be improved.

In Western Europe in 1980s and 1990s, the proficiencies of engineering graduates of that time were discussed by university program leaders, engineers and governments, lists of desired attributes to engineers were developed. Common among these lists was an implicit criticism of engineering education for prioritizing the teaching of theory, including mathematics, science, and technical disciplines, while not placing enough emphasis on laying the foundation for practice, which emphasizes skills such as creativity, teamwork, and communications.

As P. Juceviciene (2003) noted this criticism revealed the tension between two main objectives not only within professional and university education but also within engineering education: the need to educate students as specialist in a range of technologies, while at the same time teaching students to develop as generalists in a range of professional, interpersonal, and product, process, and system building skills.

Engineering programs in many universities in various countries across the world that exemplify this tension are the products of the evolution/ development of engineering education in the last 50 years. During those years, programs moved from a practice-based curriculum to an engineering science-based model. The intended outcome of this change was to offer students a rigorous, scientific foundation that would equip them to address unknown future technical challenges. The unintended consequence of this change as noted by E. Crawley (2007) was a shift in the culture of engineering education that diminished the perceived value of key skills and attitudes that had been essential of engineering education until that time.

During last decades there were issued a number of documents in connection with the place of liberal education in engineering education and higher education in general. Among them *Declaration of Bologna Process* (1999) states that bachelor graduate should be able to collect and interpret professional activity information related to present social, ethic and science problems and give evaluation grounding decisions taken; communicate with professional and non-professional environment exchanging information, discussing ideas, problems and decisions made; *Accreditation Board for Engineering and Technology* (ABET 2000) presented engineering criteria where together with other requirements, requirements for liberal education have a very significant place. According to this criteria engineering programs have to demonstrate that their graduates have: an ability to function on multi-disciplinary teams; an understanding of professional and ethical responsibility; an ability to communicate effectively; broad education necessary to understand the impact of engineering solutions in a global and societal context; a recognition of the need for, and an ability to engage in life-long learning; a knowledge of contemporary issues (Ollis D. F., Neeley K. A., Luegenbiehl H. C. (2004));

The World Chemical Engineering Council (2004) produced the list of shortcomings of engineering graduates with respect to important skills engineering graduates should posses leaving university. This list included lack or weak skills of ability to communicate effectively, sense of ethical and professional responsibilities, management skills, effectively work in a team, analyzing information, self learning, and creativity. As E.Crawley et al. (2007) notes this list corresponds to ABET requirements as well as Declaration of Bologna Process of consistent requirements to have abilities to think creatively and critically, to communicate and to work in teams for graduates of universities majoring in engineering programs. UK-SPEC (Engineering Council, (2004) criteria for engineering programs focused on list of required learning outcomes such as knowledge and understanding, intellectual abilities, general transferable skills. The *Union of Industrial and Employers' Confederation of Europe* (2005) supporting creation of the European higher education area expressed requirements for graduates to have cross- disciplinary qualifications. Among these *indispensable cross-disciplinary qualifications and competences* are: an appropriate level of verbal and written articulacy in the national language and in at least one foreign language; ability to work in a team; moderation and feedback techniques; presentation techniques; analytical abilities; coherent thinking; general method competence; creativity and flexibility in the application of knowledge, experience and methods; realization competence; entrepreneurial thinking and acting; intercultural

understanding and competence; continuous learning ability. The philosophy of CDIO approach to engineering education described by E. Crawley et al. (2007) capturing the essential features of a modern engineering education – excitement about what engineers do, deep learning of the fundamentals, skills, and the knowledge of how engineers contribute to society, argues that students should be provided not only with deep learning of technical fundamentals and practical skill sets but also with learning personal and interpersonal skills, understanding the importance and strategic impact of technological development on society, ability to work in teams and communicate effectively, while always exercising personal creativity and responsibility. As E. Crawley et al. (2007) note the task of higher education is to educate students who must be technically expert, socially responsible and inclined to innovate.

C. Kreber (2009) argues there is now a growing awareness that in a world characterized by a rapid change, complexity and uncertainty, problems do not present themselves as distinct subjects but increasingly within trans-disciplinary contexts, thereby calling for graduate outcomes that go beyond specialized knowledge as well as higher education is perceived to play a profound role in contributing to a socially responsible citizenry, in preparing students for the complexities and unpredictability characterizing their future professional, civic and personal lives (R. Barnett, 2000).

How can universities identify the knowledge base and skill set that a liberally educated person must have in light of our diversity of world views and institutional types? Theories abound as to the core elements of a liberal education, but some principles rise above others to the level of nearly universal acceptance. These include communication skills (writing and speaking), critical thinking, and analytical reasoning. Many scholars add appreciation for diversity, enhancement of self-knowledge or identity, development of a personal code of ethics, appreciation for human creativity, and cultivation of aesthetic taste to the list, development of life long learning skills (Association of American Colleges and Universities, 2003; Bauer, Bauer, and Abraham, 2003;). The Association of American Colleges (2002), Accreditation Board for Engineering and Technology (ABET) (2000), Crawley, E.F., Malmqvist, J., Ostlund, S., Brodeur, D. (2007) offered the following list: critical and creative thinking; written and oral communication; quantitative reasoning; understanding diversity; intellectual, ethical, and aesthetic growth; problem solving; preparation for citizenship and social responsibility; developing self-knowledge or identity; cooperation skills; cultivating foreign language skills.

 These ten characteristics listed above are widely accepted as descriptive of a liberal education. Institutions of higher education develop these qualities and impart this knowledge through their entire undergraduate programs, of course, but only the general education programs are required for all students, so theoretically they must contribute substantially to an institution's liberal education goals. A university's faculty members must achieve some level of shared understanding of each area in order to design a coherent education curriculum.

1. Critical and creative thinking

This characteristic appears in the literature with greater frequency than any other, although it is not defined with much specificity. In general, students should be able to gather, synthesize, and evaluate information with good judgment and in the context of a well-rounded view of the world. These cognitive competencies and skills represent the general intellectual outcomes of college that permit individuals to process and utilize new information, reason objectively and draw objective conclusions from various types of data; evaluate new ideas and techniques efficiently; become more objective about beliefs, attitudes, and values; evaluate arguments and claims critically; and make reasonable decisions in the face of imperfect information. As C. Kreber (2009) notes the goal of higher education is to teach students to use critical thinking in the development of new ideas. Perhaps more than any other single characteristic of liberal education, this quality is the comprehensive purpose of the entire undergraduate curriculum.

2. Written and oral communication

E. B. Chew (2004) emphasizes the ability to speak and write clearly is fundamental to the definition of an educated person; in fact, breadth of knowledge is of little use—especially in preparation for citizenship and career success—if it is not combined with effective communication skills. An education in the liberal arts not only fosters effective communication by exposing students to art, literature, philosophy, and science, it also connects these communication skills to the purposes of liberal education in the first place: preparation for effective citizenship and living a worthwhile life. M. Nussbaum (2003), emphasize communication skills as part of a liberal and general education that "prepare[s] current undergraduates for the life they will lead" (p.165).

3. Quantitative reasoning

A liberally educated person should be able to interpret data and make reasonable judgments based on quantitative information (Association of American Colleges and Universities, 2002).

4. Understanding diversity

Diversity education is an example of how the meaning of liberal education is constantly evolving. Many scholars now emphasize the importance of liberal education for students, with the understanding that appreciation for cultural diversity is essential to preparation for citizenship and leadership in our society (M. Nussbaum, 2003).

5. Intellectual, ethical, and aesthetic growth

It is difficult to disagree with the virtues of intellectual, ethical, and aesthetic growth, but it is also difficult to define them or assess the student learning associated with them. At the same time, they provide one of the strongest arguments for infusing a general education program with liberal arts ideals, because there is no guarantee that major programs will address features such as arts appreciation or ethical development. These are important features of a well-rounded education program precisely because they are qualities that society seeks in its leaders.

6. Problem solving

The ultimate purpose of liberal education is to prepare students to address the world's problems. C.G. Schneider (2003) argues that "the emerging model for a contemporary liberal education takes account of the kind of world students inherit and the knowledge and skills

they need to negotiate it" (p. 13). The objective of such an education is to "lead to a more competent, more concerned, more complete human being" (p. 1), or, to understand and deal intelligently with modern life. In theory, an education that provides broad knowledge, fosters values and ethics, and develops skills in critical areas will prepare students for solving problems in their communities, workplaces, and personal lives. As E. C. Lagemann (2003) puts it, liberal education "has made [students] both brave and versatile in facing practical problems" (p. 156).

7. Preparation for citizenship and social responsibility

This characteristic encompasses and provides a rationale for all of the knowledge and skills associated with liberal education. As noted, preparation for citizenship is the oldest standard applied to liberal learning; it has been associated with democracy throughout the history of Western culture. The challenge currently facing institutions of higher education is to extend this franchise to a larger portion of the population than has previously been achieved in democratic societies. D. Carr (2009) refers to the "citizen-leaders who possess the comprehensive knowledge and virtue needed to build a just, compassionate, economically sustainable democracy" and speaks of the "benefit to the nation when liberal education and commerce [are] equally valued and occupy common intellectual space" (p. 20). G. Delanty (2002) places a broad education at the foundation of all of our societies' institutions, when he claims that it is necessary "for the proper working of our political institutions, for the efficiency of our industries and businesses, for the salvation of our economy, for the vitality of our culture, and for the ultimate good of our citizens as individuals" (p. 4).

8. Self knowledge and identity

This characteristic is a product of many factors, including the entire undergraduate curriculum, but a liberal education should be particularly aimed at achieving this goal. An important part of the reason for helping students gain a broad knowledge of the world is to assist them in understanding their place in it. This is linked closely with intellectual development, since acquiring a cogent sense of identity requires clear thinking, sound judgment, and exploration of personal values. Liberal learning enhances self knowledge by exposing students to a variety of cultures, philosophies, and modes of inquiry, and by encouraging them to consider meaningful questions about their futures.

9. Cooperation skills

This goal is part of the emerging paradigm of liberal education. Leadership theory is increasingly emphasizing the need for a leader to be a communicator, and a team member. As G. Delanty (2002) notes when this leadership model is merged with the liberal education agenda of political participation in a democratic society, the definition of good citizenship requires collaboration and cooperation, especially in a pluralistic society. Cooperation is not limited to the citizenship aims of the liberal arts and sciences; it is also linked to intellectual discovery, knowledge of the self, and problem solving. Cooperation skills enable students to become active society's members. This skill is linked to success in the workplace, it is the sort of practical skill that employers desire in graduates.

10. Foreign language skills

Foreign language skills have been part of the liberal education ideal for centuries, although their prominence in many education curricula has waned in recent years. Educators originally believed that learning foreign languages trained the mind (intellectual development) and exposed students to philosophy and literature in the language of the authors (aesthetic taste). Recently arguments for foreign language instruction have focused on appreciation of other cultures and preparation for careers in the international business community.

Students approach to manifestation of values of liberal education in technological university studies: results of the research

In order to inspect current situation of liberal education values in university experiencing transformation bachelor degree study programs in 4 faculties of X technological university were analyzed and the survey was conducted to define the conditions for liberal education in the X university from students' point of view.

Quantitative survey was performed using non-standardized questionnaire consisting of 66 question that were divided into 3 blocks: 1) instructions on how to fill in the questionnaire, 2) block of diagnostic questions (61 closed answer question and 1 open answer question), 3) block of demographic questions (4 closed answer questions).

In the instruction the aim of the survey was presented, the meaning and significance of the survey to its participants was described expecting to motivate them. Special attention was paid to anonymity of the respondents. All the respondents were given homogeneous questionnaires, which allowed comparison of respondents' answers.

The diagnostic questions were based on the analysis on scientific literature.

Questionnaires were distributed to 200 respondents in 4 faculties: Faculty of Humanities, Faculty of Social Sciences, and Faculty of Chemical Technology.

The questionnaire consisted of 11 diagnostic blocks.

Population of respondents consisted of 4th year students from Faculty of Humanities, Faculty of Social Sciences, Faculty of Chemical Technology and Faculty of Telecommunications and Electronics in X University of Technology. Total number of respondents was 200, 50 from each faculty, 77 males and 123 females

Statistical data of the survey was processed by SPSS (*Statistical Package for Social Sciences*) program (SPSS for Windows 12.0) using descriptive statistical methods.
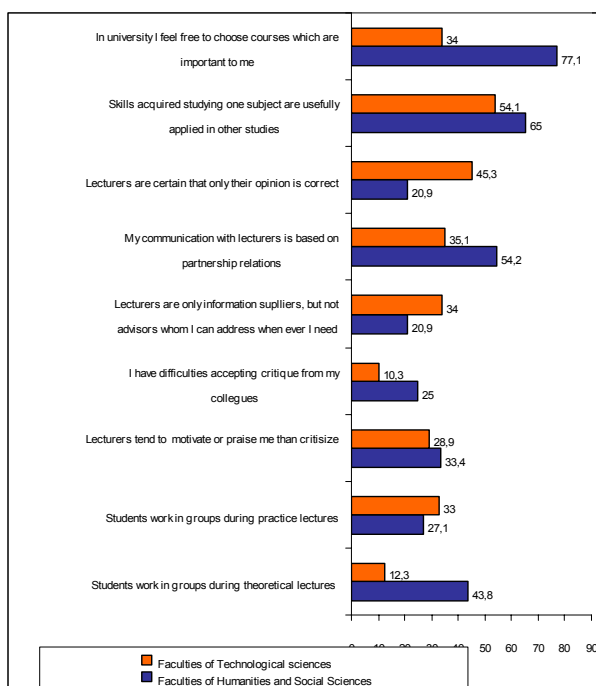
Figure 1. Conditions Fostering Values of Liberal Education in X technological university

Picture 2 represents how students of different faculties evaluate development of skills that could be assigned to liberal education in technological university. These skills stipulated by liberal education were divided into following diagnostic blocks: motivation for professional development and life long learning, tolerance and awareness of socio-context, flexibility, self-development, communication skills, cooperation skills, creativity and critical thinking.

Answer profiles are marked in scale of standard normal distribution which arithmetic mean is equal to 0, standard deviate 1. Red color in the figure represents negative (critical) evaluation while green color – positive evaluation. Students' evaluation of four faculties is marked in this scale of standard normal distribution according to dimensions listed above.

The lowest manifestation of values of liberal education is present in Faculty of Telecommunications, in some cases difference between this faculty and other faculties reach 0.6 probit of SD. Attention should be paid to the fact that respondents in Faculty of Telecommunications give the most positive evaluation to motivation for professional development and life long learning skills in comparison with other faculties. But other essential features of liberal education are evaluated more negatively by students of this technological profile faculty that in other faculties.

Flexibility and self-development the most positively are evaluated by respondents in Faculty of Chemical Technology (more than +0.2 probit of SD), but respondents in Faculty of Telecommunications give negative evaluation to possibilities for development of flexibility and self-development (more than -0.2 probit of SD).

Interesting fact is that respondents in Faculty of Chemical Technology give similar or more positive evaluation to communication and cooperation skills that respondents in other faculties, but in Faculty of Telecommunications these values of liberal education are evaluated negative (-0.3 probit of SD)

Students of Faculty of Chemical Technology evaluated creativity most positively (+ 0.2), students in Faculty of Telecommunications most negative (-0.1). Students of Faculty of Humanities give negative evaluation to creativity. Students of Faculty of Chemical Technology and Faculty of Humanities give most positive evaluation to diagnostic block of critical thinking.

When analyzing conditions fostering values of liberal education in X technological University study system (Picture 1) it should be said that generally students express wish to be educated liberally as they see value and benefits of liberal education in their future life and career, but university does not use to the full possibilities for liberal education: teaching methods still remain conservative, there is lack of partnership relations between students and university teachers, what is considered to be one of necessary conditions for liberal education.
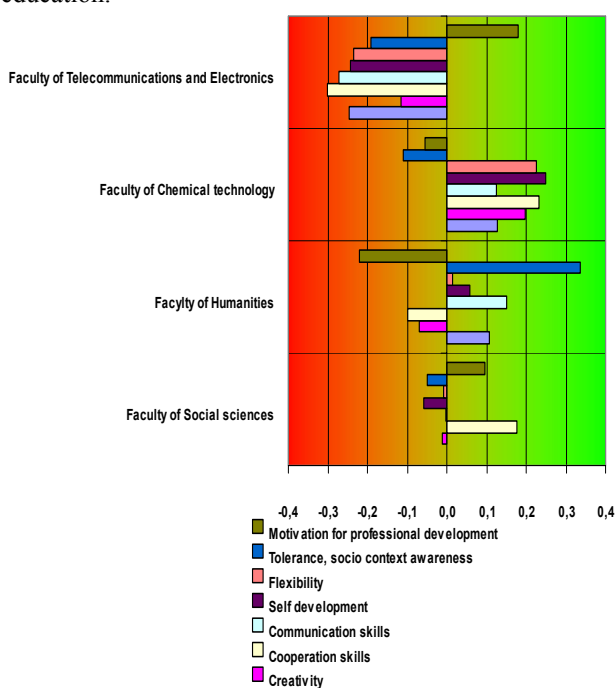

Figure 2. Conditions Fostering Values of Liberal Education According to Faculties
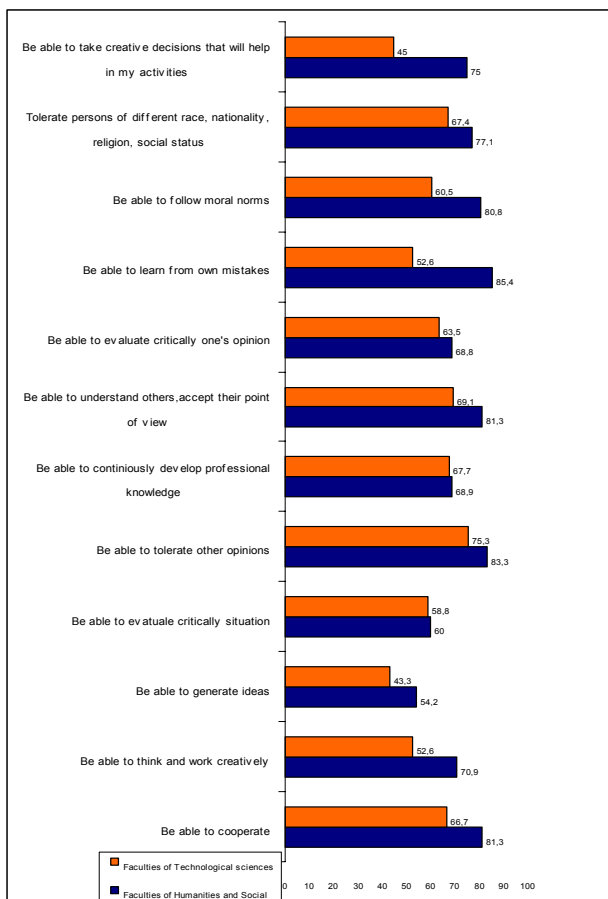
Figure 3. Significance of Skills Developed in University Studies for Professional Career

Analysis of students' evaluation of statements (Picture 3) shows that students see perspectives to apply skills developed in university in professional career. More than 90% agree on possible application of skills in future career. Presumption can be made that values of liberal education are significant to them. Significance of communication, cooperation, motivation for continuous learning show that students value ability to be flexible in today's world. Special attention should be paid to the fact that only half of students of faculties of technological sciences agreed with the statement about ability to follow moral norms when seeking professional career. This could be explained by the fact that society in general has a very vague idea about importance of moral values, so university could be the place to foster this idea.
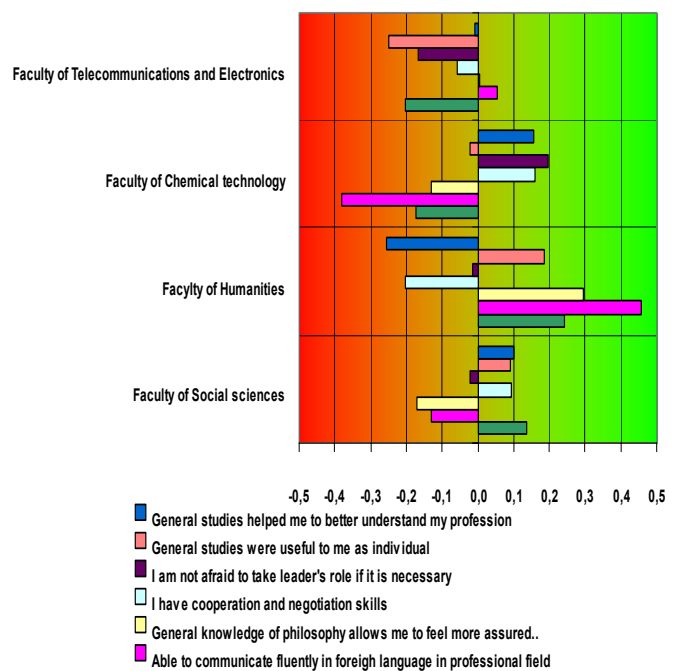

Figure 4. Evaluation and Importance of Skills Developed in General Studies for Future Career According to Faculties

Evaluating general education in university as one of possibilities to develop student' personality significant statistical differences among faculties are noticed. In some cases difference is up to 0.8 probit of standard deviation. Obtained statistical data allow to propose that students of Faculty of Humanities most positively evaluate their ability to communicate fluently and express oneself in foreign language in comparison to other faculties. The highest evaluation (+0.4 probit of SD) is given to ability to communicate and express oneself fluently in foreign language in professional field by respondents of Faculty of Humanities. Students of this faculty also give most positive evaluation to ability to communicate and express oneself fluently in foreign language among other faculties (+0.2 probit of SD).

Students of Faculty of Chemical Technology give most negative evaluation to their ability to communicate and express oneself fluently in foreign language in professional field communicate (- 0.4 probit of SD).

Respondents of Faculties of Chemical Technology and Social Sciences give most negative evaluation of general philosophic knowledge and its influence on surrounding world perception (more than – 0.1 probit of SD), it is obvious and expected that students of Faculty of Humanities most positively evaluated this block (+0.3 probit of SD). Students of Faculty of Chemical Technology (more than +0.1 probit of SD) and students of Faculty of Social Sciences (probit of SD almost +0.1) give the most positive evaluation to cooperation and negotiation skills.

Respondents of Faculty of Chemical Technology give most positive evaluation to leadership skills (+0.2 probit of SD), while students of faculty of Telecommunications give the most negative evaluation to their leadership skills (-0.2 probit of SD) Respondents of Faculty of Chemical Technology give most positive evaluation to the statement that "general studies helped me to understand better my profession" (more than + 0.1 probit

130

of SD), while students of Faculty of Humanities give most negative evaluation to this statement (more than – 0.2 probit of SD). Respondents of Faculty of Telecommunications give most negative evaluation to studies of general education and their own individual development (more than –0.2 probit of SD).

Thus, it can be stated that:

- The idea that values of liberal education are one of core elements in university's studies is proposed and relevant in today's society. In modern, multicultural world such skills as communication, cooperation, motivation for continuous learning, flexibility are becoming vitally important. During last decades there were issued a number of documents in connection with the place of liberal education in engineering education and higher education in general and they all emphasized that skills of critical thinking, creativity, cooperation, communication, personal and aesthetic growth are becoming essentially significant and they lead to socializing of technical science studies what becomes precondition to technological university studies' change.

- Generally, students express wish to be educated liberally as they see value and benefits of liberal education in their future life and career. Nevertheless, the university does not use possibilities for liberal education to the full extend: teaching methods still remain conservative, there is a lack of partnership relations between students and university teachers, what is considered to be one of the most necessary conditions for liberal education. Students see perspectives to apply skills developed in university in future professional career. Most of them agree on possible application of personal skills in their future career. Presumption can be made that values of liberal education are significant to them. Significance of communication, cooperation and motivation for life long learning skills, shows that students value ability to be flexible in today's world and manifestation of values o liberal education in university studies could be the basis for successful professional career.

References

1. Association of American Colleges and Universities, (2002). Greater Expectations: A New Vision for Learning as a Nation Goes to College. Washington DC: Association of American Colleges and Universities.
2. Axelrod, P. (2002). Values in Conflict: The University, the Marketplace and the traits of Liberal Education. McGill – Queen's University Press.
3. Barnett, R. (2000). Supercomplexity and the Curriculum. Studies in Higher Education, 25 (3), 255-265.
4. Carr, D. (2009). Revisiting the Liberal and Vocational Dimensions of University Education. British Journal of Educational Studies, Vol.57, No.1, pp 1-17.
5. Crawley, E., Malmqvist J., Ostlund, S., Brodeur, D. (2007). Rethinking Engineering Education. Springer Science+Business Media, LLC.
6. Chew E. B. (2004). Blending Liberal Arts and Business Education. Liberal Education. Washington: 2004. Vol. 90 Iss.1. p. 56-64. Association of American Colleges and Universities.
7. Counsel of European Professional and Managerial Staff (2005). Higher Education & Professional Qualifications and Competences. EUROCADRES position paper on the Bologna Process. At: http://www.eurocadres.org
8. Delanty, G. (2002) Challenging Knowledge. The University in the Knowledge Society. London: Society for Research in Higher Education and Open University Press.
9. Engineering Council, (2004). UK Standards for professional Engineering Competence: The Accreditation of Higher Education Programs. Available at: http://www.engc.org.uk/documents/EC0006_UKSpecBrochure_MR.pdf
10. Heywood, J. (2005). Engineering Education: Research and Development in Curriculum and Instruction. Wiley-Interscience.
11. Kreber, C. (2009). The University and its Disciplines: Teaching and Learning Within and Beyond Disciplinary Boundaries. New York and London: Rutledge.
12. Jucevičienė, P. (2003) Aukštojo mokslo tradicija, šiuolaikiškumas ir perspektyva: edukologijos tyrimų medžiaga debatams. Kaunas: Technologija.
13. Lagemann, E. C., 2003. The Challenge of Liberal Education: Past, Present and Future. Liberal Education. Vol 89 Iss.2. P. 6-14.
14. Nussbaum, M.C. (2003). Cultivating Humanity. Harvard University Press.
15. Ollis, D. F., Neeley, K. A., Luegenbiehl, H. C. (2004). Liberal Education in Twenty-First Century Engineering. Peter Lang Publishing, Inc., New York.
16. Schneider, C. G.(2003). Practicing Liberal Education: Formative Themes in the Re-invention of Liberal Education. Washington DC: Association of American Colleges and Universities.
17. World Chemical Engineering Council, (2004). How Does Chemical Engineering Education Meet the Requirements of Employment?.At: http://www.chemengworld.org/First_Project.html

Jolita Horbačauskienė, Dalija Gudaitytė

Besikeičiančios technologinio universiteto studijos techniškųjų mokslų socialiniu aspektu

Santrauka

Straipsnyje nagrinėjama liberaliojo ugdymo vertybių raiška technologijos universiteto studijose, akcentuojant liberaliojo ugdymo galimybes techniškųjų mokslų socialinimo atžvilgiu. Techniškųjų mokslų socialinimas sudaro tecnologijos universiteto studijų pokyčių prielaidas. Remiantis mokslinės literatūros analize atskleidžiamos liberaliojo ugdymo raiškos problemos ir galimybės technologijos universiteto studijose. Antroje straipsnio dalyje pateikiami liberaliojo ugdymo vertybių raiškos technologijos universiteto studijose tyrimo rezultatai. Tyrimo rezultatai atskleidė technologijos universiteto studentų požiūrį į liberaliojo ugdymo vertybes ir jų raiškos svarbą studijų procese kaip būsimos profesinės karjeros sėkmės prielaidą. Raktažodiai: liberalusis ugdymas, technologijos universiteto studijos, techniškųjų mokslų socialinimas.

About the authots

Jolita Horbačauskienė, PG of Education, Faculty of Social Sciences, Kaunas University of Technology, Institute of Education, Lithuania. Research interests: liberal education, expression of values of liberal education, university of technology. E-mail.: jolita.horbacauskiene@ktu.lt
Dalija Gudaitytė, dr. of Social Sciences, Faculty of Social Sciences, Kaunas University of Technology, Lithuania Research interests: liberal education, a mass higher education. E-mail.: dalija.gudaityte@ktu.lt

TOWARDS RESULTS – BASED STRATEGIC MANAGEMENT IN LITHUANIAN PUBLIC SECTOR

Margarita Išoraitė

Mykolas Romeris University, Lithuania

Abstract

This article focuses on the use results based strategic management in Lithuanian public sector. Strategic planning has been used in Lithuanian government for 10 years now, but little is known about how it is used and the results obtained. Strategic planning system in Lithuania was introduced in 1999. Public expenditure management process follows the principles of strategic planning and program budgeting across all public institutions. Financial resources are allocated according to the priorities (government and ministry level). Each year ministries and Government agencies prepare the strategic action plans where they state the mission; strategic goals; major new reforms; programme goals; results to be achieved and financial resources needed. The strategic plans are approved by Government and published to the society. Institutions report on the progress achieved against planned targets. Findings do not show a dramatic expansion in the use of strategic planning, but there is some evidence of growing sophistication, as demonstrated by links to other management and decision-making activities. Managers were enthusiastic about their experiences with strategic planning and largely satisfied with their achievement of goals and objectives. Performance management, on the other hand, is an integrated strategy with the goal of improving the performance of organisations and the individuals in them. Performance management therefore consists of system. Due to the increasing challenge around funding Lithuanian public services, in addition to measuring and managing the quantity and quality of public sector goods and services, much more emphasis is being brought to bear on measuring and managing the cost thereof.

Introduction

It is a challenging job for government agencies to provide value while balancing among the expectations of individual citizens and the need for operational excellence and political return. Today, government cabinets' measurements of public agencies are increasingly results-based. In addition, the Lisbon Charter of the EU has put pressure on individual public sector agencies across Europe to perform as never before. The public sector has traditionally viewed performance management as an internal pursuit, and measured success accordingly. New requirements for the achievement of goals (as well eligibility for funding) will be based on cross-national, as well as national and local, collaboration and will require the public sector to approach performance management from a more external viewpoint. Increasingly, cabinets are communicating measurable objectives to agencies and results to voters and society at large, and officials will no doubt be held accountable for reaching the goals they set. Therefore, the enforcement of service agreements with public agencies that are based on actual results will become increasingly strict. Current efforts to measure and manage performance will need to be enhanced, if not overhauled. Government officials must begin to think in terms of creating "public value." That is, how they can best align the external, and often competing, requirements of all stakeholders from cross-national entities to individual taxpayers, measure their performance in fulfilling those requirements and then translate data from performance measurements into actions that will improve efficiency across the agency. Developing a good understanding of public value and performance management will become a top priority as government agencies seek to satisfy the competing requirements of all external stakeholders.

Strategic planning in public institutions is especially relevant today when it comes to growing more aware of the programming in resource planning and allocation, management and administration. Strategic planning success depends on how the principles and procedures that will be associated with certain of its operating costs, their operational circumstances and situations. (Bagdanavičius, 2004,). Strategic management process of development to help organizations improve decision-making process, formulate strategic plans and direction. The organization is encouraged to examine the external and internal problem situations, adapt to changing conditions. (Backūnaitė, 2007). Public economic situation, state capacity, the image of integration processes and access to world financial and political support for institutions dependent on public sector institutions the ability to plan, prepare and effectively make decisions, monitor the implementation process. Public administration management changes, targets, trends depend on the processes taking place in interaction between the public and private sectors, increasing economic opportunities for the public. Therefore, society requires that governments effectively managed public sector, to ensure a higher standard of living and dealing with public resources to carry out the national and international conflict prevention. (Ginevičius, 2001,). Characteristics of strategic management in public organizations due to environmental (market restrictions, political influence) are agreement (the scope of activities, publicity, property) and organizational processes (objectives, operational freedom, expectations, promotion) factors. The analysis of environmental factors can be pointed out that the preconditions for the conclusion of the strategic processes of public organizations are required to identify customer expectations; governments need to develop cooperative relationships with other organizations, and negotiating

deals with the political authorities of those lists to be incorporated into the main decision-making processes. Agreement factor points out that realize the strategic management process to external stakeholders and to monitor, identify interest groups and their criteria for assessing the organization's performance. (Backūnaitė, 2007,).

Strategic management systems for public organizations to adapt to the characteristics of each organization, so the system operates only in those organizations, which are set out a clear mission, objectives, tasks, powers, clear evaluation criteria and information on the implementation of the strategy and cost benefits. Is the program management, during which the activities of the expected results of separate programs goals and objectives.

Most of the literature and analysis is about private sector strategic management (Vasiliauskas A., Morkūnaitė R., Stoner J, Peter FitzRoy and others) and little is devoted to public sector institutions strategic management. Given the complexity of the public sector developed value, environment, resources and / or power, should pay more attention to this sector studies, because only then can find out whether it is carried out effectively strategic planning in state institutions, the problems encountered and how to improve this process.

The main purpose this article is based on literature analysis and secondary data analysis to evaluate results – based strategic management in Lithuanian public sector.

The objective of article – strategic mangement.

The subject of article - rresult based strategic management in Lithuanian public sector.

Tasks of this article are:
1. To analysis the origin of strategy.
2. To evaluate strategic management and startegic planning definition.
3. To analysis ttheoretical aspects of results - based management.
4. To evaluate rresult based strategic planning and management in Lithuanian public sector.

Research method is literature analysis.

Definition of strategy

The definition of strategy has been adopted from the military science and now is used in business science. Strategy is a term that comes from the Greek *strategy*, what means general ship. In the military, strategy refers to manoeuvring troops into position before the enemy is actually engaged. The classic definition of strategy was given by Carl von Clausewitz, who defined strategy as the theory of the use of combat for the object of war. Strategy is different from tactics. In military terms, tactics is concerned with the conduct of an engagement while strategy is concerned with how different engagements are linked. In other words, how a battle is fought is a matter of tactics: whether it should be fought at all is a matter of strategy. Lawrence Freedman defined it in a way that comes closer to today's needs, describing strategy as a theory of the application of power, where power is the ability to produce intended effects. *According to George Steiner (1979) s*ome of the definitions include the following:

1. Strategy is that which top management does that is of great importance to the organization.
2. Strategy refers to basic directional decisions, that is, to purposes and missions.
3. Strategy consists of the important actions necessary to realize these directions.
4. Strategy answers the question: What should the organization be doing?
5. Strategy answers the question: What are the ends we seek and how should we achieve them?

Strategies in general have been described as a way in which managers try to simplify and order a world which is too complex and too chaotic for them to comprehend (Whittington, 1993). Henry Mintzberg, (1994) stated, that people use strategy in different ways, which are:

1. Strategy is a *plan*, a how a means of getting from here to there.
2. Strategy is a *pattern* in actions over time.
3. Strategy is *position*; that is, it reflects decisions to offer particular products or services in particular markets.
4. Strategy is *perspective*, that is, vision and direction.

Porter (1986) stated that strategy is about competitive *position*, about differentiating yourself in the eyes of the customer, about adding value through a mix of activities different from those used by competitors. Porter defines competitive strategy as a combination of the ends (goals) for which the firm is striving and the means (policies) by which it is seeking to get there.

Three key principles underlie strategic positioning:

1. Strategy is the creation of a unique and valuable position, involving a different set of activities. Strategic position emerges from three distinct sources:
   • serving few needs of many customers;
   * serving broad needs of few customers;
   * serving broad needs of many customers in a narrow market.
2. Strategy requires you to make trade-offs in competing—to choose what *not to* do. Some competitive activities are incompatible; thus, gains in one area can be achieved only at the expense of another area.
3. Strategy involves creating fit among a company's activities. Fit has to do with the ways a company's activities interact and reinforce one another.

Business Strategy is a term used in business planning that implies a careful selection and application of resources to obtain a competitive advantage in anticipation of future events or trends. Business Strategy is concerned more with how a business competes

uccessfully in a particular market. It concerns strategic decisions about choice of products, meeting needs of customers, gaining advantage over competitors, exploiting or creating new opportunities.

According to Mintzberg (1978) we see strategy as a sequence of top managerial decisions exhibiting a consistency or pattern over time. Mintzberg und McHugh (1985) state that strategies in the public sector are too often equated with planning and a deliberated articulation of policies which are realized after being formulated. In their opinion, strategy should not only be seen as a constant but as a development process which is shaped by individuals and realizes a dynamic alignment and design of all the organizational activities. Following up this

definition it can be resumed that the concepts of strategic management and strategic change are interlinked by now. The first strategic management publications differentiate between strategy as a static plan on the one side and the implementation as mode of governance on the other side. Current publication rarely divides strategic management and strategic change integrating both sides into a circular development process of strategy (Zan and Zambon, 1992).

Strategy is all these—it is perspective, position, plan, and pattern. Strategy is the bridge between policy or high-order goals on the one hand and tactics or concrete actions on the other. Strategy and tactics together straddle the gap between ends and means. In short, strategy is a term that refers to a complex web of thoughts, ideas, insights, experiences, goals, expertise, memories, perceptions, and expectations that provides general guidance for specific actions in pursuit of particular ends. Different definition of strategy is shown in Table 1.

The concept of strategy development and analysis of strategies for interpretation are two main criteria by which different concepts of the overall strategy:
1) where priority is given to external or internal factors in business strategy;
2) where priority is given to the subjective and objective criteria.

Objective or subjective criteria of the concept of strategy have a number of differences of principle.

Objective criteria mean that you can find a clear environmental and business structure of the internal factors, which exist to clarify the causes and consequences of relationships, and to provide feedback to future corporate actions. In this case, the undertaking strategic process will consist of strategy formulation and implementation. The first stage will be dealt with facts about the environment and the company and the future action plan is drawn up, while the second phase plan will be implemented.

Subjective criteria imply that the strategic development of companies will be an integral part of its staff, their experience and skills training. Enterprise strategic position will change, if the employees gather new knowledge, acquire new skills and / or will establish new interconnection.

Four possible combinations of these criteria, reflecting the four different strategies and the formulation of theories explaining:

1. Classical (traditional) theory of the strategy is the strategy describes how the position of individual businesses finding the industry structure. It is assumed that each industry structure is stable, easily identifiable. Strategic analysis and its instruments are made in precisely the analysis of such branches. Strategy in accordance with the classical theory is a long term action plan. Strategic analysis of an object is a separate business unit. Strategic analysis is based on economic analysis. The main strategic decision criterion is an economic benefit. Strategy formation is the result of rational analysis. Another important feature is that between the firm and the environment dominated by simple linear relationship. It is therefore possible to predict what actions will rebound. Thus after the necessary analysis to forecast the company's situation in the future, is to see how the environment will respond to intra-enterprise activities and develop an appropriate strategy. M. Porter, on the basis of these assumptions, the company's strategy was seen as a competitive weapon, and its analysis used the term "competitive strategy". According to M. Porter, competitive strategy formulation is the key enterprise application to its environment and industries of the separate business unit competitive strategy is to find a position for your business discipline to enable them to best defend it against competitive forces or to allow them to influence the way most favourable to the company. J. Fry and P. Killing's flexible strategy defines the essence and they do not associate exclusively with the environment. Objective of the strategy - take the basic business concepts, which reflect the mission and vision, and to express their ways, which could be used in analysis and in daily activities. The strategy defines the key components, provides for the priorities and set boundaries. Strategic process, according to this theory, consists of two parts: strategy formulation, which will be the centre of strategic analysis and strategy. This theory is criticized on the grounds that it is difficult to determine the boundaries between industries, the environment often changes, and it is difficult to plan long term.

2. Company competencies (resources and capabilities) strategy includes the theory of resources, business skills, basic skills and other companies that fall outside the framework of classical theory. Their common characteristic is that the focus on formulating a strategy to appoint an outside firm action, and its all kinds of resources, skills and competency base for analysis. Approach of this theory is formulated by Robert Grant as resource-based theory of strategy. The strategy is defined as a company's internal resources and skills, the external environment facing opportunities and risks of mutual coordination. Mr Grant's strategy is similar to the classic theory, but the difference is that the resource-based theory proposes a strategy to disregard all external environmental changes, and select the resources, talent, competences, which the company may use more than its competitors, and the choice of strategies, exploiting the best these advantages. According to this theory, in order to clarify the reasons for the success of the undertaking, it is necessary to analyze the unique ability of firms and their intangible resources. Particular, this theory is the concept of introducing the basic skills. Basic competence - is the collective learning organization, especially how to coordinate the various production skills and integrate multiple technology streams], which is a technical or management subsystem that integrates various technologies, processes, resources and innovation in providing products or services that guarantee has a permanent competitive advantage and added value. This theory, the main disadvantage is that it has not been formed; it can not propose a single strategy development methodology.

3. Inter-organizational communication network strategy theory. According to this theory, an integral part of enterprise is communications network. Strategic actions under this theory is the actors' activities affecting the position of their communications network, i.e., the actions, which the company change its position among

other organizations. According to network theory, the two companies on the market are related in some links. Possible merger is:

1) operational communications: technical, administrative, commercial and others, which help to connect directly to one organization to another, without intermediate links;
2) resource connections: technological communication, tangible or intangible, communication, knowledge, everything that an organization can use as a resource. These links can indirectly link the two organizations;
3) the participants relations of these contacts affect the behaviour of the two organizations, which depends on their actions in the network / market. These contacts are not necessarily regulated by a second organization; it may equally well be affected by the intermediate links, or other organizations.

These strategies are the disadvantages of the company's strategy is not independent of one establishment choice, address the selection of each company and other network operators to position the business performance of almost entirely due to its position in the network, not a strategic plan drawn up specifically because the company in contact with other companies.

4. Learning organization theory is the most distant from the classical theory of strategy. This strategy comes from the theory of the development of the theory of organizations. Organizations of the theory - central place - a better human resources company, their training, team formation, and so on. Thus the main component of an organization is to develop the human resources of their training. The organization itself is also involved in staff training: putting in place systems that promote or hinder workers' education and knowledge to mobilize individuals, organizations moving into the so-called memory, the development of various organizational systems (technological, managerial, etc..), new procedures, policies, activities traditions. In summary, one can say that this theory of the strategy must be subjectively conditioned (to depend on people's abilities rather than on objective market or technological factors), and must come from domestic organizations. Modern understanding of the strategy has changed significantly compared with the traditional. It was previously thinking that the strategy is a multi-annual plan for competitive advantage gain or maintain.

Table 1

Definition of strategy by different authors

Author	Definition of strategy
Liddell Hart (1967)	Concluding his review of wars, policy, strategy and tactics, Liddell Hart arrives at this short definition of strategy: "the art of distributing and applying military means to fulfil the ends of policy." Deleting the word "military" from Liddell Hart's definition makes it easy to export the concept of strategy to the business world.
Steiner (1979)	Some of the definitions in use to which Steiner pointed include the following: Strategy is that which top management does that is of great importance to the organization. Strategy refers to basic directional decisions, that is, to purposes and missions. Strategy consists of the important actions necessary to realize these directions. Strategy answers the question: What should the organization be doing? Strategy answers the question: What are the ends we seek and how should we achieve them?
Kenneth Andrews (1980)	Corporate strategy is the pattern [italics added] of decisions in a company that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the company is to pursue, the kind of economic and human organization it is or intends to be, and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers, and communities.
Mintzberg (1994)	Strategy - a company activity within a certain period of the system.
Cole (1994)	The strategy is treated as long-term organizational goals and objectives setting, activities and uptake of these goals and objectives necessary to implement the allocation of funds.
Porter (1986)	Porter argues that competitive strategy is "about being different." He adds, "It means deliberately choosing a different set of activities to deliver a unique mix of value." In short, Porter argues that strategy is about competitive position, about differentiating yourself in the eyes of the customer, about adding value through a mix of activities different from those used by competitors. In his earlier book, Porter defines competitive strategy as "a combination of the ends (goals) for which the firm is striving and the means (policies) by which it is seeking to get there." Thus, Porter seems to embrace strategy as both plan and position. (It should be noted that Porter writes about competitive strategy, not about strategy in general.)
Tomson, Striklend (1998)	The strategy consists of actions and assumptions of management to achieve performance targets. Strategy is primarily a planning activity that provides both excitement and risk.
Jucevičius (1998)	Strategy may vary according to business activity, size and location of the market, the nature, timing and other activities. It is therefore difficult to establish a unified strategy formation model, which is suitable for various enterprises.
Vitkienė (2004)	The strategy is understood as a basic action plan to meet its goals.
Vasiliauskas (2004)	Strategy is the decisions in defining the future of the company objectives and key actions and measures to achieve those objectives. The strategy is linked with the company, which has a broad meaning generally understood as the people operating the system connects with the functioning of the objectives and measures to achieve those objectives.

Strategic planning and management in public sector

Strategic planning is, in the military sense, an ancient science of warfare. Military campaigns and battles are typically referred to in historical literature as large-scale stratagems to confront and engage the enemy. However, strategic planning in the management and administrative context is a modern concept and process identifiable within both the corporate and public arenas.

According to the literature, states (and also many local governments) essentially agree that strategic planning is a process of developing a long-term plan to guide an organization, for example, a state agency, department or commission, towards a clearly articulated mission, goals and objectives. It is a process of assessing where an organization is presently, ascertaining the challenges and opportunities that present themselves, and determining what destination is most desirable and how to get there.

• The establishment of a long-range, unified and broad direction (a "plan") for state government in the policy areas of education, health and human services, transportation, public safety, commerce, natural resources, and criminal justice.

• The facilitation of the governor and legislature in being more responsive, and accountable to the current and emerging needs of their state.

• The allocation of limited resources, via the state's budgetary process, in a more rational, and "results-producing" way.

• The improvement of communication among all state leaders and better coordination of the "omnibus" policy/fiscal decision-making process.

• The measurement of the progress of state-wide strategic efforts, by all planning participants, and the updating or revision of these efforts as warranted.

For these states, generally speaking, the key elements or steps of the strategic planning process are fairly rudimentary. Strategic planning is simply a formal yet flexible process to determine where an organization is currently and where it should be in the future. There is agreement, as evidenced in recent literature, in both theory and practice, on the general steps that are involved in a strategic planning process. By and large, these are six steps and can be summarized as follows:

1) An "environmental scan" or a situational analysis of the strengths and weaknesses of one's organization, including an analysis of external threats and opportunities (typically called a "SWOT"). This includes also a "stakeholder analysis" which is an analysis of persons, groups or organizations whose interests and concerns are of key importance to the overall strategic process;

2) The formation of a vision for the future and an accompanying mission statement which defines the fundamental purpose of an organization, its values, and its boundaries;

3) The development of general goals, specific targets or objectives, and performance measurements to gauge organizational progress;

4) A set of "action" strategies to indicate what will be done to accomplish its goals and objectives;

5) The implementation of detailed operational or tactical plans that provide for staff assignments and schedules; and finally,

6) An evaluation component to monitor and revise the overall strategic approach as it unfolds.

With these definitions given, a quick review of the literature gives several other useful connotations for the term "strategic planning." Boulter (1997), for example, similar to the other definitional references above, defines strategic planning as "a procedure for developing a long-term and policy-oriented device or scheme that ties together the present to a clarified image of the future". He proceeds to state that "strategic planning sets out to identify specifically an agency or governmental unit's mission, goals, measurable objectives, and performance strategies." Boulter states that: It includes an assessment of an agency's performance and accomplishments using a multi-year outlook. It also provides a solid basis for priority-based resource allocations and decisions using a decision-making process that relies on careful consideration of an agency's capabilities and environment. In developing a strategic plan, an agency identifies policy and other issues that the agency faces or will face over the course of four or more years. Another definition in the literature that is oft used to explain what strategic planning is comes from Bryan Barry's book entitled *Strategic Planning Workbook for Nonprofits Organizations* (1997). Barry sums up the definition of strategic planning in very clear and distinct terms. He states that it is *what* an organization intends to achieve and, secondly, h*ow* leadership within an organization will direct or utilize its resources to achieve its ends. This definition requires that decisions be made about:

1) The vision, mission, or goals an organization will follow;

2) Whom an organization (client, customer, stakeholder, etc.) will serve;

3) An organization's position and responsibility within the community;

4) The types (and quality) of services and/or products to be offered;

5) The resources required to be successful and thrive (staff, equipment, facilities, etc.);

6) The best combination of above items 2 – 5 to achieve an organizational vision, including its mission and goals.

Table 2

Aims of Strategic Planning (Jack Koteen (1989)

Aim	Definition
Provide Strategic Direction	In setting direction, three purposes stand out: 1) strategic planning sets goals on where an organization wants to go; 2) it indicates where resources are to be concentrated; and 3) it gives top priority and attention to strategic goals.
Guide Priority Use of Resources	Resources are scarce or limited. Strategic planning allows for sound and pointed allocation of resources—human, financial, and material.

Set Standards of Excellence	Strategic planning allows an organization to establish *shared* values and standards of excellence
Cope with Environmental Uncertainty and Change	Strategic planning aims to be flexible and provide contingencies for uncertainty and change.
Provide Objective Basis for Control and Evaluation	Strategic planning allows for marking success and failure. Performance measurement or tracking of strategic objectives and action plans are of significance and serve as a basis for control.

The objective of strategic planning is, according Eadie (2000), to maintain a favourable balance between an organization and its environment over the long run. Bryson (1995) stated that strategic planning is a disciplined effort to produce fundamental decisions and actions that shape and guide what an organization is, what it does, and why it does it. It provides a systematic process for gathering information about the big picture and using it to establish a long-term direction and then translate that direction into specific goals, objectives, and actions. Nutt and Backoff (1992), and Koteen 1989 stated, that strategic planning involves clarifying mission and values, developing a vision of the future, analyzing external challenges and opportunities, assessing internal strengths and weaknesses, developing strategic goals and objectives, identifying strategic issues, developing and evaluating alternative strategies, and developing action plans. Strategic plans do not implement themselves, and they may well be resisted by employees who feel threatened by change or by the institution of additional controls (Franklin 2000) or feel stymied by labour–management conflicts (Donald, Lyons, and Tribbey 2001). Moreover, public managers may fail to link their strategic planning efforts to other critical decision-making processes. Mintzberg (1994) is one of the most vocal critics of strategic planning precisely because organizations' planning activities are too often completely divorced from performance measurement and resource allocation. Thus, effective strategic management, the all-encompassing process of developing and managing a strategic agenda, is of the utmost importance. Koteen (1989) defines strategic management as a broad concept that embraces the entire set of managerial decisions and actions that determine the long-run performance of an organization. Strategic planning is the primary element but not the essence of strategic management. Steiss (1985) defined that, strategic management is concerned with deciding in advance what an organization will do in the future (planning), determining who will do it and how it will be done (resource management), and monitoring and enhancing ongoing activities and operations (control and evaluation).

Having reviewed several definitions and interpretations of strategic planning, a few words on Mintzberg's schools of thought on "strategy formation" will be helpful at this point. Mintzberg (1994) posits that there are 10 schools of thought associated with strategic planning (see Table 3). The first three are related and are designated: "Design, Planning, and Positioning." These three are, according to Mintzberg, *prescriptive* in nature, that is, they strive to elucidate—or to put into plain words—the appropriate methods or procedures of making strategy. The Design and Planning Schools are almost identical with the exception that the Planning School is more "formal" in its prescribed processes than that of the more conceptual and "informal" processes connected with the Design School. Both are essentially SWOT analyses and, therefore, their strength lies in the assessment stages of strategic planning. The Positioning School places greater emphasis on "content" rather than process and for this reason Mintzberg terms it as being more "analytical" in the rational or methodical sense. The remaining seven schools of thought Mintzberg categorizes are *descriptive* by comparison. That is to say, they are strategic approaches or viewpoints that take on thematic interpretations. For instance, Mintzberg describes the Cognitive School as one which focuses on mental or deliberative processes. In the case of the Entrepreneurial School of strategic planning, the mainstay is a "strong person" with a compelling vision of the future. The Learning School places emphasis on collective or "group-think."

SCHOOLS	Source	Base Discipline	Champions	Intended Messages	Realized Messages	School Category	Associated Homily	Some Shortfalls
Design	P.Selznick	None (Architecture as metaphor).	Case study teachers (especially at or from Harvard University), leadership aficionados, especially in the United States	Fit	Think (strategy making as case study)	Prescriptive	"Look before you leap"	Neither analytical, nor intuitive. Too static for the era of rapid change.
Planning	I.Ansoff	Some links to urban planning,	"Professional" managers, MBAs, staff experts	Formalize	Program (rather than	Prescriptive	"A stitch in time saves nine"	Neither supports real-time

		system theory, & cybernetics	(especially in finance), consultants, & government controllers - especially in France and the US		formulate)			strategy making nor encourages creative accidents.
Positioning	Sun Tzu's *'The Art of War'* Michael Porter Purdue University	Economics (industrial organization) & military history	As in planning school, particularly analytical staff types, consulting boutiques", & writers, especially in the US	Analyze	Calculate (rather than create or commit)	Prescriptive	"Nothing but the facts, madam"	Strategy is reduced to generic positions selected through formalized analysis of industry situations.
Entrepreneurial	J.A.Schumpeter, A.H.Cole & others in economics	None (although early writings come from economics)	Popular business press, individualists, small business people everywhere but most decidedly in Latin America & among overseas Chinese	Envision	Centralize (then hope)	Descriptive (some prescriptive)	"Take us to your leader"	Vague vision; strategies are designed manly based on the leader's intuition.
Cognitive	H.A.Simon & J.March	Psychology (cognitive)	Those with psychological bent - pessimists in one wing, optimists in the other	Cope or create	Worry (being unable to cope in either case)	Descriptive	"I'll see it when I believe it"	Too subjective approach to strategy formulation - it is just in the head of the strategist.
Learning	C.E.Lindbiom, M.Cyert, J.G.March, K.E.Weick, J.B.Quinn & C.K.Prahlad & G.Hamel	None (perhaps some peripheral links to learning theory in psychology & education). Chaos theory in mathematics.	People inclined to experimentation, ambiguity, adaptability - especially in Japan and Scandinavia	Learn	Play (rather than pursue)	Descriptive	"If at first you don't succeed, try, try again"	Strategy development process is rather chaotic, unpredictable and process-rather than result-oriented
Power	G.T.Alison (micro), J.Pfeffer & G.R.Salancik, & W.G.Astley (macro)	Political science	People who like power, politics, & conspiracy, especially in France	Promote	Hard (rather than share)	Descriptive	"Look out for number one"	Focuses mainly on the clash of self-interests of stakeholders during the process of strategy development
Culture	E.Rhenman & R.Normann in Sweden	Anthropology	People who like the social, the spiritual, the collective - especially in Scandinavia and Japan	Coalesce	Perpetuate (rather than change)	Descriptive	"An apple never falls far from the tree"	Not well suited for radical change projects.
Environment	M.T.Hannan & J.Freeman.	Biology	Population ecologists, some	React	Capitulate (rather	Descriptive	"It all depended"	Severe limits to strategic

	Contingency theorists (eg D.S.Pugh et al)		organization theorists, splitters, & positivists in general - especially in the Anglo-Saxon countries		than confront)			choice.
Configuration	A.D.Chandler, McGill University group, R.E.Milles & C.C.Snow	History	Lumpers & integrators in general, as well as change agents. Configuration perhaps most popular in the Netherlands. Transformation most popular in the US	Integrate, transform	Lump (rather than split, adapt)	Descriptive & prescriptive	"The everything there is a season"	Polarized between two approaches favouring either radical or incremental change

Figure 3. Schools of Thought on Strategic Planning

Based on the Sloan Management Review[1], 1999

Strategic planning is instrumental to the National Baldrige Quality Program. The prestigious Baldrige Award is given to world-class organizations in both the private and public sectors once a year. (In 1999, two additional public-oriented categories were introduced—education and health.) The award is based on seven criteria4 used by examiners in formal assessments of an organization—as based on the excellence of its processes, efforts, and results. Strategic planning is the second Baldrige criterion and asks organizations basically three things:
1) How does your organization develop strategic objectives and action plans?
2) How are these strategic objectives and action plans implemented by your organization?
3) How does your organization measure the progress or accomplishment of these objectives and action plans?
It should be noted that the Baldrige program provides two key definitions for organizations to consider when competing for the Baldrige Award or when simply using Baldrige techniques for self-assessment purposes. First, "strategy development" is defined as an organization's method or approach used to prepare for the future. Second, the term "strategy" is to be understood generally. "Strategy might consist of one or all of the following: new products, services, and markets; operations and activities; and new partnerships and alliances".
More specifically, one key component of the Baldrige process asks simply what *steps* are to be taken in the organization as regards strategic planning. Baldrige expert Mark Graham Brown states that although there are certainly variations of strategic planning methods, his experience is that a simple four–phase approach is recommended. Phase I involves the development of "guiding documents." This includes the development of statements of vision, mission, and values. Phase II entails a situational analysis, that is, a SWOT or, in other words, an assessment of an organization's strengths and weaknesses as well as its opportunities and threats. Phase III is the actual development of a plan. Such a plan would incorporate key success factors, measures and objectives, and action strategies. Phase IV is the implementation of the plan. This involves aligning and deploying resources,

communication, and feedback and adjustment (Brown, 2001).
The biggest difference between strategic management in the public versus the private sector would appear to be content rather than form. Both sectors are forced to operate in dynamic environments with a high degree of uncertainty and the need to avoid that "the corporate plan, once complete, is a tablet of stone, given an honoured place in annual reports, but otherwise forgotten" (Stewart, 1996). Both sectors comprise organizations that are often managed from a short-term budgetary perspective focused on financial rather than strategic control. Public sector managers need to adopt an approach to strategic management that helps them clarify the expectations of their authorizing environment, communicate a more consistent strategic direction internally, while at the same time demonstrate externally their organizations' ability to interpret and respond to frequently changing political signals and priorities (Henrik Andersen, Gavin Lawrie, 2002). The changes in management process needed to achieve this increased flexibility as well as clarity and communication of strategic direction point to the need for improved strategic control in public sector organizations, when compared with the following general management principles for strategic control, as suggested by Muralidharan (1997):
   1. Agree unambiguous descriptions of a set of strategic goals, the achievement of which are likely to achieve the long-term vision of the organization;
   2. Agree the actions necessary to achieve these goals (causes) and the results they are expected to produce (effects);
   3. Monitor the implementation of the plan using indicators chosen and tailored to suit this particular purpose and subsequently use the information produced to inform management discussion/decisions about possible corrective actions;
   4. monitor changes in the external environment e.g. new/changed policy directives, sudden changes in the economy and update the plan on the basis of a) changes in external planning assumptions b) learning about the management team's cause and effect assumptions identifying the need to change these when relevant;

5. Involve staff in the decision making process developing ownership and building on the combined operational insight of the organization.

Effective managers around the world recognize the role that strategic management plays in their organization's performance.

Strategic management is that set of managerial decisions and actions that determines the long-run performance of an organization. It entails all of the basic management functions; that is, the organization's strategies must be planned, organized, put into effect and controlled.

The strategic management process is an eight-step process that encompasses strategic planning, implementation and evaluation. These eight steps are (Aldag & Stearns, 1987):

1. Identify the organization's current mission, objectives and strategies.
2. Analyze the environment.
3. Identify the opportunities and threats.
4. Analyze the organization's resources.
5. Identify strengths and weaknesses.
6. Formulate strategies.
7. Implement strategies.
8. Evaluate results.

Studies of the effectiveness of strategic planning and management have found that, as with planning in general, companies with formal strategic management systems had higher financial returns than did companies with no such system (Wilson, 1989).

Today, strategic management has moved beyond for-profit business organizations to include governmental agencies, hospitals, and other not-for-profit public or-generations.

Although strategic management in public organizations has not been as well researched as that in for-profit or business organizations, it is important for these organizations as well.

Theoretical aspects of results - based management

Results -based management (RBM) can mean different things to different institutions/organizations. RBM is a broad management strategy aimed at changing the way institutions operate, by improving performance, programmatic focus and delivery. It reflects the way an organization applies processes and resources to achieve interventions targeted at commonly agreed results. Results-based management is a participatory and team-based approach to programme planning and focuses on achieving defined and measurable results and impact. It is designed to improve programme delivery and strengthen management effectiveness, efficiency and accountability. RBM helps moving the focus of programming, managing and decision-making from inputs and processes to the objectives to be met (United Nations Educational, Scientific and Cultural Organization, Bureau of Strategic Planning, 2008).

At the **planning stage** it ensures that there is a necessary and sufficient sum of the interventions to achieve an expected result. During the **implementation stage** RBM helps to ensure and monitor that all available financial and human resources continue to support the intended results. To maximize relevance, the RBM approach must be applied, without exceptions, to all organizational units and programmes. Each is expected to define anticipated results for its own work, which in an aggregative manner contributes to the achievement of the overall or high-level expected outcomes for the organization as a whole, irrespective of the scale, volume or complexity involved.

The formulation of expected results is part of an iterative process along with the definition of a strategy for a particular challenge or task. The two concepts – strategy and expected results - are closely linked, and both have to be adjusted throughout a programming process so as to obtain the best possible solution.

In general, organizational RBM practices can be cast in twelve processes or phases, of which the first seven relate to **results-oriented planning** (United Nations Educational, Scientific and Cultural Organization, Bureau of Strategic Planning, 2008).

1. Analyzing the problems to be addressed and determining their causes and effects;
2. Identifying key stakeholders and beneficiaries, involving them in identifying objectives and in designing interventions that meet their needs;
3. Formulating expected results, in clear, measurable terms;
4. Identifying performance indicators for each expected result, specifying exactly what is to be measured along a scale or dimension;
5. Setting targets and benchmarks for each indicator, specifying the expected or planned levels of result to be achieved by specific dates;
6. Developing a strategy by providing the conceptual framework for how expected results shall be realized, identifying main modalities of action reflective of constraints and opportunities and related implementation schedule;
7. Balancing expected results and the strategy foreseen with the resources available;
8. Managing and monitoring progress towards results with appropriate performance monitoring systems drawing on data of actual results achieved;
9. Reporting and self-evaluating, comparing actual results vis-à-vis the targets and reporting on results achieved, the resources involved and eventual discrepancies between the "expected" and the "achieved" results;
10. Integrating lessons learned and findings of self-evaluations, interpreting the information coming from the monitoring systems and finding possible explanations to eventual discrepancies between the "expected" and the "achieved".
11. Disseminating and discussing results and lessons learned in a transparent and iterative way.
12. Using performance information coming from performance monitoring and evaluation sources for internal management learning and decision-making as well as for external reporting to stakeholders on results achieved.

Nearly every government agency has undertaken some kind of performance management program in the past, but as the environment of the public sector quickly changes, these efforts have become less effective. A new approach to performance management can help

government officials address their concerns and make the improvements they seek by:

• *Improving decision-making and accountability.* The most important reasons for adopting more effective performance management quoted during our interviews with public sector leaders were related to creating accountability and supporting better decision-making.

• *Increasing organizational transparency.* Public sector leaders also cited increasing transparency and trust, mandated by political decision-making and service level agreements, as top reasons to rethink performance management.

• *Capturing deeper insights.* Good performance management can lead to deeper insights into the daily operations and profound analysis around improvements, which can be used to assist policymakers in developing new or better processes.

• *Optimizing resources.* Tracking the organization's performance will help management to put the right person in the right place at the right time, and to bridge the skills gap either by additional training and education, or by attracting new people.

The main objectives of performance management are: *efficiency and effectiveness, improved decision-making in the budget process, improved external transparency and accountability, and savings.* Some countries have embraced all four objectives (Australia, Denmark, Netherlands, New Zealand, United Kingdom, and United States), whereas other countries only embraced one or two. Hose objectives then determine the characteristics of performance management policy (see Figure 3) r instance, the savings objective should be implemented on a top-down basis as it requires the focus on the input-side of operations. The evidence points to Lithuania's emphasis on improved decision-making in the budget process and the internal allocation of resources inside the executive. There is a good deal of internal coherence between the main problem and objective of performance management. However, its contribution to other objectives has been limited. Therefore, there is a need to deal with the issues of efficiency and effectiveness as well as external accountability stemming from weak ministerial performance or limited citizens' trust in the government. Also, these objectives of performance management are important for achieving a balanced budget in 2009 (Nakrošis V.).

In literature the evaluation process identified a number of species. Methodological literature of Economic Cooperation and Development Organization, is provided, that evaluation process include:
1. According to this, when conducting the assessments:

Ex-ante evaluation - the original (pre-) assessment;

Ex-post evaluation - the end / evaluation of results;

Mid-term evaluation (mid-term) - in the middle of the evaluation process;

Formative assessment - carried out projects during construction.
2. According to the operator:

External evaluation - an object the other actors;

An independent assessment - the object of unrelated Entities;

Internal assessment - an object inside the organizational unit or partner;

Overall assessment - evaluation involving several entities;

All assessment is carried out together - all the entities at the same time.

The performance assessment system must include not only the strategic level, but lower levels of management. Introduction of performance measurement system usually identifies three levels of performance measurement systems: a strategic, functional and individual.

Strategic level performance measurement system will be determined if the chosen strategy allows achieving strategic objectives.

Functional level managers design and manage the organization's processes. Here the performance assessment system will help determine whether existing functional system allows achieving their objectives and evaluating alternative systems for performance management. At this level the performance assessment system allows the assessment of the results of the process such as quality, cycle time, customer service, employee relations, etc.

Individual level activity measurement system determines whether the individual employee goals and how they affect overall organizational performance.

This relationship at all levels of government shall ensure coordinated decision-making and is the guarantor of strategic objectives.

The evaluation criteria are not static, they change depending on the social environment changes, so the performance evaluation system must be sufficiently advanced that its requirements - as well as high - performance evaluation system should be based on the purposes and values.

Thus, evaluation is necessary not only to their operational management. The evaluation process in each institution is the basis for the Heads of institutions are entitled to know whether the authorities have implemented the strategic objectives and programs, or personnel fulfilled the tasks entrusted to the Finance Ministry the duty to know whether the appropriations managers effectively use the State budget, the Government's responsibility to know whether the institutions of strategic objectives and or committed a fiscal plan. As well as family needs to know how the Government implements the budget and on track, and the public - know, or the provision of quality services.

Table 1

Objectives of Performance Management and their Main Characteristics (Nakrošis V.)

Objective	Characteristics
Efficiency and effectiveness of agencies and ministries and/or the internal control and accountability	Focus on outputs and/or outcomes, the need for an information system, some top-down guidance combined with a bottom-up approach
Improved decision-making in the budget process, and/or in the allocation of resources and accountability of	Focus on performance budgeting, top-down approach

ministries to the Ministry of Finance	
Improved external transparency and accountability to parliament and the public	Focus on the public availability of information, bottom-up approach
Savings	Focus on the input-side of operations, top-down approach

Result based strategic planning and management in Lithuanian public sector

The strategic planning system used by the Lithuanian public sector stands at the heart of the process of Government, central and local. The strategic planning process is, as noted above, fully integrated with the system of policy analysis and, as will be seen below, is also fully integrated with the Government's Planned, Programmed Budgetary System (PPBS). As with the system for policy analysis, the requirement for strategic planning has been framed in law (Law on Government and Law on Budget) and by Governmental Resolution 827 of 2002 and once again places a requirement on public authorities to act in accordance with the National Development Plan / Single Programming Document, which clearly assists in terms of improving horizontal coordination with national and European policy objectives (World Bank, 2006). The strategic planning process was initially introduced in 1999 as a pilot; following difficulties faced by the Government of Lithuania as a result of the Russian economic crisis at that time and was fully implemented in an integrated fashion with PPBS in 2000, when budget allocation to public bodies was made conditional on engagement with strategic planning. Strategic planning is required of all Ministries and central agencies and local authorities are encouraged to engage. The system requires organizations to take account of a hierarchy of objectives, with European and Government priorities driving the system, followed by the priorities of Line Ministries etc. (as developed via the policy impact process previously described). This again contributes to the effectiveness of horizontal and vertical policy co-ordination throughout the public sector, as plans which are inconsistent with over-arching goals will not be approved. Performance evaluation and reporting is built-in to the system and reports on the achievement of organizational performance targets are published in a standardized format on the internet. As with the system of policy analysis, the strategic management process as originally introduced drew heavily on Canadian experience but has also integrated practice from the UK, the US and New Zealand and has been adapted to better-suit the Lithuanian public sector. Again in common with the policy analysis system, the strategic planning system was developed with inputs from across the public sector and is run from the very centre of Government by the State Chancellery, in close collaboration with the Ministry of Finance. Lithuania's Planned, Programmed Budgetary System was piloted from 1998 by the Ministry of Finance and implementation was rolled-out hand-in-glove with the strategic planning process in 2000. The Ministry's staff reported that at the outset there was little interest in either strategic planning or PPBS outside those groups of staff actively engaged in promoting them, but noted that this has changed significantly since then and that many more people are now engaged, which they find heartening. Of particular significance, it was reported that the political / Ministerial class are now closely involved. The system in use is a relatively standard type of PPBS where the Ministry of Finance prepares proposals regarding the availability of funds and then holds discussions with politicians in relation to priorities. It was reported that as a consequence of the extent to which policy is formally codified in legislation there can be mismatches between budget allocation and political priorities, resulting from the requirement to meet legal obligations before policy preferences (and this is exacerbated by unstable and changing coalitions). According to informants from the Ministry of Finance, the greatest success of the programmed approach to budgeting was achieving NATO membership and accession to the EU. It was maintained that these goals simply could not have been achieve using the previous incremental budgetary system as there was not enough money in the system to make the necessary investments required for NATO and EU membership whilst maintaining all other activities. Tough decisions had had to be made and PPBS allowed them to be made in as clear, rigorous, efficient and fair a manner as possible. Programmed budgeting has of course led to a significant increase in the workload of the Ministry of Finance, but has also greatly aided financial and non-financial decision-making processes as the quantity of management information available to evaluate policy proposals, set targets etc. for Ministries is now considerable. Line Ministries were reported to have 'grown to love' the system - it had caused a lot of discontent as it had been introduced very rapidly in response to the Russian economic crisis and took a full three or four years to settle down. As with the State Chancellery in relation to strategic planning however, the Ministry of Finance was tenacious. Less positively, it was again reported that the management of the financial affairs of the central agencies is more problematic than the Ministries and that the agencies are generally less well prepared vis-à-vis the strategic planning system and PPBS. One Ministry that is well-regarded however, by both the State Chancellery and the Ministry of Finance in relation to its application of strategic planning and PPBS is the Ministry of National Defense, which makes an interesting case study as this Ministry can experience rapid and unexpected changes in calls on its resources as a result of NATO and UN deployments – exactly the type of situation which critics of programmed approaches state that PPBS is ill-equipped to deal with. The main aims of introducing the PPBS system were to (World Bank, 2006):

- Increase value-for-money;
- Ensure clarity in terms of aims, objectives, tasks and activities;
- Improve transparency;
- Ensure compatibility with NATO's planning systems.

The requirements for the military forces are established within national and NATO plans, such as the *National Security Strategy, National Military Strategy,* and Lithuania's commitments to *NATO's Force Goals*. These documents define the national military objectives, establish a strategy to accomplish these objectives and address the Lithuanian military capabilities required to execute this strategy. Within the National Military Strategy there are, at present, eight priority programs (land forces; special operations; air forces; naval forces; logistics; training; central support systems; policy) that are implemented by military / administrative units. Lithuania remains committed to spending 2% of GDP on defense. This objective was agreed between Parliamentary parties in 2001 and repeated by the highest State officers during the meeting of the State Defense Council in February 2006. It is agreed that pre-scheduled expenditures for national defence should account for no less than 2% of GDP. Despite the promise to allocate 2% of GDP for national defence, in 2005 overall defence expenditure reached just 1.24%. In 2006 overall Lithuanian defence expenditures stand at 1.26% of GDP. Allocations directly to the MoND amount to 1.25% of GDP. The budget of the Mind will have to increase in order to successfully continue defence reforms / build up modern capabilities. The modernization and professionalisation of the Armed Forces and implementation of international commitments, in particular meeting NATO Force Goals and participating in international operations, will depend directly upon the growth of the defense budget. In planning defence expenditure the assumption is that the proportion of GDP assigned to national defence will increase annually by 0.05% until it reaches 2% of GDP. This long term plan was approved by Lithuanian Parliament. In 2006 the Ministry's approved budget is circa 1 billion Litas or €280 million per annum, of which: approximately 50% is spent on personnel costs, operations and maintenance; 28% on procurement; and, 18% on military hardware. The army is by far and away the largest of the 3 forces, their funding for personnel and operations & maintenance being 300M LTL / annum compared to 90M LTL / annum for the air force and only 33M LTL / annum for the small Lithuanian Navy. There is still a system of National Service (National Defense Volunteers) but these personnel are being reorganized into a modern active reserve, which will correspond to the needs of the Lithuanian Armed Forces. The MoND continues to reduce the number of conscripts over 2000 to 2008 and increase the number of professionals, but due to financial restrictions the MoND does not have the possibility of a fully professional army in the near future. In such an austere financial climate, where the State has only a small annual budget for military hardware, new demands are constantly being made on the limited resources available as a consequence of unplanned calls for sending troops and equipment at short notice by the UN and NATO. It is difficult for the Ministry to predict when or where trouble will break out in the world, Parliament will not vote extra monies to cover the costs of Lithuanian troops' participation in international operations and, unlike most other public bodies, the MoND does not enjoy the luxury of being able to access EU monies either (only very small

amounts are available for fringe activities such as training of administrative staff). Consequently, rapid reprioritization becomes the order of the day within the PPBS, making the MoND an interesting case study in relation to the flexibility and robustness of the system. The PPBS involves mid- and short-term planning, resource programming, financial management and performance evaluation. The system helps to achieve efficiency in the decision-making process by setting up clear tasks and responsibilities. It also helps to ensure transparency of defence plans and policies and in the use of national resources. The PPBS integrates a complex process of planning, programming, and budgeting into a comprehensive and responsive system that provides the greatest defence capability for Lithuania within the resources that are provided by Parliament. The PPBS in use in Lithuania involves 28-month overlapping cycles of formulation, implementation and evaluation for every 12-month period of activity: 1) *Planning Guidance* (about 5 months) – used to determine the military capability that will be required in 6-10 years to continue to meet the National Security and National Military Strategies. This phase is informed by phase 5 of the previous cycle. 2) *Planning* (about 5 months) – this period is used to create / update a series of related documents – the mid-term plan and investment program (both six years) and the budget and activity plan (both three years). *It is this stage which is crucial in terms of linking resources to strategic intent.* 3) *Government Budgeting* (about 6 months) – the documents listed above are transmitted to the Ministry of Finance and thence to the Government and Parliament thereafter. At the end of this period outputs are (a) money and (b) amended versions of the documents from phase two (in keeping with the monies actually voted by Parliament). 4) *Implementation* (12 months). 5) *Reporting & evaluation* – feeding into / overlapping with the phase 1 of the next cycle (World Bank, 2006).

Conclusions

1. Successful Lithuanian public sector performance management puts measures in place that accurately assess how well agency processes are helping to fulfil the external needs and goals of all stakeholders. Government officials must then act on these measurements to improve the efficiency and effectiveness of the agency in delivering public value.
2. For achieving result based strategic planning and management in Lithuanian public sector:
2.1**.** There is a need to maintain the existing momentum and good practice within and across public sector organizations.
2.2. There is a need to prioritize improvement in a small number of Ministries and in those agencies and local authorities where policy, budgetary, performance and strategic management practices remain less well-developed than the norm.
2.3. There is a need to re-prioritize and re-vitalize the Public Administration Development Strategy established in 2004 as regards reviewing the role of Territorial Central Government in Lithuania.
2.4. To ensuring the effective implementation of management systems, training to encourage the public

service to take greater heed of non-statutory policy priorities will, in the long-term, hopefully improve the responsiveness of the administrative apparatus to mandated political decisions. Such reforms ought not to be rushed however as to seek these other than through long-term cultural change will risk compromising the significant successes in terms of implementation that have been achieved.

2.5. Within the performance management, there is a need for incremental development, again over time, of improved input and throughput measures and controls, to inform rounded decision-making in conjunction with existing output and outcome indicators.

3. The introduction of performance management (together with increasing budget revenues) solved the initial problem of governmental reliability and contributed to Lithuania's membership in the EU and NATO. But this is partly attributable to increasing revenues of the state budget. However, the contribution of performance management to the efficiency and effectiveness of governmental o orations as well as the quality of public services has been limited. Despite plentiful performance information, its quality is poor and its use in the decision-making process is limited. Also, performance budgeting is only of presentational nature; performance information is used primarily for external reporting rather than internal monitoring (Nakrošius V., 2007).

4. For better strategic management is needed:

4.1. Apply an integrated approach towards performance management, foreseeing all necessary measures within the public administration development strategy.

4.2. Improve program-based budgeting and its implementation.

4.3. Developing performance management systems in each ministry.

4.4. Continue implementing reforms supporting performance management.

4.5. Improve performance management in higher education (Nakrošius V., 2007).

4.6. Improve evaluations and reviews (ex-post efficiency evaluations especially.

4.7. Improve performance and results based monitoring systems.

4.8. Align institutional goals, objectives and performance measures with departmental and individual performance measures

4.9. Link individual performance appraisal with motivation of public servants.

5. Strategic planning is defined as a formalized system to ensure full realization of the strategic management process, which establishes policies and methods as the most effective use of existing and planned receive financial, material and human resources to execute the mission to attain the goals, as well as monitoring and reporting with the results play an important role in the public sector to ensure democratic control of the implementation and evaluation.

6. Performance increase in the public sector not only due to a strategic plan, which is fully analyzed the situation and choose the optimal way to achieve its objectives, appropriate performance evaluation system to assess not only the strengths of the institution's activity area, but weak, thus allowing time for the resource results improvement, but also providing service to the improvement of the modernization of the public authority.

References

1. Bryson, John M. Strategic planning for Public and Nonprofit Organizations. San Francisco: Jossey-Bass Publishers, 1988.

2. Bryson, John M. 1995. *Strategic Planning for Public and Nonprofits Organizations: A Guide to Strengthening and Sustaining Organizational Achievement*. Rev. ed. San Francisco: Jossey-Bass.

3. Backūnaitė E. ir kt. / red. Raipa A. Naujoji viešoji vadyva: mokomoji knyga. – Kaunas: Technologija, 2007. – 393 p. – ISBN 9955-25-259-7.

4. Bagdanavičius J. ir kt. / red. Raipa A. Viešojo administravimo efektyvumas: monografija. – Kaunas: Technologija, 2007. – 387 p. – ISBN 9955-09-095-2

5. Cole G. A. Strategic Management. Theory and Practice. – London: Aldine Place, DP Publications Ltd., 1994.

6. Donald, Carrie G., Thomas S. Lyons, and Rebecca C. Tribbey. 2001. A Partnership for Strategic Planning and Management in a Public Organization. *Public Performance and Management Review* 25(2): 176–93.

7. Eadie, Douglas C. 1983. Putting a Powerful Tool to Practical Use: The Application of Strategic Planning in the Public Sector. *Public Administration Review* 43(5): 447–53.

8. Franklin, Aimee L. 2000. An Examination of Bureaucratic Reactions to Institutional Controls. *Public Performance and Management Review* 24(1): 8–21.

9. Ginevičius R. ir kt. XXI amžiaus iššūkiai: organizacijų ir visuomenės pokyčiai: monografija. – Vilnius: Technika, 2006. – 548 p. – ISBN 9955-28-057-3

10. Henrik Andersen, Gavin Lawrie. Examining Opportunities for Improving Public Sector. Governance through better Strategic Management 2GC Working Paper. May 2002, 2GC Limited Albany House, Market Street, Maidenhead, Berkshire SL6 8BE UK.

11. Kenneth Andrews. *The Concept of Corporate Strategy*, 2nd Edition, 1980. Dow-Jones Irwin.

12. Koteen, Jack. 1989. *Strategic Management in Public and Nonprofit Organizations: Thinking and Acting Strategically on Public Concerns*. New York: Praeger.

13. Kuno Schedler and Alexandra Collm. Management and Evolution: Towards understanding strategic developments in public administrations. Paper presented at the PMRA Conference 2007 Tucson, October 25-27, 2007, University of St.Gallen, Dufourstrasse 40a, 9000 St.Gallen, Switzerland.

14. Liam Fahey, Robert Randall. The Portable MBA in Strategy. John Wiley & Sons: U.S., 1994.

15. Mintzberg, H. Patterns in Strategy Formation. Management Science 24, 934-948. 1978.

16. Liddell Hart. B. H. *Strategy*. Basic Books. 1967.

17. Mintzberg, Henry. 1994. *The Rise and fall of Strategic Planning: Reconceiving Roles for Planning, Plans, and Planners*. New York: Free Press

18. Mintzberg, H. and A. Mc Hugh. Strategy formation in an adhocracy. Administrative Science Quarterly 30[160], 197. 1985.

19. Muralidharan, R; (1997). "Strategic Control for Fast-moving Markets: Updating the Strategy and Monitoring the Performance", Long Range Planning Vol.30, No.1 pp. 64-73.

20. Nakrošis. V. Reforming Performance Management in Lithuania: Towards Results-based Government.

21. Nutt, Paul C., and Robert W. Backoff. 1992. *Strategic Management of Public and Third Sector Organizations: A Handbook for Leaders*. San Francisco: Jossey-Bass.

22. Jucevičius R. Organizacijos strateginis valdymas. – Kaunas: Pasaulio lietuvių kultūros, mokslo ir švietimo centras, 1998.
23. Porter M. *Competitive Strategy*. Harvard Business School Press, 1986.
24. Steiss, Alan Walter. 1985. *Strategic Management and Organizational Decision-Making*. Lexington, MA: D.C. Heath.
25. Steiner George. *Strategic Planning* (1979). Free Press.
26. Stewart J. Is Public Management Possible? Canberra Bulletin of Public Administration, 1995, No 78, pp 1-6
27. United Nations Educational, Scientific and Cultural Organization, Bureau of Strategic Planning. Results-Based Programming, Management and Monitoring (RBM) at UNESCO Guiding Principles. BSP/RBM/2008/1, Paris January 2008.
28. Vasiliauskas A. Strateginis valdymas. – Kaunas, 2004.
29. Vitkienė E. Paslaugų marketingas. Antras pataisytas ir papildytas leidimas. – Klaipėda: Klaipėdos universiteto leidykla, 2004.
30. Whittington, R. What is strategy and does it matter? 1993. London, Routledge.
31. World Bank. EU-8 Public Sector Capacity in the EU . Report On Strategic Planning and Policy Management in Lithuania and Latvia, Background Paper, October 2006.
32. Zan, L. and S. Zambon. Strategy, Change, and the Strategic Approach: Making Sense in Process. Zan, L., Zambon, S., and Pettigrew, A. M. Perspectives on Strategic Change. 1-34. 1992. Boston et al., Kluwer.

Margarita Išoraitė

Rezultatais grindžiamas strateginis valdymas Lietuvos viešajame sektoriuje

Santrauka

Šis straipsnis analizuoja rezultatais pagrįstą strateginį valdymą Lietuvos viešajame sektoriuje. Strateginis planavimas naudojamas Lietuvos viešajame sektoriuje daugiau kaip 10 metų, tačiau mažai žinoma apie tai, kaip jis atspindi gautus rezultatus. Todėl straipsnyje yra analizuojama pati strategijos sąvoka, strateginio planavimo ir valdymo viešajame sektoriuje teoriniai aspektai, rezultatais pagįstas strateginis valdymas bei jo analizė Lietuvos viešajame sektoriuje.
Raktiniai žodžiai: strategija, strateginis valdymas, strateginis planavimas, rezultatais pagįstas strateginis valdymas

About the author

Margarita Išoraitė, assoc. proff., dr. of Social Sciences, University of Mykolas Riomeris, Lithuania. E-mail.: misorait@mruni.lt, mob.tel.8-616-34-648, research interests: administration of social service, activity evaluation, strategic planning, strategic management, strategies' implementation and control.

HOLISM OF INFORMATION AND COMMUNICATION TECHNOLOGY COMPETENCE OF UNIVERSITY LECTURERS

Vitalija Jakštienė, Brigita Janiūnaitė
Kaunas University of Technology, Lithuania

Abstract

Paradigmatic change and changes in the society influence changes at universities and in lecturer activities that require a new competence. Such problematic issues are discussed in this paper: what constitutes ICT competence of a university lecturer; is this competence holistic? These issues are covered in four sections of the paper. The conception of ICT competence is described in the first section; lecturer activities emphasizing the ICT appearance in it are analyzed in the second section; the structure of lecturer ICT competence is detailed and its holism is justified in the third and the fourth sections (the basic ICT competence is discussed in the third section and the integral one – in the fourth section).

Introduction

Fast developing technologies, economical and social changes in the society determine the need for permanent learning and the paradigm change from teaching to learning. All this determine changes at university and in lecturer activities. Under the paradigmatic transition learning becomes mutually related with information communication technologies (ICT). Databases and expert systems developed on the bases of ICT enable the learner to find unlimited up-to-date learning information resources without the help of the educator and becomes one of the elements of the education system. The use of ICT in the learning process requires both lecturer's and student's ICT competence. Lecturer ICT competence enables an appropriate use of ICT in the study process stimulating student learning motivation, ensuring the flexibility of educational environments and an efficient use of learning environments.

In the scientific literature ICT competence of a school teacher was researched more (Knierzinger et al., 2002; Sabaliauskas, 2006; Brazdeikis, 2007 et al.). In the context of lecturer activity only separate ICT activities, skills, attitudes or activities and skills in concrete educational and learning environments are emphasized (Goodyear et al., 2001; Smith, 2001, Brown , 2002; Forsblom & Silius, 2002; Arreola, 2004; Niederhauser et al., 2004; Sales, 2005; Ardizzone & Rivoltella, 2006, Parchoma, 2007; Schneckenberg, 2007, Cunningham et al., 2009 et al), however we did not succeed in finding a holistic construct of university lecturer ICT competence. Therefore the scientific problem of this research consists of problem issues concerning the compositions of lecturer ICT competence and its holistic essence.

The paper objective is to justify and uncover the holistic construct of university lecturer ICT competence.

The research object is university lecturer ICT competence.

The method of **scientific literature analysis** was applied. The paper consists of four sections. The conception of ICT competence is described in the first section; lecturer activities emphasizing the ICT appearance in it are analyzed in the second section; the structure of lecturer ICT competence is detailed and its holism is justified in the third and the fourth sections (the basic ICT competence is discussed in the third section and the integral one – in the fourth section).

ICT Competence Conception

In pursuance of justifying and revelation of university lecturer ICT competence (further – ULICTC), we have to describe the notion of ICT and competence in common manner as it is used in the paper.

Having analyzed ICT definitions provided by Cuttance & Stokes (2000), Educational Testing Service (2002), Khvilon et al. (2002), Linkaitytė et al. (2003), Čivilis (2006), Markauskaitė (2006), Brazdeikis (2007), Miranda (2007) and other authors we can assume that *ICT are technologies that encompass a computer (hardware and software), computer networks and / or other digital devices; such technologies can be used, applied or integrated in work, learning or other activities.* There are a lot of quite different definitions and conceptions of competence in scientific literature. In this paper we refer to the definition provided by Jucevičienė (2007a, p.138): competence is "*personal knowledge, skills, abilities, attitudes, and values, which reside in the inside of a person and show evidence in successful work results in a concrete area of personal activity*".

In the scientific literature ICT competence is defined in a very specific context, e.g. one talks about educator's ICT competence (Brazdeikis, 2007; Zwaneveld & Bastiaens, 2008), a general definition of competence is provided (Van der Blij et al., 2002) or no explicit definition is provided at all (Sabaliauskas, 2006), however one can understand from the context that ICT competence is a competence to perform a specific activity using ICT. Due to different understanding of competence different interpretations emerge. On the bases of the definition of competence and ICT competence definitions presented in the scientific literature we can assume that *ICT competence is personal knowledge, skills, abilities, attitudes, and values, which determine a successful ICT use, appliance or integration in professional, learning or other activity. ICT competence can be structured according to the levels of action.*

Lepaitė (2001) reveals a double meaning of competence phenomenon. On the one hand, competence can be approached as behaviour, i. e. fragmented competence. On the other hand, competence holistically is an ability to estimate a new situation and to select appropriate activity methods integrating subject and professional knowledge constantly (Lepaitė, 2001). Competence holistically emphasizes the ability to transfer knowledge into new situations and enables a person to function in various levels of action (Jucevičienė & Lepaitė, 2000; Lepaitė, 2001). On purpose to justify and uncover ULICTC and its holism or fragmentary nature it is worth analyzing university lecturer's activities revealing IC presence in it.

Particularity of University Lecturer Activity

Johnston (1996) indicates thee main activity areas of a university lecturer – teaching, research and administration. Jucevičienė (2007b) defines the main competences of a university lecturer and indicates such activity areas: educational, research and knowledge dissemination in the society. Arreola et al. (2003), Arreola (2004) denote teaching, research and service as the main activity areas. Such activities encompass a wide range of roles; therefore a lecturer has no longer to be only an expert of his professional field (Arreola et al. 2003).

The work with students is not limited by knowledge impartation; the development of environments that enable student learning is much more important today. On the bases of time and place Aggarwal & Bento (2000) define four types of educational environments; the lecturer role there depends on the way ICT are used.

Type I environments (concrete time, a concrete place). These are traditional classes (audiences) where the same subject is taught / being learned at the same time. Aggarwal & Bento (2000) reveal wide possibilities of the Internet in such environments, and the authors of this paper complement that the use of ICT without the Internet is possible as well. ICT are usable for the content (lectures, tasks) delivering, estimating or obtaining feedback (Saunders, 2002b). It has to be mentioned that the exploitation of ICT possibilities depends on ICT competence lecturer has and his ingenuity. A lecturer, who does not pursue for novelties and takes no account for current requirements, if his subject requires no ICT appliance, can deal without ICT in such type of environments. ICT usage gives new possibilities in providing the course, estimating students, and the communication between the lecturer and students and student collaboration are direct.

Type II environments (any time, a concrete place). These are laboratories, information centers, libraries, where one can study at the convenient time. As Aggarwal & Bento (2000) asserts, the Internet in such environments provides wide possibilities to access information, learning material or resources for laboratory task accomplishment at the laboratory, to perform the search for information in libraries, other databases, etc. ICT can be used for information storage, spread, and reception, student interaction beyond the limits of a concrete place (laboratory, library) with counterparts, team members, and their lecturer. The use of ICT in such type of environments becomes a necessity. In modern libraries the search for literature is performed using ICT, and the usage of technologies in laboratories depends on the scientific area and work organization. Therefore, lecturer ICT competence enables the search for information, opens new possibilities to task preparing and presenting in a laboratory, ICT is used for the communication between a lecturer and students and for student collaboration.

Type III environments (concrete time, any place). These are the case of distance learning, when video or audio technologies are used; furthermore, as Aggarwal & Bento (2000) assert, the real time Internet possibilities can be used. Learning takes place at a concrete time moment, but in places that are different geographically. All interactions in the third type environments are held by technologies, therefore lecturer ICT competence is required.

Type IV environments (any time, any place) enables a student to learn at a convenient time, in a convenient place at his own speed. These are distant teaching / learning courses. Aggarwal & Bento (2000) call them correspondence courses. The mentioned authors distinguish technical, administrative and educational issues the lecturer has to handle in such environments. Technical problems are related to wide possibilities of content (lectures and tasks) preparation, placing in the Internet, course deliverance, access ensuring, communication with students using ICT, estimating and obtaining feedback. Some administrative issues mentioned by the authors are related with lecturer ICT competence: such as issues of the prepared course as the intellectual property (the course can be prepared by a team) and organizational issues determining technical decisions. Educational issues are related to teaching / learning quality (the stimulation of student critical thinking in discussions, engaging in problem decision, granting individual attention to students and similar are required) and control, which has ethical problems related. Therefore, in such environment, a lecturer uses ICT in the course preparation, provision, estimation and feedback assurance, communication with students, student collaboration assurance. Aggarwal & Bento (2000) show that traditional decisions are not enough in preparing and providing a distance course; the ability to estimate the situation and to choose appropriate methods, integrating subject, technical and pedagogical knowledge are required.

Blended learning where different environments are combined according to the need is popular at the universities, however, along with positive sides of blended learning (Oliver & Trigwell, 2005) some problems may emerge (Cunningham et al., 2009). Consequently, a lecturer has to be able to estimate every situation separately and to be flexible in decision making. Weston & McAlpine (2001), Srikanthan & Dalrymple (2007) consider collaboration between lecturers, teaching / learning experience exchange and team work, that influence student teaching / learning improvement to be important. ICT expand communication and collaboration possibilities. The search for up-to-date information is very important for lecturer's learning as well; such search enables both subject improvement (Lipinskienė, 2002)

and gathering information about teaching / learning (Goodyear et al., 2001). Lipinskienė (2002) denotes that the ability to use ICT is important for the search for information.

Therefore, such ICT usage areas showed up in educational activity of a lecturer: *information search, course preparation, course delivery, estimation, communication with students, student collaboration assurance, communication and collaboration with other lecturers and experts*.

Scientific activity methodology mastering and its realization are relevant in university studies (Jucevičienė, 1998). Scientific activity is primarily related with researches. Research methods and data analysis depend on the scientific area, consequently, ICT usage in this domain is specific to scientific area. Scientific activity needs communication and collaboration with students (Haifeng, 2007), colleagues (Kriščiūnas et al., 2008), knowledge dissemination is performed by publishing papers, books, monographs, presenting works in conferences (Arreola, 2004). Niederhauser et al. (2004) presume that scientific journals require electronic versions of publications more and more often. ICT help to perform the search for scientific literature (Tautkevičienė, 2004), expand communication and knowledge dissemination possibilities. In the activity of service to the society knowledge is disseminated by writing papers to popular press, participating in TV or radio broadcasts, exhibitions, seminars and elsewhere (Arreola, 2004). Besides the mentioned activities Theall & Arreola (2001) denote service provision, participation in public activities and other. An appropriate ICT usage in these areas expands their possibilities. ULICTC enable a lecturer to estimate the situation and to choose appropriate ways and methods. Therefore, scientific and society service activities encompass such ICT application areas: *information search, knowledge dissemination, researches, communication and collaboration with students, colleagues, experts*.

Johnston (1996) denotes administration as one of the lecturer's activities. The authors of this paper assume that it could be module cards, sheet filling or similar activities done by lecturers. These functions can be attributed to educational activity (course preparation, student estimation). ICT competence is required if this is done in an electronic form.

Having analyzed lecturer activities and defined areas of ICT use in them we can assume that ICT competence is a necessity for a contemporary lecturer.

Basic ICT competence

Modeling ULICTC structure models of school educator ICT competence by Brazdeikis (2007) and lecturer e-competence (required for the work in e-learning environment) by Schneckenberg (2007) were analyzed. In our case the model of educator ICT competence by Brazdeikis (2007) is more convenient and can be easily adapted for ULICTC modeling. Two component parts are highlighted in the model of educator ICT competence: basic ICT competence inherent for many occupations and integral educational ICT competence related with a specific activity of the educator. Consequently, on the basis of this model, the structure of ULICTC is being modeled analyzing the scientific literature and distinguishing the basic ICT competence inherent for many occupations and the integral ICT competence specific for a university lecturer. The basic ICT competence of the educator consists of technological, information and social literacies (Brazdeikis, 2007).

Literacy is human ability to communicate by accepted means in an appropriate level in the social environment of the society (Jucevičienė, 1997). Functional literacy of an expert is the ability to communicate by accepted means in the subject activity; therefore we can talk about literacy in a certain area.

Technological development determined the emergence and use of various literacy terms related to ICT (Markauskaitė & Dagienė, 2004; Leu et al., 2004): computer literacy, ICT literacy, information literacy, technological literacy, information technology (IT) literacy, digital literacy and other. Having analyzed the scientific literature (Urbonaitė, 2000; Bawden, 2001; Hughes, 2003; Marcum, 2003; Christ, 2004; Bundy, 2004; Rogow, 2004; Markauskaitė, 2006; Vaičiūnienė, 2007 et al.) we can assume that there are no clear limits between the mentioned literacies. Although the authors see some differences, a certain part of the terms are suggested to use synonymously, moreover, the relation between different literacies is handled differently. The authors of this paper assume that one can notice such tendencies: *IT, ICT, technological literacies are often understood synonymously, they define the ability to use ICT in one's activity. Information literacy describes the possession of information skills (to reach, control, and use information).* As literacy standards are applicable to all people, consequently, literacy describes only common needs.

In the model by Brazdeikis (2007) technological literacy shows the ability to use ICT and to control them, information literacy shows the possession and use of information skills; social literacy shows the knowing of social, ethical, legal norms and the ability to follow them in skill training using ICT. It has to be mentioned that at the university technologies mean production processes, the totality of design approaches or realization means, e. g., chemical technology. For avoiding the ambiguity, it is purposeful of naming technological literacy ICT literacy (on the basis of the scientific literature analysis such terms can be used synonymously). The social dimension in the model by Schneckenberg (2007) is understood as communication, therefore, to make things clear, literacy related to social, ethical, legal norms is worth to name socio-cultural literacy.

For defining the structure of ULICTC in more details, lecturer activities according to ICT application areas were analyzed. Having analyzed the scientific literature (Goodyear et al., 2001, Ardizzone & Rivoltella, 2006; Parchoma, 2007; Schneckenberg, 2007; Cunningham et al., 2009) it was proved that the basic ICT competence of the university lecturer consists of the same components as the one of the school educator, i. e. ICT literacy, information literacy and socio-cultural literacy.

ICT literacy is the ability to use and control ICT. Such literacy is relevant in all lecturer activity areas and in majority ICT appliance areas (except estimation and

assurance of student collaboration, as these areas of activity are very specific and ICT literacy reflects common needs of society members). In the educational activity communication with students, communication and collaboration with lecturers and other experts, as well as in scientific and service activity communication and collaboration with colleagues, students, experts raise the same claims to ICT literacy, therefore they were not separated. Such ICT literacy aspects were defined according to ICT application areas:

- *Information search*: the use of electronic catalogues of libraries, knowledge about electronic learning resources and their use (Tautkevičienė, 2004; Schneckenberg, 2007), and new technology studying (Kriščiūnas et al., 2008; Cunningham et al., 2009), participation in conferences, seminars in distant manner (Kriščiūnas et al., 2008), as new information is obtained in such way.

- *Course preparation*: understanding ICT possibilities and limitations; knowledge about design editing principles, design methods; ability to use ICT means and tools properly; planning a simple access to Internet resources; communications skills (Goodyear et al., 2001, Ardizzone & Rivoltella, 2006, Schneckenberg, 2007 et al.).

- *Course deliverance*: technical skills, ability to store and disseminate information (e. g., place in on a website), as well diagnosis of possible technical problems and difficulties, their solution, consulting on technical issues, reflection on ICT possibilities (Goodyear et al., 2001, Smith, 2001, Brown , 2002, Schneckenberg, 2007, Cunningham et al., 2009).

- *Communication and collaboration with students, lecturers, other experts*: communication skills by various ICT means; ability to share information (Goodyear et al., 2001, Ardizzone & Rivoltella, 2006, Schneckenberg, 2007, Cunningham et al., 2009 et al.). This is important for all activities of the lecturer, however in education activity the ability to be an active listener is important communicating with students (Goodyear et al., 2001); collaboration in scientific research networks is highlighted in scientific activities (Niederhauser et al., 2004; Kriščiūnas et al. 2008).

- *Research*: It's related to data gathering and analysis, problem solving, result fixing and storing, report and other document preparation, distant work (Jucevičienė, 2007b; Kriščiūnas et al., 2008). ICT usage possibilities in this dimension depend on the scientific area. Report and other document preparation (not necessary textual), knowledge storage, distant work is relevant to all scientific areas.

- *Knowledge dissemination*: preparation of various documents, result presentation to the audience, knowledge transfer by ICT, participation in discussions forum, publication placement on websites (Niederhauser et al., 2004; Parchoma, 2007; Kriščiūnas et al., 2008).

Information literacy is possession and usage of information skills (to reach, control, and use information). It is relevant to all lecturer activities in information search. Such information literacy aspects have to be mentioned:

- *Information search*: search strategy anticipation, information search realization in library catalogues, databases, organization websites, storage and gathering of the required information (Goodyear et al., 2001, Tautkevičienė, 2004; Ardizzone & Rivoltella, 2006, Cunningham et al., 2009). In scientific activity the ability to find the required information from various resources is important, as well as the ability to collect new knowledge and to use them (Goodyear et al., 2001; Kriščiūnas et al., 2008). Information about teaching / learning gathering in online resources and its use is important to education activity (Goodyear et al., 2001).

Socio-cultural literacy is knowledge about social, ethical and legal norms and the ability to follow them using ICT. Socio-cultural literacy is relevant in all activities of the lecturer and ICT application areas and encompasses respect to other's privacy and intellectual property rights, possession of knowledge and attitudes to relevant legal issues and ethical questions, observance of conventional and legal obligations, professional standards (Goodyear et al., 2001; Sales, 2005; Gray, 2007; Kriščiūnas et al., 2008), as well as observance of work safety rules, e. g. backup copies storage and etc. (though Kriščiūnas et al. (2008) mentioned work safety in the analysis of scientific activity, it is not a few relevant in other activities as well). Course deliverance, estimation, communication with students, assurance of student collaboration – these are areas of educational activity where it is important to solidify equality, stimulate creativeness and self-esteem in applying ICT, the lecturer has to be self-reflective (Goodyear et al., 2001; Smith, 2001; Schneckenberg, 2007). Moreover, such aspects are relevant to socio-cultural literacy of the university lecturer (according to ICT appliance areas):

- *Course preparation*: attitude to apply technological innovations in one's work (Schneckenberg, 2007).

- *Course deliverance*: understanding learners' culture, flexibility and mobility, determining main rules and following them (Goodyear et al., 2001; Schneckenberg, 2007).

- *Assurance of collaboration between students*: discourse maintenance, safe environment assurance are important to the development of learning society (Goodyear et al., 2001), besides, knowledge about individual learning needs and collective learning cultures are required (Schneckenberg, 2007).

- *Communication and collaboration with lecturers and other experts*: the ability to work in a n interdisciplinary team; communication and knowledge exchange in colleagues networks, interest in strategic decision making (Schneckenberg, 2007).

Basic ICT competence is not enough to perform lecturer activities; another component of ULICTC is integral ICT competence.

Integral ICT competence

Integral ICT competence shows the additional (besides the basic one) ICT competence required for performing university lecturer activities. Integral educational ICT competence of the school educator consists of the pedagogical competence (the ability to apply ICT in training and to develop computer literacy of learners) and

the management competence (the ability to plan, control, analyse ICT appliance processes) (Brazdeikis, 2007). Integral ICT competence of the university lecturer, as well as the basic one, is modeled on the basis of ULICTC dimensions revealed from the scientific literature. Three components of integral ICT competence showed up: educational ICT competence, management ICT competence and subject ICT competence.

Educational ICT competence is the ability to apply ICT in the teaching / learning process flexibly (an appropriate selection of ICT means, their use and estimation). This competence encompasses all activities of the lecturer and nearly all ICT appliance areas (information search and collaboration with lecturers or experts helps the lecturer to improve his / her educational ICT competence, e. g. gather information about teaching / learning using ICT, but educational ICT competence is not required in these areas). Such aspects of educational ICT competence are relevant (according to ICT appliance areas):

- *Course preparation*: understanding of educational possibilities of ICT and qualified their selection in course and learning process design; ICT novelty estimation and appliance; analysis and estimation of a didactic product, development of student progress monitoring mechanisms or means, design of an appropriate estimation (Goodyear et al., 2001; Forsblom & Silius, 2002; Sales, 2005; Ardizzone & Rivoltella, 2006; Schneckenberg, 2007; Cunningham et al., 2009).

- *Course deliverance*: flexibility in reacting to different learning actions; understanding of learning in collaboration and interactive learning processes, when ICT are used in learning; use of adequate methods and instruments under certain conditions; readiness to experiment with ICT means; reflection upon one's activity and activity improvement by experience analysis (Goodyear et al., 2001; Ardizzone & Rivoltella, 2006; Schneckenberg, 2007; Cunningham et al., 2009); experience of the lecturer as a learner in e-learning environments; skills of teaching and course improvement (Sales, 2005; Cunningham et al., 2009).

- *Estimation*: estimation of ICT novelties and their appliance (Forsblom & Silius, 2002), student learning monitoring and estimation, ICT appliance for result analysis and estimation (Goodyear et al., 2001; Ardizzone & Rivoltella, 2006; Schneckenberg, 2007). Ardizzone & Rivoltella (2006) denote estimation of educational process quality, however they assume that this is too complicated for one lecturer, consequently, it could be done in a team, together with other experts.

- *Communication with students*: maintenance of learner knowledge construction, response to learner learning actions by ICT means, reflection on ICT based communication and interaction features, possibilities and limitations (Goodyear et al., 2001; Brown, 2002; Schneckenberg, 2007).

- *Assurance of collaboration between students*: selection of ICT means for student collaboration, maintenance of knowledge construction by collaboration, intervention into discussions held by ICT means by giving them a certain direction, providing information (Goodyear et al., 2001; Smith, 2001; Schneckenberg, 2007).

- *Research*: development of teaching / learning theories and models in research related to lecturing by using ICT (Goodyear et al., 2001; Gray, 2007); estimation of ICT novelties in teaching / learning (Forsblom & Silius, 2002); preparation of researchers, their competence development, consulting (Kriščiūnas et al., 2008) when ICT are used.

- *Knowledge dissemination*: communication with different audience, presentation of research results to the society in an understandable way (Kriščiūnas et al., 2008) when ICT are used.

Management ICT competence is the ability to plan, organise, coordinate and control the activity when ICT are used. In this competence communication and collaboration with lecturers and experts in the educational activity, communication and collaboration with colleagues, students, experts in scientific or service to society activities encompass the same dimensions; therefore they were not distinguished separately. Such aspects of management ICT competence of the lecturer have to be mentioned (according to ICT appliance areas):

- *Information search*: the ability to obtain new knowledge and skills quickly (Kriščiūnas et al., 2008).

- *Course preparation*: need for the course analysis; schedule anticipation, interactive activity planning; the ability of learning plan construction when ICT are used in these activities (Goodyear et al., 2001; Forsblom & Silius, 2002; Ardizzone & Rivoltella, 2006).

- *Course deliverance*: student demand analysis, provision of a possibility to choose study difficulty level, distribution of learning resources, development and control of learning groups, procedural rule determination, control assurance, guarantee of learners' activity, consulting on learning process issues, understanding of learning in collaboration and interactive learning processes, self-motivated, autonomous learning stimulation, when ICT are used (Goodyear et al., 2001; Smith, 2001; Brown, 2002; Forsblom & Silius, 2002; Ardizzone & Rivoltella, 2006; Schneckenberg, 2007; Cunningham et al., 2009).

- *Estimation*: student progress monitoring, feedback assurance, when ICT are used (Goodyear et al., 2001; Sales, 2005).

- *Communication with students*: stimulation of learning motivation, responsibility on learning, learning reflection; stimulation of various forms of activities, using ICT; fast reaction to the needs; communication control, exemplification in communication (Goodyear et al., 2001; Forsblom & Silius, 2002; Sales, 2005; Ardizzone & Rivoltella, 2006; Schneckenberg, 2007; Cunningham et al., 2009).

- *Assurance of collaboration between students*: knowledge about individual learning needs and collective learning cultures; learning society development; maintenance of efficient collaboration; team work organization; organization of research in collaboration, problem learning; discussion stimulation and guidance, when ICT are used (Goodyear et al., 2001; Brown, 2002; Forsblom & Silius, 2002; Ardizzone & Rivoltella, 2006; Schneckenberg, 2007).

- *Communication and collaboration with lecturers, experts*: involvement and collaboration maintenance with

colleagues and experts of other areas in online communities, communication and work in organization networks or interdisciplinary teams using ICT, assistant and consultant involvement into learning without reference to the distance (Goodyear et al., 2001; Brown, 2002; Ardizzone & Rivoltella, 2006; Gray, 2007; Parchoma, 2007; Schneckenberg, 2007; Kriščiūnas et al., 2008).

- *Research*: coordination of scientific research, projects, team work supervision, scientific activity guidance, the ability to team up, to organize networks and to work in them (Kriščiūnas et al., 2008), when ICT are used.

- *Knowledge dissemination*: e-learning project guidance, solving complex problems related to ICT usage in the organizational level; knowledge dissemination in the international context (Schneckenberg, 2007; Kriščiūnas et al., 2008).

Subject ICT competence is the ability to apply ICT in one's area when specific knowledge for ICT use are required, e. g. mathematical model development by ICT means in management information system subject studies. This competence is relevant not in all distinguished ICT appliance areas.

- *Information search*: Kriščiūnas et al. (2008) denote information system development in scientific activities. According to the particularity of the information system, subject ICT competence may be required for its development and use.

- *Course preparation*: A lecturer who prepares a course plans the course structure (Goodyear et al., 2001; Forsblom & Silius, 2002) and designs the course (Schoenfeld-Tacher & Persichitte, 2000; Sales, 2005). Subject ICT knowledge, if there is such a need, may be included in the course under preparation.

- *Course deliverance*: This competence enables to consult on subject, related to ICT questions (consultation importance in lecturer's work is highlighted by Goodyear et al. (2001)).

- *Estimation*: Subject ICT competence enables to estimate student competence development in the subject area related to ICT (student competence development estimation in lecturer's work is described by Schneckenberg (2007)).

- *Research*: ICT use in research depends on a specific scientific area and ICT possibilities in it. The particularity of the scientific area may require subject ICT competence when subject knowledge is required to use ICT. Moreover, Arreola (2004) highlights the importance of knowledge about up-to-date technology possibilities in the scientific area.

- *Communication and collaboration with lecturers, students, experts*: in the analysis of the scientific activity Kriščiūnas et al. (2008) reveal the importance of collaboration in researches. Subject ICT competence enables collaboration in researches where this competence is required.

Systematization of all ULICTC aspects reveals the whole view of ICT competence. Summarizing we can assume that *ICT competence of the university lecturer is knowledge, skills, abilities, attitudes, values that determine a successful ICT use, appliance or integration into university lecturer activities*. ULICTC encompasses all activities of the lecturer, and the distinguished aspects show that acquisition of certain behaviour is not sufficient. Even the best ICT usage practices are complicated to transfer into new learning situations (Forsblom & Silius, 2002). The lecturer's work is characterized by unexpected or difficult to predict circumstances: because of different contexts, there is a discrepancy between theoretical predictions of applying theoretical knowledge on teaching and learning and reality (Ramsden, 1998). In addition, good lecturing is a continuing development, involving experiment and risk (Ramsden, 1998; McAlpine & Weston, 2000). This is also characteristic of lecturers' other activities, especially research. Reflection helps to recognize drawbacks, mistakes, learn from them and make right decisions. However, according to McAlpine & Weston (2000), it is effective only when lecturers already have experience. Thus the necessity of lecturer's experience, reflection and continuing learning for performance under new circumstances is highlighted. Unusual circumstances emerge because of differences in students' age, needs, experience or culture (Ramsden, 1998; Martin, 1999), because orientation towards different students and the need to evaluate experiential learning. Unpredictable problems may arise because of ineffective ICT, inadequate application of ICT, inadequate ICT, their absence or other reasons. Lecturers face students' need for technical assistance (Goodyear et al., 2001), inadequate technical assistance for lecturers (Saunders, 2002a), time and effort consuming process of mastering new technologies (Pajo & Wallace, 2001) and other problems. Every situation has to be estimated separately, activity methods that suit best for this case have to be chosen. Technical, educational, management, subject and other knowledge and skills are integrated for decision making. Thus we can assume that *ULICTC is holistic*. Jucevičienė & Lepaitė (2000), Lepaitė (2001) assume that the holism of competence depends on the activity and its appropriate competence level (the higher the level, the more holist is the competence). ULICTC evidence in different ICT implementation stages and levels of action will be analyzed in further research.

Conclusions

- ICT competence is required for performing all activities of the university lecturer: in educational activities – for information search, in course preparation, in course deliverance, estimation, communication with students, student collaboration assurance, communication and collaboration with lecturers and experts; in scientific and service activities – for information search, in research, knowledge dissemination, communication and collaboration with lecturers, students and experts.

- University lecturer ICT competence (ULICTC) is knowledge, skills, abilities, attitudes, values that determine a successful ICT use, appliance or integration into university lecturer activities. It consists of basic ICT competence (inherent for many professions) and integral ICT competence (specific to the university lecturer). Basic ICT competence consists of ICT literacy, information literacy and

socio-cultural literacy; integral ICT competence consists of educational, management and subject ICT competences.

- The variety of unexpected or difficult predictable situations that require ULICTC, their estimation and appropriate decision making when technical, educational, management, subject and other knowledge and skills of the lecturer are integrated, the necessity of lecturer's experience, reflection and continuing learning allows stating that ULICTC is holistic.

References

1. Aggarwal, A. K.; Bento, R. (2000). Web-Based Education. In A. Aggarwal (Eds.) *Web-Based Learning and Teaching Technologies: Opportunities and Challenges* (pp. 2-16), Hershey, PA: Idea Group Publishing. Retrieved November 11, 2008 from InfoSci-Books database.
2. Ardizzone, P.; Rivoltella, P. C. (2006). Teachers, Tutors, and Mentors: New Roles or Professionals?. In A. Cartelli (Eds.)*, Teaching in the Knowledge Society: New Skills and Instruments for Teachers* (pp. 100-114), Hershey, PA: Information Science Publishing. Retrieved November 10, 2008 from InfoSci-Books database.
3. Arreola, R. A. (2004). *Scholarship Re-conceptualized: An Evaluative Perspective*. Paper presented at the 2004 Annual Meeting of AERA. . Retrieved April 1, 2009 from Center for Educational Development and Assessment web site http://www.cedanet.com/meta/.
4. Arreola, R. A., Theall, M., Aleamoni. L.M. (2003). *Beyond Scholarship: Recognizing the Multiple Roles of the Professoriate*. Paper presented at the American Educational Research Association convention, Chicago, Illinois. Retrieved April 1, 2009 from Center for Educational Development and Assessment web site http://www.cedanet.com/meta/**.**
5. Bawden, D. (2001). Information and digital literacies: a review of concepts. *Journal of documentation,* 57(2): 218-259. Retrieved March 20, 2009 from Digital Library of Information Science and Technology web site http://dlist.sir.arizona.edu/895/01/bawden.pdf.
6. Brazdeikis, V. (2007). Pedagogų informacinių ir komunikacinių technologijų taikymo kompetencija ir jos vertinimo strategijos (Edukologijos daktaro disertacija, Kauno technologijos universitetas).
7. Brown, D.G. (2002). Proven Strategies for Teaching and Learning. In: A. J. Kallenberg, M. J. J. M. van de Ven (Eds) *The New Educational Benefits of ICT in Higher Education Proceedings:* (pp.9-11) Rotterdam: Erasmus Plus. ISBN 90-9016127-9.
8. Bundy, A. (2004). One essential direction: information literacy, information technology fluency. *Journal of eLiteracy*, 1, 7-22. ISSN 1745-4360. Retrieved March 20, 2009 from Journal of eLiteracy Web site http://www.jelit.org/6/.
9. Christ, W, G. (2004). Assessment, Media Literacy Standards, and Higher Education. *American Behavioral Scientist*, 48, 92-96. Retrieved March 13, 2009 from Sage Journals Online database.
10. Cunningham, T., McDonnell, C.; McIntyre, B.; McKenna, T. (2009). A Reflection on Teachers' Experience as E-Learners. In R. Donnelly; F. McSweeney (Eds.) *Applied E-Learning and E-Teaching in Higher Education.* (pp. 56-84). Retrieved November 10, 2008 from InfoSci-Books database.
11. Cuttance, P., Stokes, S. (2000). *Monitoring progress towards the national goals for schooling: information and communication technology (ICT) skills and knowledge. Report to the National Education Performance Monitoring Taskforce of the Ministerial Council on Education, Employment, Training and Youth Affairs*. Retrieved 11 May, 2009 from Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) of Australian Web site http://www.mceetya.edu.au/verve/_resources/reportnepmt_ict_file.pdf.
12. Čivilis, M. (2006). Vadybininko žinių struktūros pokyčiai diegiant organizacijoje informacines technologijas: elastingų žinių atvejis. *Informacijos mokslai*, 38, 52-63. ISSN 1392–0561.
13. Educational Testing Service (2002). *Digital transformation: a framework for ICT literacy. A report of international information and communication literacy panel.* Princeton, NJ: Educational Testing Service. Retrieved October 2, 2005 from from Educational Testing Service Web site http://www.ets.org/Media/Tests/Information_and_Communication_Technology_Literacy/ictreport.pdf.
14. Forsblom, N., Silius, K. (2002). What is the Added Value of Web-based Learning and Teaching? The Case of Tampere University of Technology. In: A. J. Kallenberg, M. J. J. M. van de Ven (Eds) *The New Educational Benefits of ICT in Higher Education Proceedings:* (pp.18-25) Rotterdam: Erasmus Plus. ISBN 90-9016127-9.
15. Goodyear, P., Salmon, G., Spector, J.M., Steeples, C., Tickner, S. (2001). Competencies for online teaching: A special report. *Educational Technology Research and Development,* 49(1), 65-72. Retrieved January 13, 2009 from SpringerLink database.
16. Gray, K. (2007). Educational Technology Practitioner-Research Ethics. In M. Quigley (Eds.) *Encyclopedia of Information Ethics and Security* (pp. 164-169). Retrieved November 13, 2008 from InfoSci-Books database.
17. Haifeng, L. (2007). The Lifestyle of University Teachers. In: P. Maoyuan, F. Yibong, Z. Yu (Eds.) Key to University Quality Assurance, Faculty/ Staff Development in the Global Context (pp.63-74). Xiamen. ISBN 978-7-5334-4743-4.
18. Hughes, S. K. (2003). Computer Literacy. In: A. DiStefano (Eds.) *Encyclopedia of Distributed Learning*. Retrieved December 9, 2008 from SAGE Publications database.
19. Johnston, R.J. (1996). Managing How Academics Manage. In: R. Cuthbert (Eds.) *Working in Higher Education* (pp. 21-33). SRHE and Open University Press, ISBN 0 335 19721 3 (pb) 0 335 19722 1 (hb).
20. Jucevičienė, P. (1997). Dokumentai ir statistikos duomenys. Iš P. Jucevičienė (Eds.) *Lyginamoji edukologija* (pp.23-32). Kaunas, Technologija, ISBN 9986-13-350-5.
21. Jucevičienė, P. (1998). Reikalavimai aukštosios mokyklos dėstytojams ir jų veiklos galimybės: Europos šalių ir Lietuvos lyginamoji analizė. In A. Navasaitienė et al. (Eds.) *Aukštojo mokslo sistemos ir didaktika : konferencijos pranešimų medžiaga, Kaunas, 1998 m. balandžio 9* (pp. 85-94). Kaunas : Technologija.
22. Jucevičienė, P. (2007a). Besimokantis miestas. Monografija. Kaunas, Technologija. ISBN 9955-25-183-2.
23. Jucevičienė, P. (2007b). Rethinking University Teacher Competence. In: P. Maoyuan, F. Yibong, Z. Yu (Eds.) Key to University Quality Assurance, Faculty/ Staff Development in the Global Context (pp.75-88). Xiamen. ISBN 978-7-5334-4743-4.
24. Jucevičienė, P., Lepaitė, D. (2000). Kompetencijos sampratos erdvė. *Socialiniai mokslai*, 1(22), 44-50. ISSN 1392-0758.
25. Knierzinger, A., Rosvik, S., Schmidt, E. (Eds.) (2002). *Elementary ICT curriculum for Teacher training*. Rertieved March 10, 2008, from Web site: http://unesdoc.unesco.org/images/0012/001257/125763eo.pdf.
26. Kriščiūnas, K., Staniškis, J.K., Tričys, V. (2008). Mokslinė veikla: šiuolaikinės tendencijos. VšĮ Šiaulių universiteto leidykla, ISBN 978-9986-38-912-5, 463p.
27. Khvilon, E., Patru, M., Anderson, J., Weert, T. (2002). *Information and Comunication Technology in Education. A curriculum for schools and programme of teacher development*. Retrieved March 10, 2008, from Web site: http://unesdoc.unesco.org/images/0012/001295/129538e.pdf.
28. Lepaitė, D. (2001). Kompetenciją plėtojančių studijų programų lygio nustatymo metodologija (verslo studijų atvejis) (Edukologijos daktaro disertacija, Kauno technologijos universitetas).
29. Leu, D.J., Kinzer, C.K., Coiro, J.L., Cammack, D.W. (2004). Toward a theory of new literacies emerging from the internet and other information and communication technologies. In R.B. Ruddell & N. Unrau. (Eds.), *Theoretical models and processes of reading.* Newark, DE: International Reading Association. Retrieved March 22, 2009 from http://www.readingonline.org/newliteracies/leu/.
30. Linkaitytė, G., Valiuškevičiūtė, A., Žilinskaitė, L. (2003). Pedagoginės veiklos planavimas virtualioje mokymosi aplinkoje. *Tarptautinė konferencija „Informacinėmis technologijomis grįstas mokymasis skaitmeniniame amžiuje",* (pp.45-49). Rertieved March 13, 2009, from Web site http://www.vdu.lt/ssc/download/straipsnis4.pdf.

31. Lipinskienė, D. (2002). Edukacinė studentą įgalinanti studijuoti aplinka (Edukologijos daktaro disertacija, Kauno technologijos universitetas).

32. Marcum, J. (2003). Information Literacy. In: A. DiStefano (Eds.) *Encyclopedia of Distributed Learning*. Retrieved December 9, 2008 from SAGE Publications database.

33. Markauskaitė, L. (2006). Towards an integrated analytical framework of information and communications technology literacy: from intended to implemented and achieved dimensions. *Information Research: an International electronic journal, 11(3), 252.* Retrieved May 19, 2008 from Directory of Open Access Journals database.

34. Markauskaitė, L., Dagienė, V. (2004). Kompiuterinio raštingumo samprata Lietuvos švietime. *Informacijos mokslai*, 31, 55-72. ISSN 1392-0561.

35. Martin, E. (1999). Changing Academic Work. Developing the Learning University. Maidenhead: SRHE and Open University Press. ISBN 0 335 19883 X.

36. McAlpine, L., Weston, C. (2000). Reflection: Issues related to improving professors' teaching and students' learning.. *Instructional Science 28,* 5, 363–385. Retrieved May 27, 2009 from SringerLink database.

37. Miranda, G.L. (2007). The Limits and Possibilities of ICT in Education. *Educational sciences journal*, 3, 39-48. ISSN 1646-6500. Retrieved February 28, 2009 from http://sisifo.fpce.ul.pt/pdfs/sisifo03ENGa3.pdf.

38. Niederhauser, D.S., Wetzel, K., Lindstrom, D. L. (2004). From manuscript to article: Publishing educational technology research. *Contemporary Issues in Technology and Teacher Education*, 4(2), 89-136. Retrieved 13 May, 2009 from Education & Information Technology Library web site http://go.editlib.org/?fuseaction=Reader.ViewFullText&paper_id=19938.

39. Oliver, M., Trigwell, K. (2005). Can blended learning be redeemed? *E-Learning*, 2(1), 17-26. Retrieved December 4, 2008, from journal web site http://www.wwwords.co.uk/elea/content/pdfs/2/issue2_1.asp.

40. Pajo, K., Wallace, C. (2001). Barriers To The Uptake Of Web-based Technology By University Teachers. *The Journal of Distance Education / Revue de l'Éducation à Distance, 16,* 1, 70-84. Retrieved May 24, 2009 from http://www.jofde.ca/index.php/jde/article/viewArticle/171/127

41. Parchoma, G. (2007). Visualizing ICT Change in the Academy. In C. Van Slyke (Eds.) *Information Communication Technologies: Concepts, Methodologies, Tools, and Applications*. (pp. 3695-3715). Retrieved November 12, 2008 from InfoSci-Books database.

42. Ramsden, P. (1998). Learning to Teach in Higher Education. London: Routledge. ISBN 0-415-06414-7 (hbk) 0-415-06415-5 (pbk).

43. Rogow, F. (2004). Shifting from Media to Literacy: One Opinion on the Challenges of Media Literacy Education. *American Behavioral Scientist,* 48, 30 – 34. Retrieved March 13, 2009 from Sage Journals Online database.

44. Sabaliauskas, T. (2006). Mokytojų informacinių ir komunikacinių technologijų kompetencijų projektavimas (Edukologijos daktaro disertacija, Vytauto Didžiojo universitetas).

45. Sales, G. C. (2005). Developing Online Faculty Competencies. In C. Howard; J. Boettcher; L. Justice; K. Schenk; P. Rogers; G. Berg (Eds.) *Encyclopedia of Distance Learning, Vol. 2* (pp. 547-553). Retrieved November 14, 2008 from InfoSci-Books database.

46. Saunders, G. (2002a). Integrating Technology into the Activities of a Traditional University: Facing up to the Problems. In: A. J. Kallenberg, M. J. J. M. van de Ven (Eds) *The New Educational Benefits of ICT in Higher Education Proceedings*: (pp.159-165) Rotterdam: Erasmus Plus. ISBN 90-9016127-9.

47. Saunders, G. (2002b). Introducing Technology onto a Traditional Course: Turning the Classroom Upside Down. In: A. J. Kallenberg, M. J. J. M. van de Ven (Eds) *The New Educational Benefits of ICT in Higher Education Proceedings:* (pp.38-44) Rotterdam: Erasmus Plus. ISBN 90-9016127-9.

48. Schneckenberg, D. (2007). eCompetence Development Measures for Faculty in Higher Education - A Comparative International Investigation (Dr. phil. dissertation, der Universität Duisburg-Essen).

49. Schoenfeld-Tacher, R., Persichitte, K. (2000). Differential skills and competencies required of faculty teaching distance education courses. *International Journal of Educational Technology*, 2(1). Retrieved January 9, 2009 from http://ascilite.org.au/ajet/ijet/v2n1/schoenfeld-tacher/.

50. Smith, B. (2001). *Teaching online: New or transferable skills?* Higher Education Academy. Retrieved November 17, 2008, from Higher Education Academy Web site http://www.heacademy.ac.uk/assets/York/documents/resources/resourcedatabase/id455_teaching_online.pdf.

51. Srikanthan, G., Dalrymple, J.F. (2007). A conceptual overview of a holistic model for quality in higher education. *International Journal of Educational Management*; 21(3), 173 – 193. Retrieved April 4, 2009 from Emerald database.

52. Tautkevičienė, G. (2004). Studentų mokymosi aplinkų susiformavimui iš universiteto bibliotekos edukacinės aplinkos įtaką darantys veiksniai (Edukologijos daktaro disertacija, Kauno technologijos universitetas).

53. Theall, M., Arreola, R. (2001). *Beyond the Scholarship of teaching: searhing for a unifying metaphor for the college teaching profession*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). Retrieved April 1, 2009 from Center for Educational Development and Assessment web site http://www.cedanet.com/meta/.

54. Urbonaitė, D. (2000). Mokinių informacinės kultūros ugdymo pedagoginės sistemos raiškos tipai (sąlygoti kompiuterių taikymu esant ribotiems ištekliams). (Edukologijos daktaro disertacija, Kauno technologijos universitetas).

55. Vaičiūnienė, V. (2007). Informacinis raštingumas modernizuojant universitetines studijas (Edukologijos daktaro disertacija, Vytauto Didžiojo universitetas).

56. Van der Blij, M., Boon, J., Van Lieshout, H., Schafer, H., & Schrijen, H. (2002). Competentieprofielen: over schillen en knoppen [e-Competence profiles]. Utrecht: Digitale Universiteit.

57. Weston, C.B, McAlpine, L. (2001). Making Explicit the Development Toward the Scholarship of Teaching. *New Directions for Teaching and Learning*, 86, 89-97. Retrieved April 10, 2009 from Wiley InterScience database.

58. Zwaneveld, B., Bastiaens, T. (2008). ICT competences of the teacher: About supporting learning and teaching processes with the use of ICT. *Joint Open and Working IFIP Conference ICT and Learning for the Net Generation*. Retrieved March 30, 2009 from The IFIP Digital Library web site http://dl.ifip.org/iojs/index.php/ifip/article/viewFile/1006/10.

Vitalija Jakštienė, Brigita Janiūnaitė

Universiteto dėstytojo informacinių ir komunikacinių technologijų kompetencijos holistiškumas

Santrauka

Paradigminė kaita bei pokyčiai visuomenėje sąlygoja pokyčius universitete ir dėstytojo veiklose, kurių atlikimui reikalingos naujos dėstytojo kompetencijos. Šiame straipsnyje koncentruojamasi į probleminius klausimus: kas sudaro universiteto dėstytojo IKT kompetenciją, ar ji yra holistinio pobūdžio? Šie klausimai sprendžiami keturiose straipsnio dalyse Pirmojoje dalyje paaiškinama IKT kompetencijos samprata, antrojoje dalyje analizuojamos dėstytojo veiklos atskleidžiant IKT raišką jose, trečiojoje ir ketvirtojoje dalyse detalizuojama dėstytojo IKT kompetencijos struktūra (trečiojoje dalyje atskleidžiama bazinė IKT kompetencija, ketvirtojoje– integralioji IKT kompetencija), pagrindžiamas jos holistiškumas.
Raktažodžiai: universiteto dėstytojas, dėstytojo veiklos; IKT kompetencija.

About the authors

Vitalija Jakštienė, PhD candidate in Social Sciences (Educational Science) at the Institute of Educational Studies, Faculty of Social Sciences, Kaunas University of Technology, Lecturer at the Faculty of Informatics, Kaunas University of Technology, vitalija.jakstiene@ktu.lt, +370 37 300130, information and communication technologies in teaching and learning.
Brigita Janiūnaitė, PhD in Social Sciences (Educational Science); Professor at the Institute of Educational Studies, Faculty of Social Sciences, Kaunas University of Technology, brigita.janiunaite@ktu.lt, +370 37 300130, management of educational innovations, change management.

THE RESEARCH OF CONTEMPORARY APPROACHES TO CONTINUING LEARNING IN THE DYNAMIC LABOUR MARKET ENVIRONMENT

Sandra Jakštienė[1], Valdas Narbutas[2], Daiva Beržinskienė[3], Michael Claudon[4]

[1, 2, 3]*Kaunas University of Technology, Lithuania,* [4]*Johns Hopkins UniversityUnited States of America*

Abstract

Contemporary labour market keeps changing fast, putting forward new requirements to the employees and organizations. It is namely these requirements which stipulate the necessity to possess certain abilities and qualities enabling to better adapt to the changing labour market conditions. Under current conditions individuals having found themselves in the ever-changing dynamic labour market should be able to find employment, specialize and adapt. Success in labour market depends on numerous factors: the demand for the profession acquired, professional qualifications and competences, personal characteristics, ability to actively adapt to the work environment and other factors.

Labour market is an ever-changing system often requiring new technologies, manufacturing and property relationships and the change of tools of trade. The ability to adapt to labour market changes should be an uninterrupted process, as an individual encouraged by internal and external factors, has to continuously improve his/her qualifications and find new ways for action, as well as be able to learn continuously.

Keywords

Labour market, continuous learning.

Introduction

In the contemporary world education, qualifications, knowledge, skills, experience and continuous learning get to be probably the most essential things in the work environment. It is possible to state that these things determine a successful integration into labour market.

Today an employee is posed newer and more complicated requirements, therefore professional improvement and the acquisition of new knowledge and skills become one of the most important priorities in the dynamic labour market.

It means that a continuing professional improvement helps an employee to not only seek a career, but also regularly adapt to changing conditions in the labour market.

Learning, living and labour models keep changing fast. That is why it is not only an individual who has to adapt to the changes, the methods of activity also have to change (Radžiūnas, Grincevičius, 2007).

The issues of continuing learning have been researched by numerous authors (Baršauskienė, Guščinskienė, 2003; Dautaras, Rukštelienė 2006; Fokienė, 2006; Grincevičius, Radžiūnas 2007; Hojlo, 2006; Albrektaitė 2007; Longworth, 2000; Sahlberg 2005; Linkaitytė, Širvaitytė 2000; Maclean, 2004; Bėkšta, Dienys, 2001; Vaivada, 2006; Gudžinskienė, 2008; Arends, 1998; Juozaitis, 2005; Jovaiša, 1993; Rajeckas, 2002 et al.) in attempt to characterize the importance and concept of continuing learning.

Continuing learning is a life-long kind of learning, promoted by a certain environment (changing living conditions, etc.) and the individual's internal need to learn (Baršauskienė, Guščinskienė, 2003; Beresnevičienė, 2005).

Continuing learning is defined as "entire learning activities throughout lifetime in order to deepen one's knowledge, skills and competences in personal, civil, social and professional field "(Radžiūnas, Grincevičius, 2007).

According to V. Baršauskienė, J. Guščinskienė (2009), continuing learning is stipulated by several main factors: external environment, machinery and technologies, internal environment within an organization, and the people's individual characters. All the abovementioned factors primarily determine the success of an organization's activities and its ability to adapt to changing social conditions. On the other hand, they help people adapt to the requirements of this changing society. The goal of continuing learning is to accumulate professional experience, acquire and improve his/her own qualifications in order to more quickly adapt to the ever changing activities in the world (Jucevičienė 2000; Beresnevičienė 1995). The relevance of continuing learning is also proved by the EU initiatives, international and Lithuanian legal acts: National Education Strategy 2003-2012 (July 4, 2003), Law of Education of the Republic of Lithuania, Law of Adult Education, Lifelong Learning Strategy and other legal documents. Human Resource Development programme for 2007–2013 states, that one of the most important indicators for lifelong learning, demonstrating the creativity of society and potential for innovation, is the adults' participation in continuing learning. It is stated that in Lithuania almost half the number of adults, as compared with the EU, participate in adult education. It is hard to believe that Lithuania will manage to catch up with the EU, which has set a task to improve this indicator up to 12.5 percent. By 2010 Lithuania has an ambitious plan to reach at least 10 percent. Adults are very inactive in both formal and informal education, even in self-education; however the poorest involvement is in non-formal education – more than twice as low as the EU average. *Eurostat* data shows that in Lithuania individuals with lower qualifications participate in continuing learning several times more seldom than those with higher qualifications and this is an alarming sign for the industry sectors more dependant on blue-collar workers. The data of the social survey *"The state of non-formal adult education and employers' attitude to non-formal adult education"* prove that it is namely the workers' training and re-qualification is the

weakest link in non-formal adult education. The needs for learning in this group are satisfied the least, compared with the groups representing other professions. However, the biggest issue is a low degree of understanding among the workers and especially the employers that blue-collar workers should learn the least.

The major part of unemployed registered in the labour exchange does not have any qualification or have lost it. A large part of them are long-term unemployed having lost motivation and skills. Regaining them and acquiring professional qualification is often a complicated process, and traditional means of active labour market often fail, as efficient methodologies and qualified staff is lacking. A significant part of youths between 16 and 25 years of age do not work or study, however do not get registered in the labour exchange. These individuals lack of work or learning motivation, they seldom seek advice at public administration institutions that is why the government has little data about them, this data is often scattered among various other institutions and is not systemized. Due to this reason it becomes very difficult for this group of people to return to the education system or integrate into labour market.

Lifelong learning is not accessible to all society groups. Certain groups are doomed to social exclusion or limited to a minimum education. Poor education limits the opportunities of participating in social life and increase poverty. The main risk groups include children living in poverty or having special needs, the disabled, adults having not received main education, long-term unemployed, convicted persons and persons having returned from a place of confinement. Still unsolved qualification access issues for the women returning to work after maternity leaves. In addition, one of the main employment policy tasks in the national implementation of Lisbon strategy for 2008-2010 is to ensure that labour force supply corresponds to the demand for developing and increasing investment into human capital. It means that investment into knowledge is one of the most important and essential conditions in adapting to changes in contemporary labour market.

This also proves the problematic nature of the subject under discussion. The *problem* discussed in the article may be formulated in the question: how does continuing learning determine the employee's integration into labour market?

The article aims at carrying out a research of contemporary attitude to continuing learning in dynamic labour market environment.

The research methods used in the article were as follows: the analysis of research literature and primary data.

The purposefulness of continuing learning in the dynamic labour market environment

Effective provision of continuing vocational training (CVT) is commonly regarded as highly significant in order to maintain and enhance the skills and competences of the country's workforce, enabling national competitiveness and economic growth (Hodkinson and Unwin, 2002; Grubb and Ryan, 1999). Equally, an effective provision of vocational education is perceived as necessary to support many different people in their everyday struggle in finding an appropriate work/life balance by providing both education packages for those already working, to basic skill courses for less advantageous groups, preventing social exclusion (Wieringen and Attwell, 1999).

Changes taking place in labour market make people look for ways how to better adapt to dynamic labour market conditions. One of such ways is continuing learning, as preparedness to learn during one's lifetime guarantees wider opportunities in labour market, as compared to narrow knowledge and poor qualifications. The concept of continuous learning has become important because it places a priority on noticing, adapting and learning from change (McNamara, 2008). Also, the importance of continuing learning is determined by an individuals' choice to have more than one specialization corresponding his/her interests and possibilities.

As A. Fokienė (2006) states: "the concept of lifelong learning in the European context was started to be used firstly emphasising the relationships between learning and work place, i.e. understanding learning as a way to react to the changes in labour market".

Continuing learning is not only useful to the individuals, but also to the employer (organization). According to V. Baršauskienė et al. (2003), learning is useful in that regard that it "helps an individual find solutions for different issues; increases the value of work activity and work productivity; strengthens the employee's self confidence; creates wider career opportunities; forms a better climate within the organization. The employees' learning is useful for the organization, as it promotes increase in motivation and flexibility; guarantees maintaining of the necessary qualifications among the organization staff".

B. Gruzhevsky (2005), speaking about the importance of continuing learning differentiates a vertical and horizontal sections to express the links between continuing learning and labour market.
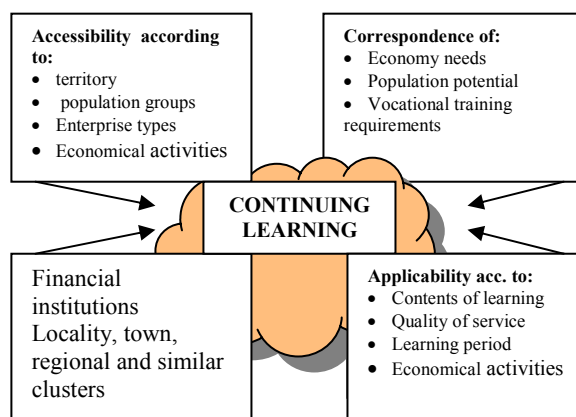

Figure 1. Continuing learning for labour market (vertical section) (Gruzhevsky, 2005)

The vertical section for continuing learning demonstrates that continuing learning is accessible to everyone according to the territory, population groups, also types of enterprises and economical activities; it also corresponds to the various needs of the economy, population potential and the requirements of vocational training. Besides, continuing learning is diverse in its forms of training, curricula and pay possibilities. Continuing learning is easily applicable according to the learning contents, service quality and period of training.
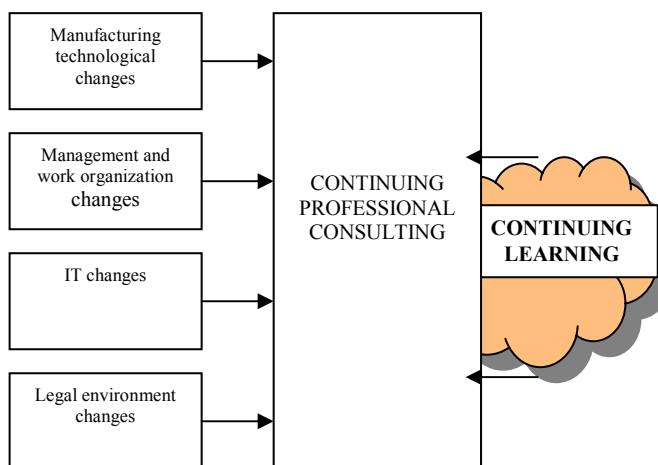

Figure 2. Continuing learning for labour market (horizontal section) (Gruzhevsky, 2005)

Continuing learning and manufacturing technology changes, management and work organization changes, as well as changes in legal environment promote a continuing professional consulting and it means that continuing learning becomes an important factor in labour market.

The dynamic labour market environment

It is essential to note that changes keep taking place in the labour market: one part of employees become unemployed, voluntarily cease work (i.e. become the passive part of labour resources), while others return to the active work activity, another group being graduates and mothers having raised their children to a certain age who appear in the labour market (for the first time or return to it), and finally cease their work activities due to al the abovementioned reasons. Thus, labour market experiences permanent changes in demand and supply. Labour market is dynamic, as a continual change of labour resource flow takes place (Jančauskas, 2006).

An individual should always analyze the changes in labour market in all aspects: restructuring, appearance of new elements, qualification changes, etc. Therefore employers besides professional knowledge and high qualifications put forward requirements for the employees' personal qualities – general level of culture, self-sufficiency, being initiative, able to socialize and behave in complicated situations (Jovaiša, 2000).

This means that currently it is not enough to be an expert in your own field a great deal of attention should be paid to one's human qualities.

According to T. Jovaiša, Director of Lithuanian Labour Market Training Authority "now it is necessary to change

quickly and adapt to the new conditions – certain jobs disappear, while others do appear. If sometime ago an individual could quietly live for decades without changing his/her living and working environment, now a really rapid movement from end to another is taking place…" (Skujaitė, 2007).

According to D. Beržinskienė (2001) "labour market keeps constantly changing, although not so quickly as commodities, services or other valuables. Economists analysing labour markets usually differentiate the following reasons for the changes in labour market: scientific-technical revolution, work efficiency and intensity, economical crises, structural reorganizations in the economy, population growth, etc., the reasons due to which unemployment usually occurs in a country".

The term *market* used to describe a certain area in which good were purchased and sold. However, these days *market* denotes conditions allowing the buyers and sellers contact each other and competition to take place, which is an indispensable market component.

In labour market employees compete with each other in trying to get employment or a better-paid job. In this market competition necessarily comes across unemployment, as an unavoidable phenomenon under market conditions. The rate of unemployment fluctuates depending on the level of the country's development and labour market socialization, which manifests itself while the government and trade unions actively regulate the labour market processes, especially influencing the rate of unemployment (Martinkus, 2003).

As B. Martinkus et al. (2005) states "labour market is an open system and the level of efficiency for its functioning is influenced by numerous factors – internal and external. These factors are presented in Table 1.

Table 1

Factors influencing labour market
(B. Martinkus et al., 2005)

Internal factors	External factors
Employee's compatibility:	- changes in the nature of work: work pay, work time, social partnership;
- detailed information regarding the need for the employee's and work place;	- changes in economy: dynamics in GDP, stage of business cycle, intensity for investment;
- level of intensity in seeking employment;	- changes in the structure of labour resources: demographical, composition, economical activity;
- employer's flexibility with regard to the work place and employment conditions;	
- employer's flexibility with regard to work conditions;	

Important to note that under dynamic labour market conditions, the pay for the workforce is also dynamic, depending on the employees' qualification, differences in training and skills. The differences in pay among employees could be explained using a competitive workforce market model. Ware going to look at one of these models, where only two different levels are analyzed demonstrating that work force fall under two types: qualified and non-qualified.

Qualified employees are able to perform various tasks, while the non-qualified ones will perform them

inadequately of will fail to do so. Therefore qualified employees have higher income than non-qualified ones, which means that the higher the workforce marginal product the higher the demand for the workforce. That is why enterprises are prepared to pay the qualified workforce higher salaries, as the main difference is the limitation in knowledge.

It is possible to point out two reasons determining the pay differences between the qualified and non-qualified workforce. First of all, qualified employees have a higher marginal product, secondly, knowledge and skills cost, therefore the supply for qualified employees is lower (Parkin, Powell, Matthews, 2000). Therefore it is possible to state that the balance between qualified and non-qualified workforce in the market demonstrate the essential difference between the pay rates due to the difference in knowledge between these two levels of workforce. Therefore, to compete in a dynamic labour market, "not to fail in it" means continuous improvement and learning in all spheres of life.

Having overviewed the importance of continuing learning a dynamic labour market environment, it is possible to state that continuing learning is a permanently continuing process, promoted by an individual's wish to learn and the factors of environment. In contemporary world, with different changes taking place, continuing learning becomes an inevitable criterion in order to successfully seek a career, improve and adapt to the new changes in labour market.

A survey of continuing learning in Panevėžys (Lithuania) labour market training and advisory authority

A short introduction of Panevėžys (Lithuania) labour market training and advisory authority

Panevėžys labour market training and advisory authority (PLMTAA) is a public administration institution which aims at implementing the policy human resources development and employment in the area assigned (Panevėžys County and Utena County Anykščiai and Molėtai districts). Panevėžys labour market training and advisory authority was established December 2, 1992. This institution employs 18 staff. The founder is Lithuanian Labour Market Training Authority at the MSS and provides the following services: consulting, individual consulting, group consulting, and consulting for social workers. This is an institution for the individuals who do not know:

- What kind of work they going to do;
- Do not have a specialization;
- Have an unsought specialization;
- Do not like their specialization;
- Do not adequately know themselves, do not know their interests and abilities;
- Do not know what kind of activities individuals of a certain profession do;
  - Do not know where they could learn a specialization they wish for;

- Do not know where they would like and could work according to their specialization;
- Do not know how to introduce themselves to the employer, offer his/her services and present themselves;
- Do not have adequate abilities to adapt to the changes;

Survey methodology

To carry out the survey a questionnaire method was chosen. The questionnaire is made up of 20 closed and open type questions. The survey was carried out from the 14 th to the 20th of April, 2009. A survey of the clients' opinions regarding continuing learning in the dynamic labour market environment was carried out. Grip was chosen in non-probability (accidental) manner for the clients visiting the institution, therefore every person could have equal opportunities to get into the survey, and it also requires less work, time and funds than a probability survey. 50 questionnaires were handed out; rate of return was 84 percent. The data on the respondents are presented in Table 2.

Table 2

Data on the respondents

Criteria	Number of respondents	Percentage
Age		
18-25	9	21 %
26-35	10	24 %
36-45	17	40 %
46-55	4	10 %
55<	2	5 %
Gender		
Female	26	62 %
Male	16	38 %
Place of residence		
Urban	27	64 %
Rural	15	36 %
Education		
Higher	9	21 %
College	8	19 %
Secondary	6	14 %
Vocational	15	37 %
Main	4	9 %
Status in labour market		
Employed	5	88 %
Unemployed	37	12 %

Results of the survey

During the survey it was clarified that the concept of continuing learning is best perceived as lifelong learning. 62 percent of the respondents said so.

Analysing the link between the respondents and continuing learning, it was inquired whether or not the respondents devote time for continuing learning. It is maintained that the respondents devote little time for continuing learning, although they realize what it is. It was also noticed that the respondents with less education also devote less time for learning. Half of the respondents indicated that they wish to learn in order to acquire new knowledge and skills, 25 percent of respondents indicated that this is so due to the constant changes in labour market, 25 percent due to the wish to find employment. Continuing learning is mainly stimulated by internal

guidelines, as 37 percent of the respondents stated so. Economical environment has less influence on continuing learning, according to 21 percent of the respondents. External environment is also important competition in labour market is one of the factors promoting continuing learning (12 percent of the respondents). Social environment (9 percent of the respondents) and psychological factors (5 percent) seem to be the least promoting factors. It means that internal guidelines, personal wish to learn and convictions promote continuing learning the most.

The survey also took an interest in what kind of factors make most influence in order to get employment. According to the respondents' opinion, work experience and education are the most important factors in order to get employment.

It was also noticed that respondents with better education and more work experience are more satisfied with their qualifications than the ones with vocational training or lower and the ones having less work experience.

The majority of respondents (37 percent) were directed to the authority by the territorial labour exchange, and employers seldom send their employees to specialized courses or seminars in this institution.

The results of the survey demonstrated that continuing learning is important to both the organization and the individual. The organization helps maintain a necessary qualification level, 61 percent of respondents think so, and according to 40 percent of the respondents, continuing learning helps an individual to find employment more easily and adapt to the conditions of dynamic labour market.

Conclusions

In contemporary world, where different changes take place, continuing learning becomes an inevitable criterion in order to successfully seek career, develop and adapt to the various changes in the environment. One of the most important priorities in the dynamic labour market environment is becoming professional development, acquiring new knowledge and skills. The changes taking place in labour market make people look for ways how to better adapt to the conditions in the dynamic labour market.

One of such ways is continuing learning, as preparedness to learn throughout one's life guarantees wider opportunities in labour market, as compared to narrow knowledge and poor qualifications.

While carrying out the survey it was notices that parsons with less education and work experience are less satisfied with their qualifications and devote less time for learning. These respondents do not have motivation for learning, are indifferent to acquiring knowledge and skills. It was also clarified that continuing learning is important for both the organization and the person. Continuing learning is promoted by internal guidelines, the person's wish to learn and competition in labour market. Continuing learning in the organization helps maintain the necessary level of qualification and the individual's knowledge acquired in the course of learning determines to keep a necessary level of qualification, and the knowledge acquired during continuous learning determines successful integration in to labour market and adapting to dynamic and eve-changing labour market environment.

References

1. Albrektaitė, D. Karjeros valdymas mokymosi visą gyvenimą koncepcijos kontekste. Lietuvos žemės ūkio universitetas [interaktyvus]. 2007. Internet link: http://www.lzuu.lt/ [accessed: 16-03-2009].
2. Arends R. I. Mokomės mokyti. Vilnius. 1998. p. 519.
3. Baršauskienė V. Nuolatinio mokymosi vaidmuo kintančioje visuomenėje / V. Baršauskienė, J. Guščinskienė // Suaugusiųjų mokymasis — įsidarbinimui ir pilietiškumui: tarptautinės konferencijos medžiaga [interaktyvus]. [Kaunas, 2003 gegužės 9, 10 d.]. Internet link: http://www.vdu.lt/ [accessed: 16-03-2009].
4. Beržinskienė D. Darbo rinkos pokyčiai ir tendencijos Lietuvoje bei Europoje // Ekonomika ir vadyba: tarptautinės konferencijos pranešimų medžiaga [Kaunas, 2001 kovo 28 d.]. Kaunas. 2001. p. 15-20.
5. Bėkšta A. Mokymosi visą gyvenimą memorandumo aptarimo Lietuvoje ataskaita / A. Bėkšta, V. Dienys. Vilnius. 2001. p. 14.
6. Dautaras J. Mokymosi visą gyvenimą motyvacija: pedagogų požiūris / J. Dautaras, N. Rukštelienė // Pedagogika. Vilnius. 2006. p. 74-79.
7. Fokienė, A. Neformalusis ir savaiminis mokymasis: samprata ir esmė. Lietuvos suaugusiųjų švietimo ir informavimo centras [interaktyvus]. 2006. Internet link: http://www.lssic.lt/, [accessed: 12-03-2009].
8. Gudžinskienė V. Mokymo ir mokymosi sampratų analizė // Pedagogika. Vilnius. 2008. p. 49-56.
9. Grigaitienė R. Kritinio mąstymo ugdymas: kodėl ir kaip? Kaunas. 2004. p. 62.
10. Grincevičius J. Nuolatinio mokymosi ypatumai: farmacijos specialistų įžvalgos profesinės kvalifikacijos kėlimo atžvilgiu / J. Grincevičius, R. Radžiūnas // Pedagogika. Vilnius. 2007. p. 105-110.
11. Gruževskis B. Nuolatinio mokymosi kryptingumas darbo rinkos aspektais. Lietuvos suaugusiųjų švietimo ir informavimo centras [interaktyvus]. 2005. Internet link: http://www.lssic.lt/ [accessed: 21-03-2009].
12. Hojlo P. Mokykis, nes viskas keičiasi // Vadovo pasaulis. 2006, Nr. 10, p. 17-20.
13. Jagminienė R. Kaip suprantamas mokymasis? Mokymosi bendradarbiaujant principai. Grupinis tyrimas // Pedagogų kompetencij.
14. Jovaiša L. Edukologijos įvadas. Kaunas. 1993. p. 192.

15. Jovaiša T. Darbo rinkos profesinio mokymo įtaka darbo rinkai // Suaugusiųjų švietimas dabarčiai ir ateičiai. Kaunas. 2000. p.76-80.
16. Juozaitis A. M. Besimokantys suaugusieji: prieš einant į suaugusiųjų auditoriją. Vilnius. 2005. 167 p.
17. Kučinskas V. Ergonomika. Vilnius. 2001. 171 p.
18. Linkaitytė G. Nuolatinio mokymosi gebėjimai ir juos veikiančios sąlygos / G. Linkaitytė, V. Širvaitytė // Suaugusiųjų švietimas dabarčiai ir ateičiai. Kaunas. 2000. p. 52-57
19. Lifelong learning – a tool for all ages. In Age [online]. 2007. Internet link: http://www.age-platform.org/ [accessed: 02-04-2009].
20. Maclean R. Bendrieji mokymosi visą gyvenimą gebėjimai // Švietimo visiems kokybė: pagrindiniai mokymosi visą gyvenimą įgūdžiai. Europos dimensija ir Baltijos šalių vizija: regioninės konferencijos medžiaga [Vilnius, 2003 spalio 23-25 d.]. Vilnius, 2004. p. 11-13
21. Martinkus B. Darbo išteklių ekonomika ir valdymas. Kaunas, 2003. 221 p.
22. Martinkus B. Lietuvos gyventojų užimtumo ekonominiai aspektai: monografija / B. Martinkus, D. Beržinskienė. Kaunas, 2005. 171 p.
23. Mokymosi visą gyvenimą memorandumas [interaktyvus]. 2001 gegužė-birželis. Internet link: http://www.lssa.smm.lt/ [accessed: 12-03-2009].
24. Panevėžio darbo rinkos mokymo ir konsultavimo tarnyba [interaktyvus]. Internet lin: http://www.pandarborinka.lt [accessed: 06-04-2009].

25. Rajeckas V. Pedagogika – ugdymo mokslas ir menas. Vilnius. 1999. 76 p.
26. Rinne R. Besimokančios visuomenės link // Profesinis rengimas: tyrimai ir realijos. 2003. Nr. 6.
27. Sahlberg P. Kaip suprantamas mokymasis. Švietimo ir mokslo ministerija [interaktyvus]. Internet link: http://www.mtp.smm.lt/ [accessed: 11-02-2009].
28. Skujaitė I. Darbuotojų mokymas — efektyvaus darbo pagrindas // Veiklos kryptis. 2007, Nr. 2, p. 68
29. Longworth N. Making Lifelong Learning Work: Learning Cities for a Learning Century. London, 2000.
30. Stanišauskienė V. Gyventojų įtraukimas į besimokančio miesto vystymą. Kaunas. 2007. p.111
31. Šernas V. Tautos elito ugdymas universitetuose // Lietuvos mokslas. Akademinė edukologija. Vilnius. 2003. p. 8-24
32. Teresevičienė M. Mokymasis grupėse ir asmenybės kaita: monografija / M. Teresevičienė, G. Gedvilienė. Atsak. red. N. Kreimerienė. Kaunas. 2003. p.179
33. The importance of lifelong learning. In 2004 Sun Microsystems [online]. Internet link: http://www.sun.com/ [accessed: 20-03-2009].
34. 2007–2013 m. Žmogiškųjų išteklių plėtros veiksmų programa, Vilnius. 2006 m. gruodžio 6 d.
35. ES Lisabonos strategija, Nacionalinė Lisabonos strategijos įgyvendinimo 2008-2010 metų programa. Internet link: http://www.ukmin.lt/ [accessed: 15-08-2009].
36. Grubb, N.W. and Ryan, P. The Roles for Vocational Education and Training. Plain Talk on the Field of Dreams, International Labour OfficeG 1999. Geneva.
37. Hodkinson, P. and Unwin, L. "The role of vocational education and training in a changing world: pro-active agent or compliant child?" in Tha°ng, P.O. and Achtenhagen, F. (Eds), Transferability, Flexibility and Mobility as Targets of Vocational Education and Training, Georg-August-Univerita ̈t Press, Gottingen. 2002. p. 72-82.
38. Wieringen V., F. and Attwell, G. (1999), Vocational and Adult Education in Europe, Kluwer Academic Publishers, Dordrecht.
39. Jančauskas E. Valstybės darbo rinkos politika Vilnius. 2006. Internet link: http://www.lka.lt/ [accessed: 25-08-2009].
40. Carter McNamara, MBA, PhD, Authenticity Consulting, LLC. Continuous Learning. Internet link: http://managementhelp.org/ [accessed: 20-08-2009].

Sandra Jakštienė, Valdas Narbutas, Daiva Beržinskienė, Michael Claudon

Šiuolaikinio požiūrio į nuolatinį mokymąsi tyrimas dinamiškoje darbo rinkos aplinkoje

Santrauka

Šiuolaikinė darbo rinka sparčiai keičiasi, keldama naujus reikalavimus darbuotojams bei įmonėms. Keliami reikalavimai sąlygoja būtinybę turėti tam tikrus gebėjimus bei savybes, kurie leistų geriau prisitaikyti prie kintančios darbo rinkos sąlygų.

Šiais laikais asmenims patekus į nuolat besikeičiančią dinamišką darbo rinką, reikia sugebėti savarankiškai susirasti darbą, specializuotis bei adaptuotis. Sėkmė darbo rinkoje priklauso nuo įvairių veiksnių: įgytos profesijos paklausos, profesinės kvalifikacijos ir kompetencijos, asmenybės bruožų, gebėjimų aktyviai prisitaikyti prie darbo aplinkos bei kitų veiksnių. Darbo rinka yra nuolat kintanti sistema, dažnai reikalaujanti naujų technologijų, gamybinių, turtinių santykių ir darbo priemonių kaitos. Gebėjimas prisitaikyti prie darbo rinkos pokyčių turi būti nenutrūkstamas procesas, kadangi žmogus skatinamas vidinių ir išorinių veiksnių, nuolatos turi tobulinti savo kvalifikaciją ir rasti naujų veiklos būdų, taip pat sugebėti išmokti nuolatos mokytis. Nuolatinis mokymasis tampa neišvengiamu kriterijumi norint sėkmingai siekti karjeros, tobulėti bei prisitaikyti prie įvairių aplinkos pokyčių. Profesinis tobulėjimas bei naujų žinių ir įgūdžių įgijimas tampa vienu iš svarbiausių prioritetų dinamiškoje darbo rinkos aplinkoje.

About the authors

Sandra Jakštienė, Doctoral Student of Economics, Kaunas University of Technology Panevėžys Institute, Lecturer, sandra.jakstiene@ktu.lt, Labour market, human resources.

Valdas Narbutas, Master's Degree in Management and Business Administration, Kaunas University of Technology Panevėžys Institute, Lecturer, valdas.narbutas@ktu.lt, Human resources.

Daiva Beržinskienė, Assoc. Prof. Dr., Kaunas University of Technology Panevėžys Institute, Lecturer, daiva.berzinskene@ktu.lt, Economic, Labour market.

Michael Claudon, Ph.D., Johns Hopkins University, Business & Competitive Strategy, New Economy Studies, Transition Economies, International Economic Policy, Middlebury College, Vermont, USA, Professor of Economics, Economic.

OPEN VERSUS CLOSED INNOVATIONS: USING THE UNIVERSITY POTENTIAL FOR DISSEMINATION OF PRODUCTIVE SCIENTIFIC KNOWLEDGE AMONG ENTERPRISES

Brigita Janiūnaitė

Kaunas University of Technology, Lithuania

Abstract

The innovation process is subject of various changes. Currently innovation becomes more and more dependent on the horizontal links, e.g. joint research, joint research and development firms, strategic alliances. The model of Open Innovation have suggested that many innovative firms have changed the way they search for new ideas, adopting open search strategies that involve the use of wide range of external actors and sources to help them achieve and sustain innovation. Strengthening cooperation and networks will be integral to an effective innovation strategy in the downturn. The article addresses the following question: how to use the university potential for disseminating productive scientific knowledge among enterprises and thus enabling innovations. The article focuses on the case of a catching-up country and the situation determined by the global crisis.

Introduction

In the 21st century, the innovation process is subject of various changes. The early Schumpeterian model of the lone entrepreneur bringing innovations to markets has been superseded with by a rich picture of different actors working together in interactive processes of trial and error to bring about the successful commercial exploitation of a new idea (Schumpeter, 1942/87; Rosenberg, 1982; von Hippel, 1988; Freeman and Soete, 1997; Tidd,Bessant, and Pavitt, 2000).

New models of innovation have suggested that many innovative firms have changed the way they search for new ideas, adopting open search strategies that involve the use of wide range of external actors and sources to help them achieve and sustain innovation (Tidd, Bessant, and Pavitt, 2000;Laursen, Salter, 2006). A recent example of research regarding the interactive, distributed, and open nature of innovation can be seen in Chesbrough's 'open innovation' model (2006).

This paper explores the relationship between the openness of firms to different knowledge domains, especially universities, and its innovative performance. However in the process of the article preparation global crises as well as recession influence upon catching-up countries were particularly sharply felt. Under such situation it is not sufficient only to scan how cooperation of universities and enterprises happens in such country, but also what to do in such situation, because the NESTA (UK) discussion paper (2008) states that we need a strategy to attack the recession, not just respond to it. As its heart is a simple idea: this is a recession brought on by the ultra-networked character of the modern economy and the solutions will be more effective if they work with and reshape those networks. As innovation must be central to our response to the recession, strengthening cooperation and networks will be integral to an effective innovation strategy in the downturn. Thus, having disclosed the peculiarities of cooperation between universities and enterprises, especially knowledge-intensive, the article pursues to answer the following research question: how to use the university potential to disseminate productive knowledge among enterprises and thus enable

innovations, especially in the case of a country under a deep crisis? This problem is addressed in the following parts of the article: the first part reveals the relationship between open and closed innovations; the second part focuses on the process of knowledge translation into innovations; the third part presents the research methods, whereas the fourth part discusses the specific features of scientific knowledge dissemination in the context of innovative performance at Lithuanian enterprises; the fifth part reveals the university potential for disseminating scientific knowledge among enterprises in the context of the open innovation model.

Open versus closed innovation

According to Vanhaverbeke et al. (2007), the conventional model of closed innovations is based on investment into internal R&D which leads to the emergence of momentary outbursts of innovation. This kind of innovations normally is products or services for the market that provide enterprises with competitive advantage by increasing the profit through the existing business models. Additional profit may be reinvested into further research and the cycle repeats. The model of closed innovations also is limited in the sense that its application eliminates ideas and projects that may seem wrong in the stage of initiation, even the initiatives are positive.

Drawing on Chesbrough (2003), Nuevo (2006), Vanhaverbeke et al. (2007), one may note that the contemporary economy involves a lot of factors that disrupt the logicts of the closed innovation models:

- Mobility of a competent labour force;
- Emergence of enterprises financed by risk investment;
- Application of opportunities provided by risk investment in order to commercialise one's ideas;
- External suppliers may offer solutions equivalent to internal research of highest quality.

Referring to Chesbrough (2006), the open innovation paradigm can be understood as the antithesis of a traditional vertical integration model where internal research and development (R&D) activities lead to

internally developed products that are then distributed by the firm. Open innovation is the use of purposive inflows and out-flows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. The open innovation paradigm points out that the firms can and have to apply the external and internal ideas, external and internal ways to the market. The paradigm emphasizes the internal ideas that can be presented through external channels, completely dissociated from present activity of a firm in order to create added value. R&D in the paradigm is treated as an open system. The paradigm of open innovations suggests that valuable ideas can emerge from outside or inside of a firm. This viewpoint involves external ideas and external ways to the market, their importance is not less than internal ideas and internal ways to the market used by a firm, which were very important in earlier days.

According to Vanhaverbeke et al. (2007), the model of open innovations effectively functions in the interface of clusters of different sectors of several sciences. This creates favourable possibilities to coordinate different knowledge, competences of employees of different industrial sectors as well as to apply methods of different sectors for its activity, and to integrate technologies. Here scientists point out the establishment of institutional networks, which would be oriented to different scientific domains. Thus development of relations among organisations, encouragement of science and business cooperation, clusterisation is one of the essential premises for the functioning of the model of open innovations. This conception stimulates creativity and initiative, as well as it attracts more different flows of knowledge and creates a favourable ground for emergence of ideas and creation of innovative products.

Translation of productive knowledge generated at the university into inovations

An innovation is a creative and interactive process, which involves profit and non-profit institutions. The innovation forms when the knowledge of different types is creatively applied in order to react the demand that has formed in the market or social needs.

In the aspect of knowledge production it is important to mention one more significant category – productive, innovative knowledge. Socially 'tenacious', valuable knowledge – the knowledge that can potentially be applied and transform in innovation – is considered as *innovative* knowledge. Referring to Nowotny, Gisler (1999), socially 'tenacious' knowledge is such in the production process of which the context is evaluated, and this, in its turn, creates premises for diffusion of knowledge and its application in praxis. As Kriaučionienė (2002) states, *productive* knowledge is practically efficient knowledge directly participating in the process of economic value production.

The viewpoint to the mechanism of knowledge production that for a long time prevailed in the society referred to neo-classical theory of economics where productive knowledge is defined as technical information and is perceived as universal good (Joly, Cohendet, 2001; Nyholm et al., 2001). Referring to evolutionary theory of economics, productive knowledge is perceived as combination of tacit and explicit knowledge, the model of their diffusion evaluates the importance of differences among actors and their being place. In this case actors acquire knowledge only if they directly interact with the actor who renders it. This model also indicates that it is not enough to get information about innovation. In order for it to become economically useful, it is necessary to master this information and to integrate it into already existing structure of knowledge. In this sense the empowerment of absorptive capacity of enterprises and other actors becomes important, and this allows cooperation between universities and enterprises (Kriaučionienė, Jucevičius, Ragauskas, 2008).

The prevalent viewpoint that innovativeness of an enterprise is mostly determined by investments into science, technological and experimental development (R&D) is changed by the attitude that investments into R&D at an enterprise are not the only way leading towards innovativeness. The particularity of science-based technological innovations requires cooperation activity within an open network or distribution of elements of innovative activity in a cluster. Experience-based innovations also require cooperation and networking activities.

Transformation of scientific knowledge into innovations always depends on the relation of the latter knowledge with the market. Every technological possibility first of all forms in dynamic interface of scientific knowledge and markets (finances, consumers). Dynamics of the latter three components determines the amount of technological possibilities in the system (Kriaučionienė, Jucevičius, Ragauskas, 2008).

There is a variety of theoretical perspectives useful to knowledge translation. Weiss (1979) distinguishes even six general models of knowledge translation, for example, interactive model, political model, tactical model, knowledge-driven model, etc. Definition of knowledge translation and related concepts are frequently missing or absent from articles, different disciplines use different definitions (Estabrooks et al., 2006). In this article knowledge translation is treated as 'exchange, synthesis and ethically-sound application of knowledge – within a complex system of interactions among researchers and users' (Estabrooks et al., 2006). The process of knowledge translation is structured drawing on the Research Development Dissemination Utilization Framework (Havelock, 1969). The following processes take place: knowledge building would address the need for systematic integration of theories to replace scattered and fragmented approaches, and institutionalizing would create an accessible and dynamic science for researchers, policymakers and practitioners by establishing a range of teaching and research programs. Collaborative interactions and trusted linkages between various individuals were proposed as mechanisms to ensure that problem framing and solutions were relevant and useful. These relationships of trust between researchers, practitioners and policy-makers were viewed as conduits for the dissemination and transfer of information and scientific knowledge.

In the most common sense knowledge becomes innovation in the context of knowledge evolution: from

research to production (Jotautienė, 2003). This statement is sustained by the model of innovation creation presented by Gečas (2002) who treats the process of emerging innovation as a logical sequence: idea (manifestation of new knowledge and technologies) → innovative process in the organisation which generates innovation → presentation of a new product in the market → its return to the organisation and relation to commercial activity. This model reflects the relationship between knowledge and innovation with reference not only to technological but also to social innovations.

Research methods

In order to evaluate general profile of mechanisms of knowledge diffusion and absorption as well as their existence in the system, it is purposeful to evaluate the following statistical parameters:

• the part of innovations being generated while cooperating within total number of innovations;

• percentage distribution of the most important partners of enterprises' innovative activity;

• percentage distribution of the most important sources of innovations at enterprises;

The latter parameters are analysed referring to the results of Community Innovation Survey (CIS IV) in Lithuanian business in 2002-2004, the Eurostat database and the database of the Statistics Lithuania.

The research on possibilities of science and business cooperation referred to the survey-in-written. The questionnaire is designed in order to analyse needs and expectations of enterprises set for the sector of science, as well as cooperation needs, congruence of the offer of science sector to these forms, institutional and organisational premises of cooperation. The Forum of Knowledge Economics performed the research in 2008.

Total number of enterprises that answered the questions of the questionnaire is 93. The enterprises of the sector of information and telecommunication technologies were the most active participants in the research on science and business cooperation. Thus so-called knowledge-intensive firms made 38.7 percent in the total sample of the respondents. In the research there were 6.5 percent of the enterprises of wood, paper and furniture manufacturing sector, 3.2 percent of the enterprises food

industry sector, and 1.1 percent of the enterprises of textile sector.

Collaboration for innovation between universities and Lithuanian enterprises

In 2002-2004 innovation production by cooperating was applied by 53.3 percent of all innovative enterprises, whereas in 2004-2006 – only 43 percent of all innovative enterprises. The analysis of partners of innovative activity at enterprises shows that the most important partners of innovative activity were suppliers (45.5 percent), clients and consumers (34.54 percent), centres of innovations as well as other organisations forming diffusion subsystem, consultants (24.9 percent).Higher education institutions and science institutes remain relatively less important than other partners of innovative activity.

Intensity and partners of enterprises' cooperation in generating innovations rather significantly differ, subject to a business sector (see Table 1).

Universities were important partners of innovative activity at wholesale and retail trade (33.7 percent); electricity, gas and water supply (23.3 percent), other business activities (22.4 percent), construction (20.3 percent), and less cooperation manifested in generating innovations in manufacturing (13.6 percent), mining and quarrying (12.5 percent), transport and communications (11.8 percent). This type of partnership is not so popular (3.2 percent).

State science institutions were a gradually important partner of innovative activity in mining and quarrying exploitation, as well as suppliers and clients in this sector (correspondingly each by 25 percent).

State or public research enterprises (not universities) were least important partners of innovative activity at all categories of enterprises though the capability of large enterprises to cooperate was somewhat larger than of small and medium enterprises – correspondingly 19.71 percent, 8.78 percent and 8.58 percent of the enterprises of these categories produced innovations by cooperating with science institutes. Universities were a bit more significant partners of innovative activity – innovations were generated with them by 29.2 percent of large enterprises, 10.05 percent of medium enterprises and only a bit more of small enterprises – 10.64 percent (see Table 2).

Table 1

Co-operation arrangements on innovation activities, percent of enterprises with innovation activity, 2004–2006

Type of economic activity	Enterprises in cooperation	Cooperation with:						
		Partners	Suppliers	Clients or customers	Other enterprises	Consultans	Universitis	State science institutions
Total	**43.0**	**21.2**	**34.1**	**27.7**	**17.8**	**21.3**	**18.4**	**10.3**
Mining and quarrying	25.0	12.5	25.0	25.0	12.5	12.5	12.5	25.0
Manufacturing	40.8	14.5	36.6	26.0	20.6	19.8	13.6	10.6
Electricity, gas and water supply	60.5	14.0	58.1	32.6	27.9	27.9	23.3	18.6
Construction	23.1	10.8	23.1	21.4	21.7	20.8	20.3	19.7
Wholesale and retail trade	69.8	66.0	36.8	34.4	0.7	34.7	33.7	0.3
Transport, storage and communications	47.2	7.1	40.6	32.1	21.2	14.6	11.8	9.4
Financial intermediation	80.6	58.1	58.1	32.3	22.6	29.0	3.2	-
Other business activities	37.3	16.7	25.4	30.3	16.7	15.4	22.4	7.0

Source: Statistics Lithuania, 2008

Table 2

Intensity and partners of enterprises' cooperation in Lithuania, subject to their size in 2002-2004, in percentage from the group of the size of all enterprises that produced innovations

Cooperated with:	The size of an enterprise by the number of employees at the enterprise			
	Total	10-49	50-249	250+
Total	**56.11%**	**53.42%**	**56.31%**	**73.72%**
Partners	**16.71%**	12.05%	20.29%	34.31%
Suppliers	**45.45%**	40.50%	48.45%	67.15%
Clients or customers	**34.54%**	33.01%	34.00%	46.72%
Competitors or other enterprises in the same sector	**25.44%**	24.00%	25.78%	32.85%
Consultants, laboratories or private research institutes	**24.94%**	21.06%	27.61%	40.15%
Universities or other higher education institutions	**12.03%**	10.64%	10.05%	29.20%
State or public research enterprises	**9.60%**	8.58%	8.78%	19.71%

Source: Eurostat, 2008

Research organisations and universities as a very important source of knowledge for innovations was identified even by 16.1 percent of the enterprises, 26.9 percent of the enterprises indicated it as an important one, and the same percentage of the respondents (26.9 percent) – as moderately important. Thus more than a half of the enterprises pointed out the cooperation with science institutions as an important component. Thus it is possible to state that both organisational premises, and the positive attitude and the need to cooperate with science institutions by generating innovations in business exist.

The demand for knowledge in innovative processes was expressed strongly enough. When evaluating according to separate categories, it became evident that enterprises mostly needed the solutions oriented to activity optimisation, as well as management knowledge and technologies; and enterprises the least hope to get such formal knowledge as patents.

When assessing the compatibility of knowledge supply and demand, it is evident that the demand of scientific knowledge of specific categories is much greater than the supply. Significant nonconformity of the supply and demand was observed in all analysed knowledge categories.

When analysing experience and forms of cooperation with science institutions, it became clear that even 65.6 percent of the enterprises have such experience of cooperation, thus they can rather successfully evaluate cooperation possibilities, limitations and benefits.

When assessing cooperation structures, it becomes obvious that universities cooperate most successfully – even 73.8 percent of the respondents assessed such cooperation positively. Private consultants and individual researchers were rather successful – such cooperation was successfully evaluated by 37.7 percent of the enterprises. State and university science institutes were evaluated somewhat less, but this evaluation can be related to specific orientation of these institutes, which limits the spectrum of cooperation possibilities with business sector. It should be mentioned that individual doctoral students were evaluated as successfully participating in cooperation at even 13. 1 percent of the enterprises, thus

the experience of the successful cooperation between a young researcher and business enterprises exists (see Fig 1).

Evidently, in this domain the greatest limitation and hindrance for cooperation is the incongruity of topics of doctoral students' research to topicalities of business sector, as well as frequent and mean information possession by both parts on needs for researches and their accomplishment.

When assessing cooperation problems, it became evident that business enterprises mostly miss applied-character solutions (65. 6 percent), "reality sense" (62. 3 percent), economic thinking (36.1 percent), original fundamental solutions (26.2 percent), and engineering thinking (18.0 percent).

Thus, referring to the results of this research, it is possible to agree with the opinion of Radosevic and Mickiewicz (2002) that *the means oriented to a specific sector or development of technological system, empowerment of social interfaces could be more effective than general means of innovation policy or horizontal means of infrastructure creation such as centres of innovations or science and technology parks* because enterprises are not yet able to participate in the latter mechanisms of knowledge transfer.

Using the university potential for dissemination of productive knowledge among enterprises

The disclosed situation shows certain tendencies, a "snapshot" of the situation, in order to solve which it is possible to appeal to the theory of networks, innovative entrepreneurship and other concepts, as well as good experience of other countries; but the global crisis, recession hardens the situation as well as stimulates a researcher focus on wider aspects. Thus the question how in the country, where there is no compatibility between separate elements of the national system of innovations, networking tradition, low absorptive capacity, etc., and alongside the impact of the global crisis is particularly strongly felt, a university should act. Is usual cooperation with enterprises sufficient when transferring produced science knowledge, solving the problems that enterprises
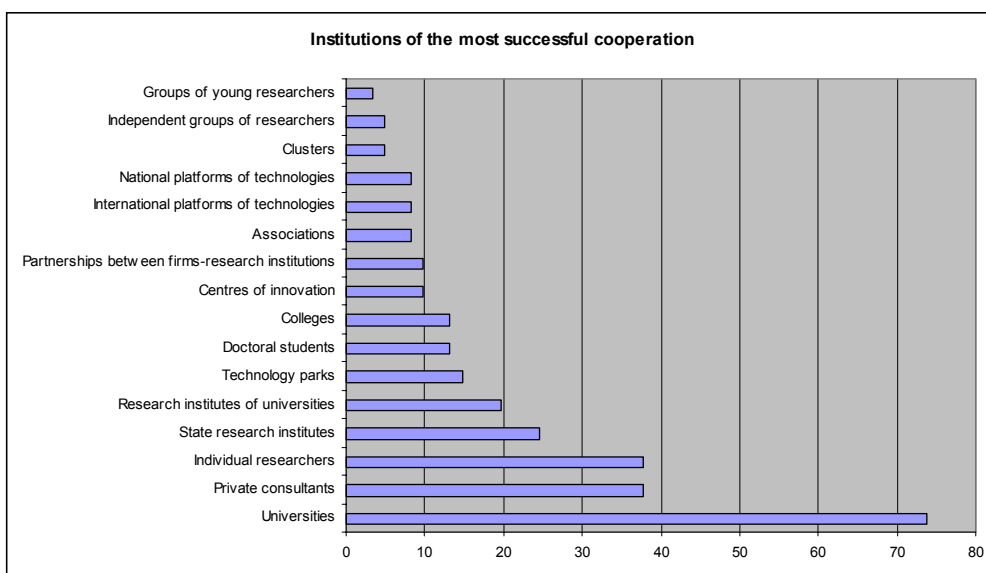
Figure 1. Cooperation between science and business sector

face? Have universities to focus on fundamental or more on applied research?

The answers to these questions were pursued by referring to discussion paper *Attacking the Recession. How Innovation can Fight the Downturn (Leadbeater, Meadway et al., December, 2008)* prepared by UK NESTA organisation.

The document refers to the basic statement that *we need the strategy to attack the recession, not just to respond to it. Innovation – in business, communities and public services – needs to be at the heart of that attack'.* Crisis is often critical to innovation. A crisis provides an urgent sense of focus to mobilise resources and break down barriers, which normally stand in the way of innovation. On the other hand, it has to be considered that investment in new technologies is likely to be reduced. R&D spending is usually pared back by cash-strapped firms. Start-ups will have to compete more fiercely for venture capital that will be in shorter supply. What decisions are suggested in this case?

- Investment in innovation may be in shorter supply but there will be a premium on making more effective and creative use of resources that are available. **Innovation on the job – not in the lab – will become more important.**

- Strengthening collaboration and networks will be integral to an effective innovation strategy in the downturn. The recession will accelerate the shift away from pipeline models of innovation towards more **open, networked approaches** as firms increasingly learn to share resources and **collaborate, with universities and consumers as well as other firms, to innovate.**

- Firms will need to **focus even** more tightly **on innovation that creates value for customers.** That does not necessarily come from new inventions or technology**.** According to Chesbrough (2003), **the importance of business models in creating value from technology is emphasised.** The emphasis will be on business innovation, rather than technological innovation. **There will be a sharper focus on exploiting technologies and innovations that have already been invented**

(recombination or re-use of known practices. This will create opportunities for firms that can combine existing technologies with new business models to create disruptive low cost products.

- Firms will need to harness innovation from many more sources, which apply to different aspects of their business. Firms will need to open their innovation processes to make them more cost effective. The downturn could stimulate **a new wave of networked innovation. This will mean firms establishing new alliances, partnerships and collaborative approaches to shared problem solving.**

- The extent to which local actors successfully drawn on such networks depends on their ability to identify, interact, assimilate and exploit new sources of knowledge – what has been labelled their **'absorptive capacity'**. The more connected a place is, the greater its ability to attract global ideas; and **the greater its absorptive capacity, the greater its ability to reap the benefits at home.**

- Developed economies can only compete by becoming more entrepreneurial and more skilled. In this sense it is necessary to speak about the development of entrepreneurship innovative culture. Short entrepreneurship programmes for young job seekers may better prepare them for economic conditions in which finding a job will be hard. We need a human capital strategy for the recession which would encompass: young people staying on at school and college, with a focus on entrepreneurship and business skills; new approaches to use online social networks and clubs to keep people connected to work, etc.

What to do in such a case and how are universities related? One of the exceptions is the application of the model of open innovations, which creates favourable conditions to use different knowledge flows by developing available technologies or by creating new ones. These tendencies not only found the importance of external knowledge for innovation development, but also force an organisation to apply new business models. Processes of such business model induce creativity,

generation and discussion of more different ideas. The enterprise functioning on the principle of open innovations distinguishes in the flows of information and competences to and out of the enterprise; and this creates favourable conditions for production of innovative products with high value-added, especially by focusing to exploiting technologies and innovations that have already been invented (recombination or re-use of known practices). This will create opportunities for firms that can combine existing technologies with new business models to create disruptive low cost products. In this context an important role falls to universities in enabling enterprises for generation of innovative ideas, guaranteeing distribution of knowledge flows into and out an enterprise, coordinating and enabling the functioning of the model of open innovations in the case of different sectors and inter-sectorial clusters, and finally implementing innovative knowledge of science into enterprises, modelling network-based national system of innovations, etc. The capacity of an enterprise to infuse, to absorb knowledge, i.e. its absorptive capacity is directly related to the concept of open innovations. The capacity of an organisation to infuse knowledge has to be understood as coordination and integration of competences or knowledge at different institutions. Cooperating organisations always have different technological capacities and capabilities; this creates gaps among enterprises. It is possible to decrease technological gaps by increasing own capabilities to absorb knowledge. In order to effectively share knowledge, close cooperation between scientific, especially universities, and business institutions is necessary. The attention should be paid to that external knowledge can be recognised and assimilated only when enterprises develop new orders and change organisational structure and culture that it would be favourable and would induce processes of open innovations (Vanhaverbeke et al., 2007). Collaboration across international borders will help regions, firms find common solutions, but also *allow them to draw from a deeper external pool of ideas*, absorbing them and turning them into innovations at the local level. Universities can be the transitional link, which empowers enterprise's absorptive capacity through empowerment of enterprises for such activity directly, i.e. together with enterprises, their clusters to foresee absorption strategies and so on, as well as indirectly – through the development of a specialist with absorptive capacity. Universities can play a more specific role by engaging in a closer way with firms and its needs via

certain forms of professional training (involving the development of special competences), consultancy (involving the application of practical knowledge) and etc. In general, much of the work of the universities will contribute to innovation, some of it indirectly. A university education can unleash the talents lying within members of society, many of which will find application in innovation, i.e. universities can act as a *magnet for talent*.

Conclusions

- It is clear that the most sophisticated knowledge interaction, such as learning from the market and other system actors, are not being developed. The most basic forms of innovative activities prevail where the main power belongs to the suppliers of technologies. So there is a donor-recipient relationship prevailing in the system, where Lithuanian businesses are little involved in creating new technologies. So it is possible to see the tendency to build networks, based on social and cultural proximity, and institutional path dependences that tend to favour the Taylorist practices of management and closed rather than open innovation.

- Cooperation between universities and enterprises has to pass from rendering intellectual services to creation of intellectual property and its commercial application.

- Universities can be the transitional link, which empowers enterprise's absorptive capacity through empowerment of enterprises for such activity directly, i.e. together with enterprises, their clusters to foresee absorption strategies and so on, as well as indirectly – through the development of a specialist with absorptive capacity.

- Universities can play a more specific role by engaging in a closer way with enterprises and its needs via certain forms of professional training (involving the development of special competences), consultancy (involving the application of practical knowledge), etc.

- A university education can unleash the talents lying within members of society, many of which will find application in innovation, i.e. universities can act as a *magnet for talent*.

References

1. Chesbrough, H (Ed.) (2006). Open Innovation. Researching a New Paradigm. Oxford: Oxford University Press.
2. Chesbrough, H. (2003). Open Innovation: The New Imperative for Creating and Profiting from Technology. Harvard Business School Press.
3. Estabrooks et al.(2006). A Guide to Knowledge Translation Theory. *The Journal of Continuing Education in the Health Professions*. Vol.26.No.1, Winter.
4. European Commission (2008). European Innovation Scoreboard 2008.
5. Freeman, C., Soete, L.L.G.(1997). The Economics of Industrial Innovation. Pinter:London.
6. Havelock, R.G. (1969). Planning for innovation through dissemination and utilization of knowledge. Ann Arbor, MI: Center for Research on Utilization of Scientific Knowledge.
7. Jotautienė, M. (2003). Edukacinių novacijų diegimo barjerų nustatymo metodologija ir jos taikymas sisteminės novacijos atveju. Daktaro disertacijos rankraštis. Kauno technologijos universitetas.
8. Kriaučionienė, M. (2002). Nacionalinės inovacijų sistemos vystymo metodologija. Daktaro disertacijos rankraštis. Kauno technologijos universitetas.
9. Kriaučionienė, M., Jucevičius, G., Ragauskas, A. (2008). Inovatika ir inovacinės technologijos.Kaunas:Technologija.

10. Laursen, K., Salter, A. (2006). Open for Innovation: the Role of Openness in explaining innovation performance among U.K. manufacturing firms. *Strategic Management Journal*.27: 131-150.
11. Leadbeater, Ch., Meadway, J. et al.(2008). Attacking the Recession. How Innovation can fight the Downturn. NESTA Discussion Paper: December.
12. NESTA Policy Briefing, June 2007.
13. Nowotny, H.&Gisler,P.(1999). The Production of Socially Robust knowledge. Report in Swiss Priority Programme 'Switzerland towards Future'.Gesuch No.5004-58484, Zurich.
14. Nuevo, Y. (2006). Open Innovation Driving Renewal. TEKES Innovation Foresight Seminar. The University of Sydney.
15. Nyholm et al.(2001). Innovation policy in the knowledge based economy-can theory guide policy making? In Archibugi,D., Lundvall,B.A.(eds.). The Globalizing learning economy. New York:Oxford University Press.
16. Radosevic, S., Mickievicz, T. (2002). Innovation capabilities of the seven EU candidate countries. University College London, School of Slavonic and East European Studies.
17. Rosenberg, N. (1982). Inside the Black Box . Technology and Economics. Cambridge University Press.
18. Schumpeater, J.A. (1942/87). Capitalism, Socialism and Democracy. Unwin:London.
19. Statistics Lithuania (2007). Development of innovation activities. Based Community Innovation Survey (CIS) 2002-2006. http://www.stat.gov.lt
20. Studentų doktorantų darbų pasiūla ir paklausa verslo įmonėse.(2008). Tyrimo ataskaita. Žinių ekonomikos forumas.
21. Teed, J., Bessant, J., Pavitt, KLR. (2000). Managing Innovation: Integrating Technological, Market and Organisational Change (2nd ed.).Wiley:Chichester.
22. Vanhaverbeke W., Cloodt, M., van de Vrande, V. (2007). Connecting absorptive capacity and open innovation. Cas Oslo Centre for Advanced Study. http://www.cas.uio.no
23. von Hippel , E. (1988). The Sources of Innovation. Oxford University Press: New York.
24. Weiss, C. (1979). The many meanings of research utilisation. *Public Administration Review*. September/October, pp.426-431.

Brigita Janiūnaitė

Atviros prieš uždaras inovacijas: universitetinio potencialo panaudojimas produktyvių mokslinių žinių platinimui tarp įmonių

Santrauka

Inovacijos procesas yra įvairių pasikeitimų veiksnys. Šiuo metu inovacija tampa vis labiau priklausoma nuo horizontalių sąsajų, kaip bendras tyrimas, bendras tyrimas ir firmų plėtra, strateginės sąjungos. Atviros inovacijos modelis iškėlė prielaidą, kad daugelis pažangių firmų pasikeitė tuo būdu, kuriuo jos ieško naujų idėjų, pritaikant atviro ieškojimo strategijas, kurios apima plataus diapazono išorinių dalyvių ir išteklių panaudojimą, tam, kad joms padėtų pasiekti ir sustiprinti inovaciją. Kooperavimosi ir tinklų stiprinimas bus būtinas efektyviai inovacijos strategijai nuosmukio metu. Straipsnis adresuoja sekantį klausimą: Kaip panaudoti universistetinį potencialą produktyvių mokslinių žinių platinimui tarp įmonių ir tokiu būdu įgalinti inovacijas. Straipsnyje sutelkiamas dėmesys į pasaulinės krizės nulemtą šalies situaciją.

About the author

Janiūnaitė Brigita, PhD in Social Sciences (Educational Science); Professor at the Institute of Educational Studies, Faculty of Social Sciences, Kaunas University of Technology, Lithuania. E-mail: brigita.janiunaite@ktu.lt, phone number.: +370 37 300 132. *Research interests:* management of educational innovations, change management.

A MODEL OF ORGANIZATIONAL LEARNING FOR SOLUTION OF PROBLEMS OF SUSTAINABLE DEVELOPMENT

Palmira Jucevičienė, Valentina Burkšienė
Kaunas University of Technology, Lithuania

Abstract

The amount of research works on sustainable development of organizations has been noticeably increasing (Parker, 1993; Epstein, 2008; Kliučinskas ir Čiegis, 2008; Laszlo, 2008; Ollson, 2009, etc,.), but there is little attention for considering the following question: how to enable sustainable development of organizations?
This article aims to reveal processes of organizational learning, enabling their sustainable development. The article consists of three parts. The first part a concept of sustainable development is discussed. The second part emphasizes the peculiarities of organizational learning and in the third part a theoretical model of organizational learning of sustainable development is substantiated.

Keywords
Organizational learning; sustainable development, sustainability.

Introduction

A modern concept of sustainable development requires a holistic approach to social, economical and environmental problems and finding right solutions (Kliučinskas and Čiegis, 2008). Sustainability is considered as a new way of accepting environment as well as a normative ethical principle for future development of society and foreseeing need of a critique both of human interaction and algorithms of activity (Parker, 1993 Čiegis, 2005 in Kliučinskas and Čiegis, 2008). Sustainability is related to all ecosystems, but nowadays it is essential for a human system and anthropological problems. A challenge of sustainability is considered as an evolutionary one (Laszlo, 2001), and a new evolutional stage is proposed to be named as "sustainable society". People have become the integral agents of evolution and are responsible for its consciousness.

Sustainability is also considered as an *integral ideology*, applied for embedding the current policy and social order. *Sustainability* in this way is considered as *a universal and most suitable world approach* which should be accepted by every person. Currently everyone wishes to develop in sustainable way, thus the process is not over, and no static aim can be achieved as *sustainable development is an ideal of developing within a system* (Bagheri, 2006).

Sustainable development is mostly analyzed on national, regional or municipal levels (Parker, 1993; Jepson, 2001; Čiegis, 2005 in Kliučinskas and Čiegis, 2008; Ollson, 2009), but some researchers argue that the process differs regarding different countries, regions and municipalities as it is influenced by local culture and traditions and evolves in different social, economical and ecological environments (Kliučinskas and Čiegis, 2008; Ollson, 2009). Recognizing that sustainable development is considered as an overall objective, there is an agreement, that ideology of sustainable development in formal or informal ways reaches every existing social system- be it community, social movement, region, municipality or other organization.

Currently the increased amount of research is observed, analyzing sustainable development of organizations (Kriščiūnas, Grėblikaitė, 2007; Laszlo, 2008; Epstein, 2008). But those works mostly emphasize on external experts who should help an organization to turn to sustainable development. The big focus has been placed on the importance of coherence among planning, programming and policy (Mackau, 2004; Jepson, 2001; McElroy, 2000 in Mackau, 2004). But considering sustainability as an integral global ideology, sustainable development is a concept, which first of all has to reach a collective mind of organization and become a collective belief, that sustainable behavior is not only important but extremely necessary (Perkins, 1993 in Easterby- Smith and Lyles, 2003). Thus, the problem of a collective competence of sustainable development emerges that should be solved by means of organizational learning.

Organizational learning is perceived as knowledge acquisition, conversion and creation aiming to facilitate the achievement of organizational objectives (Easterby-Smith ir Lyles, 2003). Organizational learning is also perceived as: a) field of human resources stressing on training, interactive learning and organizational culture (Vera and Crossan, 2003 in Pasteur, Pettit and Schagen, 2006), b) achievement of subjective perspective of a group of individuals involved in a common activity through actions, behavior and communication (Brown and Duguid, 1991 in Easterby- Smith and Lyles, 2003), c) learning in collaboration, when new knowledge and innovations are produced during the process (Laszlo, 2001).

A literature of organizational learning, which problems according to Easterby- Smith, Shenxue Li and Bartunek (2009) are recently of great scientist interest, concentrates on defining and analyzing processes embodying individual and collective learning in the organization. Therefore organizational learning is both activity and process, which help an organization to seek an ideal of learning organization (Finger and Brand, 1999).

Recognizing the importance of organizational learning for developing of collective competence in sustainable development, the following questions may be addressed: what processes of organizational learning should occur and enable sustainable development of organization? Are these processes possible during routine activities of the organization?

The novelty of a topic is that the object is analysed in a multidisciplinary field, trying to relate the managerial and educational approaches for problem solution. New knowledge management recognizes not only the importance of organizational knowledge (an outcome) but also importance of knowledge creation process (thus organizational learning), when new knowledge, important for an organization have been produced.

The research in management unfortunately lacks deeper insight into learning process and the understanding of the opportunities of organizational learning for sustainable development to be employed.

The article aims to reveal the processes of organizational learning that enable organization development in a sustainable way and to define if these processes may occur during routine performance in the organization.

The article consists of three parts. The first part presents the conception of sustainable development. The second part reveals the aspects of organizational learning, important for its further application for integrating sustainable development in the organization. And in the third part we validate a theoretical model of organizational learning for sustainable development.

Concept and essence of sustainable development

Sustainability defines status or process which is possible to maintain on a certain level for unlimited period of time. The primary idea of sustainability meant the necessity to renew all exploited resources (Davis, 1996). But commonly in academic and public discourse the concept is used to define, how long ecosystems expect to remain productive with the emphasis on the necessity to remain productive for unspecified period of time or in other words to be sustainable.

Despite the relations with all ecosystems, nowadays sustainability is most relevant to a human system and anthropologic problems. Sustainability is treated as a new way of reflection of environment with analyzing interrelations among environment, economics and culture and trying to realize those interrelations existing on local, regional, national and global levels.

Some authors (Parker, 1993 Čiegis, 2005 in Kliučinskas and Čiegis, 2008) consider sustainability as a new way of accepting environment as well as a normative ethical principle for future development of society, pointing not to as things are but as they should be and foreseeing the need of a critique both of human interaction and algorithms of their activity.

Sustainability emerges from human interaction and interdependency as well as from the negotiated agreements; therefore, institutions should be established by principles of both interaction and trust. Sustainability requires implicit confidence. Following this approach sustainability is also considered as integral ideology, which is used for embedding sustainable policy and social arrangements. There is no doubt that challenge of sustainability is considered as an evolutionary one (Laszlo, 2001), and a new evolutional stage is proposed to be named as a "sustainable society". Human have become the integral agents of evolution and are responsible for its consciousness. Sustainability recently is considered as universal and most appropriate approach

to the world, which has to be accepted by every person. However, in any evolution there is always a possibility for devolution or disappearance (Laszlo, 2001).

There is no still one common, clear normative and implementable definition of sustainable development as concept is quite new in spite of being very topical. Sustainable development is also considered as modern paradigm or political area (Bauler, 2007), multidimensional and integral process by its origin (Jepson, 2001; Kliučinskas and Čiegis, 2008,). Theoretically, sustainable development is understood as systemic or oriented to processes and is considered as a complex factor.

Following the system approach, sustainable development is considered as a continuous development with a framework of hierarchical interaction, where two complex adaptive systems such as human society and natural environment interact and where human society is incorporated into the second one and the support of previous depends on the later.

Köhn (1998 in Bauler, 2007) proposes three -level triangle system with the environmental system on the base level. It makes a basis for society development. The second level of social system is divided into three subsystems: political, economical and cultural. All five subsystems are directly or indirectly interrelated.

Munasinghe (1995 in Bauler, 2007) refers to system approach and proposes a model for sustainable development, and this model is somewhere in the middle between three main poles: economics, environment and social dimensions. Every pole has its own mono-dimensional outcomes of policy and mono- disciplinary criteria. In author's opinion, sustainable development means embedding solutions, which are made regarding the appropriate criteria related to an appropriate pole.

Aiming to perceive the process of sustainable development, it could be depicted as a multilayer head of an onion, where in the center one may found concentration of social, cultural, institutional and economical dimensions or so called human dimensions. The environmental dimension envelopes those in the center (as there are no human performances without environmental sphere). Between those layers there is a constant interaction based on the agreed rules. The model (Bauler, 2007) emphasizes human activities, which are embedded in environment and could not be performed without paying attention to outcomes.

There are three universally acknowledged dimensions or axes of sustainable development:

Economic sustainability, which means the generating of welfare in different levels of society and increasing of effectiveness in all economic activities as well as the opportunity to sustain organizational performance for a long time. From a system theory approach economics can not be separated from society and environment. Sustainable economics is one which protects and strengthens well functioning ecosystem.

Social sustainability means the respect of human rights and equal opportunities for every member of society. Social sustainability requires equal distribution of benefit and aims to release poverty. As Walt Rostow (in Davis, 1996) claims, sustainable development means that economies of the third world in the future will become

equal to economies of the advanced countries. The emphasis is laid on local communities underpinning and reinforcing support systems of their subsistence, recognizing and respecting different cultures and avoiding any form of exploitation (Davis, 1996).

Environmental sustainability means preservation and management of resources, especially those nonrenewable or possessing the valuable capacity of making life better. Environmental sustainability requires actions about decreasing pollution in the air, on the earth and in the water as well as actions preserving biological diversity and natural heritage (Making tourism more sustainable. A guide for policy makers. United Nations Environment Program and World Tourism Organization, 2005).

These axes are interlaced and interact reinforcing each other or competing. Process of sustainable development is considered as a search of balance among these axes. In the interaction of the axes different cultures (Gražulevičiūtė, 2006), energetic sustainability, ecological entity, social and economic justice, nonviolence, democracy and peace (Čiegis, 2005) are distinguished and emphasized as very important dimensions.

Discussing a need of sustainability, there is no question "whether?" just "how?" Thus of great importance there is a question of how we could turn social and global environmental problems into strategic opportunities for new innovations and for creation of safer and better life (Nauler, 2007).

As sustainable development is considered as an overall objective, the ideology of sustainable development in formal or informal ways reaches every social area as well as every social system existing in it: communities, social movements, regions, municipalities and other organizations. Therefore, the necessary condition for sustainable development is active participation of society in decision making and personal responsibility of every member of a community.

A modern concept of sustainable development requires holistic approach to social, economic and environmental problems and to finding right solutions (Kliučinskas and Čiegis, 2008). Mostly problems are analyzing in national, regional or municipal levels (Parker, 1993; Jepson, 2001; Čiegis, 2005; Ollson, 2009). Different researchers reveal that process of sustainable development differs in different countries as it is influenced by local culture, traditions and evolves in different social, economic and ecological environment (Kliučinskas and Čiegis, 2008; Ollson, 2009).

Though recently a great number of research works, which examine sustainable development in organizations, emphasize the external experts, who should help an organization to transform into sustainable one. However, inconsiderable attention is paid for searching the answer of how organizational sustainable development might be empowered?

Managers have to decide how it is better to integrate corporate sustainability into the habitual processes of decision making. All necessary appropriate organizational resources – effective leadership, strategy, different formal (hard systems: compensation, stimulation, evaluation of performance) and informal (soft) organizational systems- ought to be used for efficient integration of principles of sustainable development.

Thus, without the common agreement on principles of sustainable development, there is no clear understanding of procedures and possibilities for its embodiment. Some authors (Bossel, 1999; Bell and Morse, 2003; Bagheri, 2006) propose institutionalization of indicators that could help to identify and evaluate sustainable development. The evaluation of sustainable development in an organization could be done on the criteria and characteristics derived from the appropriate principles of sustainable development. Epstein (2008) proposes that a system of measurement scale units may be helpful to express a strategy of sustainable development.

Since sustainable development is a new ideology, as for any innovation, the best way for its integration into collective mind of organization as organizational culture, is through the learning process in the organization. the possibility for organization to become sustainable much depends on capability of its individuals and groups' abilities to learn and ability to use their knowledge in practice. Thus, implementation and maintenance of sustainable development in an organization are not separable from organizational learning.

Aspects of organizational learning, important for embedding of concept of sustainable development in an organization

Modern organizations are perceived as adaptive complex systems (Holland, 1986), which distinguish with their capability to constantly adapt themselves individually and collectively to any changing conditions in their environment by modifying their knowledge, which in turn change other knowledge and behavior (McElroy, 2000).

The representatives of new knowledge management (Fieston, Cavaleri, McElroy, 2000 in McElroy, 2008) recognize that knowledge exists in the systems of learning of organizations; they are produced, transferred and shared. Terms *transfer* and *share* are interrelated, but knowledge transfer is a term of mechanical character meaning transfer to someone, while a term *share* means mutual division of knowledge among individuals, groups (inside the group or among several of them), data bases etc. Dimensions of cultural and political confidence are very important for successful knowledge sharing. Knowledge transfer happens in one direction while during knowledge sharing some kind of reflection and feedback occur. Shared knowledge in this process may be reflected more or less transformed ant this shows ability of creation of utterly new knowledge. Process of knowledge sharing reveals the dynamics of knowledge and learning process. During the process of sharing among individuals some kind of group or collective learning occurs and knowledge, important for the organization, may be generated, hence organizational learning may come along.

The academic literature on organizational learning focuses on defining and analyzing of processes that refer to individual and collective learning in organization. Organizational learning comes along on individual, group or organizational (collective) levels with complicated

interaction in and between the levels. Organizational learning can be treated as continuous learning processes (Argyris and Schön, 1978; Crossan, 1999 in Easterby-Smith and Lyles, 2003).

Organizational learning is a very complicated multilevel process, nowadays in a modern knowledge society inevitably happening in all organizations (DiBella, 2003 in Easterby- Smith and Lyles, 2003). In fact, in some organizations performing on simple activities, *single loop learning* (Walton, 1999 in Jucevičienė, 2007) or *operational learning* is dominant. The essence of such learning then is reflection on the outcomes, evaluation of mistakes and their correction (Epstein, 2008).

Organizations that carry out more complicated tasks and objectives in constant dynamics, *double-loop learning* (Walton, 1999) is additional to single-loop one. In this sense, members of the organization not just learn how to perform, but after the activity they analyze and reflect, seeking to reveal not only the action itself and the results achieved, but also the reasons of acting and the alternatives of acting. (Jucevičienė, 2007).

A few organizations which conditionally might be named as "learning organizations" (Senge, 1990), are involved into a higher level of learning. This kind of learning is noted as *deutero* (Argyris ir Schön, 1994; Walton, 1999) or *triple-loop* learning (Jucevičienė, 2007). While learning, the organization, perceiving itself as a part of a global systemic complex and understanding responsibility not only for itself, but for its environment, intends to develop in reaction to the fundamental challenges of its environment. This generative learning, based on systemic thinking, requires new approach to the world (Malhorta, 1996 in Pasteur, Petit and Schagen, 2006). Organizations with validated triple loop learning, which help to reach deeper and long lasting changes, are ready to analyze their values and perceptions as a complex part of the process. Since the processes of learning are integrated into the social processes, which have been formatted by culture and history, learning and knowing go together with being and becoming (Elkjaer, 2003 in Pasteur, Petit and Schagen, 2006). The outcomes of triple loop learning become the basis for attitude formation.

Easterby – Smith and Lyles (2003) argue, that organizational learning essentially consists of three parts: 1) knowledge gaining from external resources; 2) conversion of tacit knowledge into explicit; 3) collective input of different groups in new knowledge creation, generated by synergy.

Most authors emphasize organizational learning through participation of organizational members in social interaction and practice, but some of them assume that cognitive learning which is not necessary linked with practical activities. It could be possible when organizations have to learn things which are unknown for its individuals, groups and when organization itself lacks relevant organizational knowledge and experience. Though some perception might be elevated, that an organization or its individuals and groups have some "knowing" or relevant life experience of some individuals as a whole, which is perceived as implicit or tacit knowledge (Jucevičienė, 2007 by Jarvis, Holford, Griffin, 2004). Then we could agree with Crossan (1995), that

learning first results in understanding and later the activity emerges.

Although the organizational learning embraces learning of individuals, it is not relevant to assume that organizational learning is just a sum of individuals' learning. The change in the number of organization members does not modify the organizational memory with its common behavior, mental maps, norms and values over the time (Hedberg, 1981 in Easterby- Smith and Lylews. 2003).

Complex theory on organization learning states that cognition is relevant to social human systems. Usually organizations generate a lot of formal or declaratory organizational "*know- "what"* and procedural "*know-how*" knowledge, which has been expressed in forms of rules, linguistic or behavior. Declaratory knowledge embraces the procedural ones and in this way the rate of organizational learning and innovations is stimulated. However, other types of knowledge, such as "know-why" which are created as a result of triple loop learning or "know- who" are of great importance in knowledge organization.

Organizations have to be innovative when generating and using knowledge and investing in them. Process is not very easy as tacit, implicit knowledge, generated by organization members, is most valuable; therefore it is very complicated to catch, codify and transfer this knowledge. Because of this, the organization needs to be ingenious in involving all members of the organization in the process (Leadbeater, 2000). This statement emphasizes the importance of tacit knowledge in the process of organizational learning.

It is very important for embedding sustainable development in an organization to use different opportunities of organizational learning. However a question- what opportunities and how to use them? – is rather complicated and requires a relevant theoretical substantiation.

Theoretical model of organizational learning of sustainable development

The essence of sustainable development stipulates two essential phases of learning of sustainable development:

A) Learning of sustainability or sustainable development as *per se*;

B) Integration and maintenance of sustainable development of a concrete organization as organizational learning.

A. Learning of sustainability or sustainable development as per se.

The need of this learning best can be explained by Vygotsky's theory (1986 in Jucevičienė 2007) of personal development. It states, that an individual creates knowledge and learns in interaction with his environment, but this creation/ learning depends on to individual's cognitive capability to interact with the environment. Vygotsky distinguishes three levels/zones of personal development:

• Zone of actual development: where knowledge is not produced, learning is absent as task for individual in reaction to the environment is too simple, thus

performing it individual only uses personal knowledge without any need to create new one.

- Zone of potential development: where knowledge is almost not produced and self learning is absent, because the task from environment is too difficult to perform rating with capability of a person. The person then is not able to develop personal knowledge without constant external educational guiding.

- Zone of proximate development is a "happy medium" when a task from external environment is quite easy for an individual to perform, but at the same time is fairly confused and for performing it some new knowledge needs to be created and gained.

- Taking into account that the concepts of sustainability and sustainable development are quite new ever-changing phenomena; there is a mere possibility that the majority of members in organizations, aiming to turn to sustainability, is aware with the concept, the ways and methods for its implementation. Thus we presume that the bigger part of organizational members are in the zone of potential development and therefore training is necessary for achieving the similar level of readiness (the similar proximate development zone) for all organization members and especially for leaders who will guide the implementation of sustainable development.

Therefore, the following objectives (Epstein, 2008) and methods of learning of sustainability and sustainable development should be realized:

- To conceptualize and accept shared vision that facilitates and supports the systemic, based on teamworking solution of problems. In this phase achieving of methodical conceptualization with the system approach to all decision making, integrating social, economical and environmental aspects, is very important. Teaching/ learning *methods*: theoretical education, discussion, training when the shared vision is created by applying concept maps.

- To be acknowledged with legal and other aspects of environmental protection and be able to adapt them in organization. To understand that integration of environmental regulations is necessary for turning organization to qualified new development (this later will create the conditions for the organization to learn from external experience and best practice). Teaching/ learning *methods*: theoretical education, discussion, training.

- To develop abilities of communication and idea generation. *Methods*: learning by doing and dialogue/ interaction.

- To assimilate knowledge and skills of PDCA (plan, do, control and act) cycle:

  Plan: to organize and carry out the initial socio-economical and environmental revision; to define the strategy of sustainable development, plan programs of sustainable development, foreseen aims and objectives.

  Do: to build appropriate structures necessary for implementation of strategy; initiate learning, implement programs.

Control/ verify: to carry out internal auditing; to observe and measure (evaluate) results of activities.

Act: to revise and improve management.

After implementing these educational actions, as it was mentioned above, we may expect the similar level of readiness in the field of sustainable development among all participants in implementation of sustainability or at least among the leaders responsible for sustainable future of the organization. We claim that theoretical and practical in a concrete organization will allow its members to gain not only some theoretical knowledge but also some experience in this field. The learning and its outcomes will be influenced by the way concept of social responsibility is embedded in the organization and constant organizational reporting on this (Gond, Herrbach, 2006).

B. Implementation and support of sustainable development in a concrete organization as organizational learning

The Implementation of sustainable development in an organization firstly is related to organizational designing with the aim to prepare a project for organizational sustainable development on the personal, collective/ departmental and organizational levels. This is inevitably related to organizational learning, which is very clear defined by Nonaka, Toyama and Boyosiere (2001), who propose a theory of knowledge creation process. Authors argue that knowledge is dynamic as is created in dynamic social interaction between individuals and an organization. Knowledge produced by individuals is active and subjective and may be expressed in terms of „obligation" and „belief" rooted deep in systems of values of individuals. Nonaka, Conno and Toyama (1998) explain dynamics of knowledge creation by proposing a multilevel model of knowledge creation consisting of three levels:

1. Knowledge creation process through socialization, externalization, combination and internalization (SECI) with tacit and explicit knowledge conversion (Nonak, Takeuchi, 1995).

2. BA- a platform for knowledge creation, making good conditions for knowledge creation process in all four phases.

3. Knowledge assets or inputs and outputs as a moderator of knowledge creation process.

Interaction between the levels is necessary during knowledge creating process in order to form a knowledge producing spiral (see Figure 1).
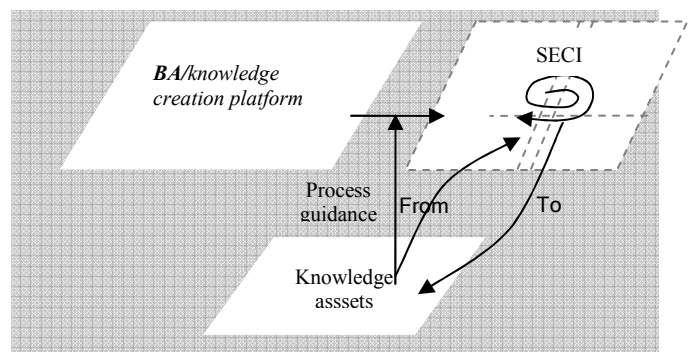

Figure 1. Three-level process of knowledge creation (Nonaka, Toyama and Byosiere, 2001)

There is a brief specification of each level presented.

SECI

Nonaka and Takeuchi (1995) explain the dynamic knowledge transformation model and emphasize social interaction as well as tacit and explicit knowledge inter-transformation between individuals and their groups during this social interaction. During this process the amount of both explicit and tacit knowledge increases both in quality and in quantity (Nonaka, 1990). And this process consists of four phases (see Figure 2):

1. Socialization- from tacit to tacit knowledge. It is possible when individuals in common action and during formation of common understanding share knowledge which, however, remains tacit. In the concept of sustainable development it basically means sense of organizational members (or leaders at least) of necessity of integration of sustainable development which is however unexpressed in words (feeling). This sense may be formed as an output of the first phase- education of sustainable development.

2. Externalization- from tacit to explicit knowledge when group members during interaction transform their tacit knowledge to explicit collective ones and it means creation of conceptual knowledge. In the concept of sustainable development this is firstly related to designing the vision of sustainable organization in a concrete working group or groups.

3. Combination- from explicit knowledge to explicit when systemic knowledge (a new product) is being produced. This, for instance, is a vision of sustainable organization, strategy or program of sustainable development, documents (as organizational knowledge) which have been accepted by all working groups.

4. Internalization- from explicit knowledge to tacit when accepted new knowledge in form of documentation is applied by organizational members in their work not only by assimilation (personally or during education) but by transforming and making them as their "theories in use".

The process of organizational learning is endless as it moves in spiral cycle. The cycle expresses growing interaction of tacit and explicit knowledge to higher level in every phase. Thus organizational knowledge is created in spiral starting from individual level and passing through all levels in the organization. The process of spiral grow of knowledge in concept of sustainable development of organization means that organizational learning becomes an inner element of organizational sustainable development, ensuring constant improving of sustainable development of the organization.

BA

According to Nonaka and Konno (1998), all knowledge creation processes take place in environment so called *BA*. As authors define, BA is a physical, mental and virtual area or some other combination. BA is also considered as a platform for concentration of resources, organizational knowledge and intellectual abilities necessary for knowledge creation process. As Nonaka, Toyama and Byosiere (2001) state, BA is defined as a context for knowledge creation, usage and share. The agreement is that the context is necessary for knowledge existence. As knowledge creation enacts during interaction of an individual with other individuals and

environment (internal and external), BA then is a space where it happens (Nonaka, Toyama and Byosiere, 2001). BA may be also considered as a framework or system in which knowledge is activated in a particular place and in particular time as a resource (Nonaka, Toyama and Byosiere, 2001).

Organizations manage knowledge creation by developing BA, which has been arranged as a context for knowledge creation process. Nonaka and Konno (1998) propose four BA types, which relate to four phases of SECI model and each matches the knowledge transformation process and creates appropriate conditions for its developing. Those four types are: a) originating BA; b) dialoguing BA; c) systemizing BA; d) exercising BA. Every BA serves as a model for knowledge transformation to the next platform and is understood as a specific step in knowledge spiral. This is particularly important for realizing organizational learning of sustainable development as a process of four phases (socialization, externalization, combination and internalization) and particular efforts are necessary for implementing the organizational learning for sustainable development. A specific environment should be prepared for every single phase. Originating BA, as opportunity for common activities in a pair or group, helping to develop values of sustainable development and increasing motivation for this as well as helping to develop collective, though tacit knowledge of sustainable development, is essential for socialization. The physical and psychological environment for discussions as dialoguing BA is necessary for groups or departments to express tacit knowledge and achieve explicit collective knowledge (shared vision of sustainable development, strategy of sustainable development, etc.).

Systemizing BA is essential for transformation the existing explicit knowledge of sustainable development of different groups/ departments into documentation on organizational level. This means that organizational sustainable development and its organizational learning must be supported by top management with allocating sufficient time, organizational resources (organizing joint meetings of work groups, schedules, facilities, etc.). Exercising BA means organizational and educational measures, realized in specific period of time in order the documents on sustainable development could affect the minds and feelings of every person in an organization and to become the routine knowledge as well as motivation.

Knowledge assets are considered as productive organizational knowledge, which stimulates creation of new knowledge and is an output of this process, This knowledge can be tacit, created through shared experience; conceptual, expressed verbally and nonverbally; systemic, displayed in documental form; routine, embedded in everyday routines, organizational culture, etc. (Nonaka, Konno and Toyama, 1998). All this knowledge is treated as knowledge assets that empower and support sustainable development of the organization. It should be noted that knowledge assets is not a closed system: it embraces not only output of knowledge creation inside the organization, but also the necessary knowledge the organization gets from its external environment.

On the basis of these theoretical assumptions, we claim that three-level model of knowledge creation process

(Nonaka, Toyama and Byosiere, 2001) is fundamental and sufficient basis for explaining organizational learning as efficient factor for integrating and supporting the sustainable development in a concrete organization.
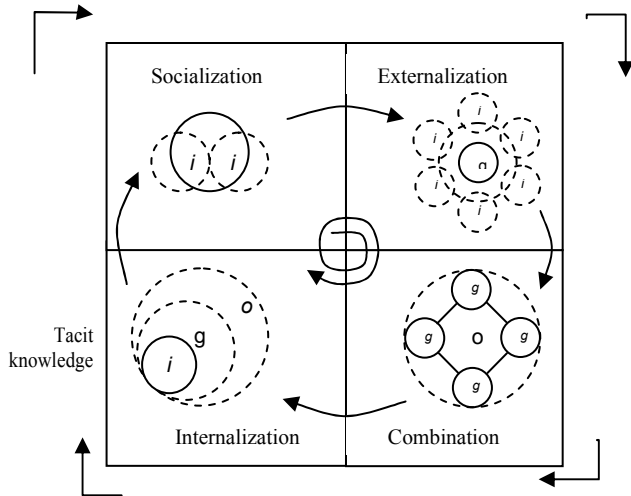

Figure 2. Development cycle in knowledge transfer process (Nonaka and Konno, 1998)

Conclusions

Organizational learning that enables sustainable development of an organization has several stages:

1. Introductory stage where the organization members' learning is influenced by *purposeful* educational impact and they accumulate both individual and collective knowledge. This stage is not related to typical SECI, but it is considered as organizational learning with the features of *educational process*, when BA is aimed to ensure *educational goals*. The primary knowledge assets in the field of sustainable development are accumulated from the external environment; although it is complemented with individual or collective knowledge of the organization members.

2. The stage of implementation of sustainable development is aimed to adapt a concept of sustainable development for a concrete organization and integrate it into organizational activities in all three levels: individual, group and organizational. This stage is based on *organizational learning* through SECI and its BA is highlighted by *organizational orientation*. Knowledge assets accumulated on the first stage is enriched by new additional knowledge of individuals, groups and organization.

3. Sustainable development supporting stage, which is a sequential output of integration of sustainability in a concrete organization and is characterized by *organizational learning* based on SECI. Its BA is *an environment of constant learning in a spiral* (socialization, externalization, combination, integration, etc.), while making decisions on sustainable development in the organization.

References

1. Bagheri A. Sustainable development: implementration in urban water systems, 2006. Sweden. Disesrtation.
2. http://proquest.umi.com/pqdweb?index=20&did [Žr. 2009-06-06]
3. Bauler T. Indicators for sustainable development: a discusion of their usability.- 2007. Universite Libre de Bruxelles Interaktyvi prieiga per internetą (www.) [Žr. 2009-05-06]
4. Bell S., Morse S. Measuring sustainability: learning by doing. EarthscanPublications Ltd. 2003.
5. Bell S., Morse S. Sustainability indicators: measuring the immeasurable. TJ International Ltd.- 2008.
6. Bossel H. Indicators for sustainable development: theory, method, applications, 1999. http://www.ulb.ac.be/ceese/STAFF/Tom/bossel.pdf [Žr. 2008-12-10]
7. Čiegis R. Gavenauskas A. Darnaus vystymosi valdymas: etiniai aspektai. Tiltai ISSN 1392- 3137, 2005 Nr. 4(33), p. 31-38
8. Davis T. What is sustainable Development, 1996. Prieiga http://www.menominee.edu./sdi/whatis.htm. [Žr. 2009-01-25]
9. Easterby M. - Smith M. and Lyles M. A. The Blackwell Handbook of Organizational Learning and Knowledge Management. Edited by. Blackwell publishing Ltd, 2003. 654 p.
10. Easterby-Smith, Shenxue Li, Bartunek „Research Methods for Organizational Learning: The Transatlantic Gap. Journal of Management Learning, 2009.Vol. 40(4): 439–447, 1350–5076
11. Epstein M.J. Making sustainability work: best practices in managing and measuring corporate social, environmental and economic impacts. Greenleaf publishing, - 2008. ISBN-13:9781906093051
12. Finger, M. and Brand, S. B. (1999) 'The concept of the "learning organization" applied to the transformation of the public sector' in M. Easterby-Smith, L. Araujo and J. Burgoyne (eds.) Organizational Learning and the Learning Organization, London: Sage. The learning organization. Prieiga per internetą: **Error! Hyperlink reference not valid.** [Žr. 2008-01-20].
13. Gond J.-P., Herrbach O. „Social Reporting as an Organisational Learning Tool? A Theoretical Framework". Journal of Business Ethics (2006) 65: 359–371 Springer, 2006
14. Gražulevičiūtė I. Cultural heritage in the context of sustainable development. ISSN 1392- 1649, 2006.
15. Jepson E.J. Sustainability and planning: diverse concepts and close associations. Journal of planning literature 2001;15;499 http://jpl.sagepub.com/cgi/content/abstract/15/4/499
16. Jucevičienė P. Besimokantis miestas. Kaunas: Technologija, 2007.
17. Kliučininkas L., Čiegis R. KTU, UAB „ Biznio mašinų kompanija", - 2008.
18. Köhn J. (1998), 'Thinking in terms of system hierarchies and velocities. What makes development
19. sustainable?', *Ecological Economics* 26 (1998) 173-197.
20. Kriščiūnas K., Greblikaitė J. Entrepreneurship in Sustainable Development: SMEs Innovativeness in Lithuania, ISSN 1392-2785 Engineering economic,2007, Nr. 4(54)
21. Laszlo K.C. The evolution of business: learning, innovation and sustainability in the 21st mentury. 45th Annual Conference of the International Society for the Systems Sciences. Asilomar, California, 2001.
22. Laszlo K.C. Sustainable value. Stanford Business Books, 2008.- 208 p. ISBN 978-1-906093-06-8
23. Leadbeater C. (2000) *Living on Thin Air*, London: Penguin. Prieiga per internetą: **Error! Hyperlink reference not valid.** [Žr. 2008-01-20].
24. Mackau J. Development local government: a study of public participation of the integrated development planning process of the city of Cape Town. 2004. University of the Western Cape.
25. Malhotra, Y. (1996) 'Organizational Learning and Learning Organizations: An Overview' http://www.brint.com/papers/orglrng.htm
26. McElroy M. Managing for sustainable innovation, 2000. Manuscript

27. McElroy M. The new Knowledge Management. Complexity, learning and sustainable innovation. British library cataloguing- in- publication data.- 2002.
28. Nonaka, I., Kanno, N. (1998), "The concept of 'Ba': building a foundation for knowledge creation", California Management Review, Vol. 40 No.3, pp.40-54.
29. Nonaka, I., Toyama, R., Byosiere, P. (2001), "A theory of organizational knowledge creation: understanding the dynamic process of creating knowledge", in Dierkes, M., Antal-Berthoin, A., Child, J., Nonaka, I. (Eds),*Handbook of Organizational Learning and Knowledge Creation*, Oxford University Press, New York, NY, pp.491-517
30. Ollson J. Sustainable development from below: institutionalising a global idea- complex. Local environment; Mar2009, Vol 14 Issue 2, p. 127-138, 12p.
31. Pasteur K., Pettit J. And B. van Schagen (IDS Sussex). Knowledge management and organizational learning for development, KM4Dev workshop 2006 Background paper.
32. Senge P.The Fifth Discipline: The Art and Practice of the Learning Organization. [Žr. 2008-01-20]. Prieiga per internetą: <http://www.solonline.org/res/kr/systhink.html>
33. Baltic21Newsletter2007/1.http://209.85.135.132/search?q=cache:GvK86WNSQS8J:www.baltic21.org/meeting_documents/ [Žr. 2008-01-20].
34. Dėl nacionalinės darnaus vystymosi strategijos patvirtinimo ir įgyvendinimo. Lietuvos Respublikos Vyriausybės nutarimas 2003 m. rugsėjo 11 d. Nr. 1160, Vilnius
35. Making tourism more sustainable. A guide for policy makers. United Nations Environment Programe and World Tourism Organization, 2005

Palmira Jucevičienė, Valentina Burkšienė

ORGANIZACINIO MOKYMOSI MODELIS DARNAUS VYSTYMOSI PROBLEMŲ SPRENDIMUI

Santrauka

Pastaruoju metu daugėja darbų, nagrinėjančių organizacijų darnų vystymąsi (Parker, 1993; Epstein, 2008; Kliučinskas ir Čiegis, 2008; Laszlo, 2008; Ollson, 2009 ir kt.), tačiau juose per mažai dėmesio skiriama, ieškant atsakymo į klausimą: kaip įgalinti organizacijų darnų vystymąsi?
Šio straipsnio tikslas-atskleisti organizacinio mokymosi procesus, įgalinančius organizaciją darniai vystytis. Straipsnį sudaro trys dalys. Pirmojoje dalyje atskleidžiama darnaus vystymosi konceptualioji esmė. Antrojoje dalyje išryškinami organizacinio mokymosi ypatumai. Trečiojoje dalyje pagrindžiamas teorinis darnaus vystymosi organizacinio mokymosi modelis.

About the authors

Palmira Jucevičienė, Prof. Dr.Habil, Director of the Institute of Educational Studies, Head of the Department of Educational Systems (Kaunas University of Technology), e.mail: palmira.juceviciene@ktu.lt, tel. no. +37061454772; research interests: knowledge management, human resources management and development, organizational behavior, learning regions, cities and organizations.
Valentina Burkšienė, doctoral student at the Department of Strategic Management, Kaunas University of Technology, e.mail.: v.burksiene@neringa.lt, tel.no. +37069885003, research interests: knowledge management, sustainable development of organizations.

THE PREPAREDNESS OF MANAGERS TO APPLY THE NEW CONCEPT OF HUMAN RESOURCE MANAGEMENT

Palmira Jucevičienė, Vilma Fiodorova
Kaunas University of Technology, Lithuania

Abstract

The modern organizations are not capable of sustaining their competitive advantage by focusing only on the technological solutions; they must turn to their most precious asset – people.
The effectiveness of organization depends to a large extent on the „smart"application of the concept of human resource management (HRM), which many managers regard as an opportunity for competitive advantage. Therefore, in this paper we focus on identifying the main differences between the personnel management and HRM, the parameters of implementing the HRM in enterprise and the characteristics that allow identify the preparedness of managers to implement this concept.

Keywords
Preparedness of managers, human resource management (HRM), personnel management.

Introduction

The processes of change that are taking place in the society lead to the changing requirements to individuals and organizations. Their competitiveness increasingly depends not only on the investment in new technologies, but also on the greater attention to the aspects of human resource management.

In the Western world two different approaches to the HRM can be distinguished. The traditional approach – personnel management - focuses on individual as a resource in the organizational activities, especially manufacturing, through the lens of his / her workplace. A more contemporary approach of HRM emphasises the importance of the collective rather than individual activities and the needed competence for effective performance. The latter approach has evolved over the last two decades until the essential qualities of these two phenomena were identified that reflect the differences in orientations, attitudes and values. The researchers who analyze this transition from personnel management to HRM management (Fombrun et al., 1984; Beer at al., 1985; Guest, 1987, 1989, 1997; Storey, 1992, 1995; Walton, 1999; Page, 1999, 2005; Armstrong, 2006) regard it as a *paradigm shift*. This shift is noticed by the Lithuanian researchers as well.

An increasing number of researchers (Tichy et al., 1982; Beer et al., 1984; Devanna et al., 1984; Legge, 1989; Storey, 1992, 2001; Brewster ir Larsen, 2000; Currie and Procter, 2001; Guest ir King, 2001; Renwick, 2003) analyze the linkages between the line managers and the specialists of HRM, the new role of line managers in organizational activities. It implies the overall growing interest in human resource management.

Whereas the subject of HRM is relatively new (especially in organizational practice), there is a lack of both theoretical and empirical data on the activities of managers on all organizational levels, in relation with HRM in organization. According to McConville (2006), the implementation of HR policy is related not only to the right understanding of policy distribution of roles, and their acceptance, but also the elimination of certain tensions across different strategic levels, where the attention is focused not only on the top- and line managers, but particularly – on the middle-level managers who emerge in the centre of this tension.

For this reason the implementation of HRM emerges not only as a source of competitive advantage (an attempt to attract the "hard-to-copy human resources"), but also as a challenge that calls for knowledge of this concept, capability of distinguishing it from the traditional personnel management, understanding of new "roles" and their adaptation in the organizational practice.

The following question calls for further discussion by the researchers: what preparedness do the managers need so that the new concept of human resource management is successfully implemented in their organizations?

The aim of this paper – to reveal the characteristics of the preparedness of managers to implement the new concept of HRM.

The basic conceptual position is the following: the preparedness of the manager is perceived not only as the manager's knowledge and capabilities, but also his/her dispositions (Uznadzė, 1966) that were conditioned by various subjective and objective factors internal and external to the organization.

The paper consists of three parts. In the first part, the main differences between the personnel management and the human resource management are outlined. In the second part, the implementation of HRM in the enterprise and its parameters are described. In the third part, the characteristics of the manager's preparedness to move from the personnel management towards the human resource management are discussed. The research method is the analysis of scientific literature.

Conceptual differences between the personnel management and HRM management

It is already possible to notice the rudiments of human resource management in the Western organizations of the pre-industrial period and the society of craftsmen and small-scale manufacturers. In this period, the HRM as an emerging area of activity was highly dependent on the technological, political, religious and other forces. Many researchers (Langbert ir Friedman, 2002; Bratton and Gold, 2007) note two stages in the evolution of HRM, each being reflected by specific characteristics and values.

Bratton and Gold (2007) divide the history of HRM into the stage of personnel management, i.e. a relatively chaotic

emerging system, and the stage of human resource management. In the latter stage, the management researchers identify that the organization is already capable of creating more than tangible product, while the investment in people can provide not only return on investment, but also become the organizational knowledge capital that enables the competitive advantage. Before the concept of HRM grew in popularity, A. Maslow had noted that people are the main asset of organization, and the human resource management is the key means towards achieving the competitive advantage. Meanwhile, "the old style of management relied on the creation of business organization, oriented towards production and services" (Maslow, 1965, p. 262). A. Maslow conceptually links the old concept of management with the personnel management with its emphasis on providing the competent employees for a specific workplace; the needed qualifications are set out and fixed from very beginning, while any needs for changes qualification were ensured through planned training.

The HRM concept, as a qualitatively new approach to employee management, has emerged in the early 80's of the 20th century. According to Walton (1999), in this period the change happens in the area of personnel management; therefore, the development and even change in personnel management competence is needed. Already in 1982 Fombrun, Tichy and Devanna wrote that "the aim of American industry to become more competitive called for a more sophisticated approach in human resource management that would be based on the balance between the HRM policy and organizational strategy…" by emphasising that „the concept of human resource management need different kind specialists than those involved in traditional administration of personnel" (Walton, 1999). Storey (1995) notes that in the academic literature (Guest, 1990, 1991; Keenoy, 1990; Hendry and Pettigrew, 1990; Storey, 1992; Blyton and Turnbull, 1992; Starkey and McKinlay, 1993) an increasing attention is being paid to the changed activity of the human resource specialist. Not occasionally, in this period HRM becomes a subject of interest to various researchers with a natural question being raised: is it different, and if so, how different is it from the traditional personnel management?

A variety of definitions of human resource management exists in the management literature. According to Juknevičienė (2006, p. 97), the diversity of approaches to human resource management may be due to the diverging focus of research by various authors: „some authors analyze only the activities performed in the organizations; other authors are interested in activities by other organizations, while the rest are interested in analyzing the static rather than dynamic systems". The author notes that in the sources, where HRM is analyzed in the broad sense, it is hard to distinguish the specialised activities, while the problems of managing the organization are analyzed from the perspective of personnel activities.

Traditionally, the personnel management in organizations is the prerogative of the specialist of personnel related with the activities of personnel administration, such as training, procedural tasks related with employment, etc. Most likely, this is the reason why the academic works on HRM by Lithuanian researchers (Sakalas, 2000, Bakanauskienė, 2002)

are still dominated by the categories of personnel (or *cadres*) management. Bakanauskienė (2002, p. 12–13) notes that such concept of personnel management was particularly influenced by the Soviet school of management, which emphasised that personnel management is one of functions of management that encompasses determining the needs of personnel, its selection, on-job training, hiring and dismissal procedures, etc. The main objective of personnel management was to provide the organization with necessary quantity and quality of personnel and to create the conditions for its use.

The researcher in personnel management Sakalas (2000) states that *personnel management is a universal trait of organization; its continuous and purposeful management guarantees successful organizational performance*. De defines the personnel management as a system whose main goal is an effective cooperation between the individuals and their groups towards achieving the goals of organization. The activity is characterised by two variables:

• organization, linked with the functions of personnel managers (planning the organizational needs for employees, personnel accounting and statistics, acceptance and dismissal of employees, etc.)

• management that belongs to the sphere of interaction between the managers and subordinates (styles of management, motivation, acquaintance with the co-workers, etc.).

It is important to note that in his definition of personnel management the author also includes the process of group co-operation (an element of HRM), but does not touch upon the collective competence and its development, moreover – the mutual commitment between the organization and the employee, does not relate the processes of competence development with organizational learning and knowledge management. All of the above implies that this concept is closer to the concept of personnel management.

Whereas the personnel management deals with providing the competence for a specific workplace, the human resource management (HRM) encompasses a much wider scope of activities, i.e. it is concerned with not only individual, but all the collective competence in the organization.

Armstrong (2006) defines the human resource management as a strategic and consistent approach to managing people as organization's the most valued asset, who individually and collectively contribute to attaining the goals of organization. The coherence of HRM policy and practice is emphasised.

HRM can be characterised by the following statements:

• Understanding that the human resources are the strategic source of competitiveness;

• orientation to the mutual commitment between the organization and its employees;

• attitude towards the employees is based on understanding that the interests of managers and employees are similar; the importance of teamwork collective competence is emphasised.

• the implementation of HRM function is a prerogative of the line managers.

Table 1

Basic characteristics of personnel management and HRM

Personnel management focuses on:	HRM focuses on:
Personnel management function is a responsibility of: • personnel management department. • personnel manager.	HRM function is a responsibility of: • HRM department that coordinates HRM, linking the HRM with organizational strategy, providing support to managers in the field of HRM; performing the necessary HRM functions. Big enterprises still have a separate personnel department for performing the traditional functions of personnel management (i.e. employee selection, acceptance, etc.). • All managers (i.e. top, middle and line managers).
• The aim of personnel management – to provide the organization with necessary quantity and quality of personnel "here and now"	• The aim of HRM – strategic integration. HRM is more oriented towards the qualitative rather than quantitative characteristics of personnel.
• Vertical management of employees, work with personnel is a separate function.	• Horizontal management of employees and taking care of all resources.
• Personnel planning is oriented towards satisfying the needs of manufacturing.	• HRM planning is related with managing and developing the individual and collective competences and accomplishing the goals of organization by providing the human resources.
• Employees are regarded as the „resources of production"; employee is appreciated based on his / her suitability to the workplace. • Approach to employee is based on belief that the interests of employees and managers are divergent. • Management of employees is associated with the attempt to ensure the cooperation, consent and obedience of employees.	• The employees are regarded as a hard-to-copy source of competitiveness and as a complex category that is defined not only by their suitability to the workplace, but also by team- and other collective competences that are necessary for accomplishing the collective work. • Attitude towards employees is based on belief that the interests of employers and employees are similar. • Management of employees is coordinated with the organizational culture and behaviour. Emphasis on cooperation, the mutual commitment of employees and organization, promotion of employee creativity.
• Learning is perceived as a control that follows learning. • The training expenses are treated overhead costs, the personnel training is associated with the development of work-related skills.	• Learning is perceived as continuous and taking place "everywhere and every time"; the empowering of learning is also emphasised. Learning and development are based on the philosophy of learning organization. • Investment to people is regarded as an investment into the human capital, which is a strategic factor in competitiveness.
• Organization is competent when all its employees are competent for their workplace.	• Organization is competent if it is competent on the levels of individuals (employees), units, other groups and all collective of organization.
• Communication emerges as a non-interrupted and integral process only when necessary to exchange the tasks, which can lead to conflicts.	• Communication is a frequent and direct interaction that enables a continuous updating of the information, ideas and experiences, thus, the development of collective competence. Such competence is oriented towards creation of the harmonious relations in organization.
• The aim of personnel policy – to achieve a compromise between the economic and social partners.	• The aim of personnel policy is oriented to the creation of harmonious organization culture that would favour innovations and flexibility.

As it can be seen from Table 1, the fundamental difference between the traditional personnel management and the contemporary HRM is that HRM becomes an inseparable part of the organization strategy. Jocytė (2002) claims, that the modern concept of HRM from the organizational point of view has become oriented not to solving the personnel management problems, but to the organizational strategy. Managers from all levels of organization are involved in the formulation of the strategy and they have to work hand-in-hand with the specialists of HRM.

Implementation of HRM concept and its parameters

The success of HRM depends on a variety of factors, while its failures are associated with certain unaccomplished tasks or with their inadequate accomplishment. The success factors are associated with the following concepts: understanding by the organization's managers about the importance of HRM, knowledge of employees, their attitudes and approaches in accepting and implementing the HRM. The essence of HRM function in organization – to enable the organization to achieve its goals through employees. It can be implemented by several ways: by promoting and using their initiative, ensuring the leadership and support. Ulrich (1998) notes that HRM often seems to be directly unrelated with the actual organizational performance, however, it creates the environment, in which people are motivated to reach for the highest goals.

The HRM strategy, according to Armstrong (2006) is oriented to strategic requirements, related with the employment and development of people, their motivation, while its implementation depends on the involvement of managers and all personnel, their commitment and cooperation. It is important, according to Armstrong (2006), to make sure that HRM strategy meets the organizational conditions, including the work

processes taking place in the organization, organization culture and external environment. To maintain the social balance, it is important not only to balance the needs of different strategic levels, but also to identify their functions, i.e. to evaluate the present situation and to understand the "future" functions.

This is where the dilemma of separating the accountability for the specific functions occurs. It is conditioned by a variety of external and internal organizational factors, especially by the organizational structure. In the organization, characterised by strict hierarchy, giving away the responsibility may be not only complicated, but almost impossible. Meanwhile, it is much easier to delegate the responsibility in the decentralized organizations where no clear authority exists. There is an increasing number of organizations that follow the track of decentralization towards a more effective communication, workload and risk sharing. It is also important in the light of implementing the HRM concept in the organizational practice.

The implementation of HRM policy must encompass the entire organization, i.e. all its strategic levels. The organization must maintain its social balance, i.e. the interacting parts must be in a dynamic balance of interaction (Jucevičienė, 1996). Therefore, the organization policy and HRM policy must be in line with each other and consistent.

In larger organizations with more complex management structures, HRM may take three level of management. (in fact, e.g., in Lithuania SME's prevail with two main levels – top and line managers, or only one level – manager and specialists). In case of three hierarchical levels of management, the top, middle and line managers are distinguished.

Top managers – the highest group of executive power, e.g., director, chairman, president, etc. responsible for the management of entire organization, i.e. setting the organizational goals, developing its policy, regulating and maintaining the organization's relations with the external environment. The personal aims and values of top managers inevitable have influence on the strategy of organization. They are those leaders who are responsible for the way the employees will understand the strategy and its benefits, responsible for the motivation system matching the employee expectations.

The top managers constantly interact with other managers, so next to the conceptual skills they must be capable of coordinating and integrating the interests and activities of all organization members. They need to be capable of projecting how the change in organizational subsystem would affect the entire system of organization. They provide the strategic impetus for action. In implementing the HRM the top managers must be in close relations with the HRM professionals who would perform a consulting function, and with the middle managers who are the intermediary link between the top and line managers.

Middle managers – a group of managers, i.e. heads of departments, units, production specialists and others, who are responsible for the activities of other managers and specialists in organization. They have a prerogative – to implement the strategy and policy of organization and its specific activities:

• to lead the implementation of organizational policy on their level of responsibility;
• to coordinate the requirements of top managers with the capacities of subordinate managers.

The middle managers must be good communicators and motivators. This level acts as an intermediary between the top and line managers.

Whereas the middle managers are responsible for leading their own units and departments, they have an important function – to provide people with the sense of direction and invoking trust of the line managers in accomplishing the organizational goals.

Line managers – are the managers of units who are responsible for the main activity of organization and are responsible for achieving the organizational objectives. The managers on this level have responsibility to take decisions regarding the use of organizational resources (manufacturing, personnel, etc.) The functional units, e.g. HRM department, do not have this mandate; they are only necessary for supporting the daily routine activities of functional managers.

Armstrong (2006) emphasises the cooperation of line managers of HRM specialists HRM specialists need to perform the *consultant function*, i.e. to provide support needed for the line managers rather than take their role.

Lien managers should perform these tasks:
• to analyze the performance and needs of employees, structure and plan the activities;
• to participate in solving the strategic problems while cooperating with the HRM specialists.;
• to create and sustain a motivating environment inducing the cooperation and high morale among the employees;
• to teach and train their employees, i.e. to help make the decisions regarding learning, to take care of developing the individual and collective competence;
• to participate actively in the process of strategy development;
• to undertake activities related with employee complaints and other daily activities.

HRM specialists must perform the consulting function by providing consultations to the managers on HRM issues and complementing on the activities of line managers. They are responsible for the following activities: analysis of learning needs; courses within organization; bonuses for work, etc.

So that the line managers take greater responsibility for the HRM, the rights, duties and responsibilities of line managers and HRM department must be clearly defined and understood from very beginning. The HRM department has to provide full procedural support and advice on HRM issues, and to provide the line- and other managers with necessary knowledge and skills in the field.

According to McConville (2006), the modern organizations have to focus special attention not only on the right understanding of policy and roles, but also on eliminating the tensions across the strategic levels. Attention must be paid not only to the top and line managers, but in particular – the middle managers who usually are in the centre of this tension. According to McConville, this tension rises because of the uncertainties that are embedded in the activities of

organization: uncertain roles and unclear functions; inadequate training and lack of resources, lack of consistent support from the management; absence of autonomy in decision making (in case of the middle managers due to their intermediary position).

For most managers the implementation of HRM becomes a true challenge. Why? Right implementation of HRM needs first of all: awareness of HRM concept, understanding its main characteristics that distinguish HRM from personnel management, awareness of HRM benefit for the organization and its employees, rethinking its implementation on various strategic levels, evaluation of preparedness and competences of employees in implementing this concept.

Characteristics of the preparedness of managers to implement the change from personnel management to HRM

The preparedness of manager to implement the HRM can be perceived as a combination of two complex qualities:

1) Structure of manager's competence and personal qualities (knowledge, skills, beliefs, attitudes) that reflects the manager's starting position to launch *right away* the transition from personnel management to HRM. **The manager's competence** is perceived as:

• *Knowledge* that is related with personnel management and new HRM concept;

• *Capacity* to recognize and implement the unique functions of HRM emphasised by the HRM concept and the important functions of personnel management. In this aspect one should note that the HRM concept, while emphasising the new HRM functions, does not get rid of some of the traditional personnel management functions (see Table 2).

Table 2

Personnel management in the structure of HRM

	HRM (including the personnel management)	Personnel Management-PM; only new HRM functions – HRM
FUNCTIONS	HRM as a constituent part of the organizational changes	HRM
	Ensuring the collective competence of organization	
	Enabling the continuous development of employees on individual and collective levels	
	Development of organization culture	
	Search and selection of personnel	PM
	Planning the needs of personnel	
	Personnel motivation	
	Personnel training	
	Personnel appraisal	
	Personnel adaptation	
	Safety at work and health protection	
	System of wages	

• *Attitudes to*:

» individual as personality in need of continuous development,

» communication between the managers and employees,

» learning and development,

» work forms,

» HRM functions.

The manager, depending on his level in the hierarchy, may possess the knowledge in personnel management and HRM, and to understand the difference between the two, the advantages of HRM over personnel management, how it should be implemented and what resistance from the supporters of personnel management can be encountered. A manager must have positive attitudes towards replacing the traditional personnel managers with human resource managers. The attitudes are even more important in this context. Attitude as individual's propensity to act is reflected in the so-called "Set-theory" by Uznadzė (1966) claiming that attitude (or "set") is a dynamic state of an individual that shows its preparedness for action, in this case – to implement the concept of HRM. In the opinion of the researcher, the preparedness to act is determined by two major factors: *a need of the subject* (his inclination and effort to implement the HRM), and *adequate objective situation* (in this case – that most managers would agree on implementing the HRM and other favourable condition would exist in the organization).

2) **Manager's disposition** towards certain organizational conditions:

• Current system of personnel management and the problems it presents to the organization;

• The benefits that are envisaged as a result of implementing the HRM.

The manager's dispositions may be influenced by the preconditions created by certain managers for switching over from personnel to human resource management. It is related with the specific actions of manager that prepare for this implementation..

The organization that seeks to prepare itself adequately for the transition from personnel management to HRM must first of all evaluate its own past and present that are closely related with the "future view" of the organization. As we all know, the organization acts not in isolation, but in constant interaction with other subjects and objects in the environment. Therefore, the analysis of present situation starts from the analysis of organization's *external* environment, i.e. managers must answer the question how the change will benefit the organization, i.e. how would it improve the organization's position with regard to its competitors; and the evaluation of the *internal* environment – how it will affect the effectiveness of organization (in broadest sense).

Conclusions

The changes that are taking place in the society are contributing to the all-inclusiveness of the concept "competitiveness". The competitive enterprises are not only investing into the technological solutions, but are paying special attention to developing their "hard-to-copy" human resources, as well as building the organization culture that would be favourable to unleashing its creative energies. These are the aspects that fall within a particular focus of new HRM.

The organizations with the prevailing philosophy of personnel management put emphasis on individual competence, its selection, formal training for the workplace, which is a special responsibility of personnel

management specialists. On the other hand, the concept of HRM stresses the development of not only individual, but also collective competence. The area of HRM nowadays becomes the field

of responsibility of the strategic managers rather than personnel specialists. It is the managers, who play active role in shaping the organization culture, enable the continuous development of employees, make the linkages between the individual and collective competence with the strategic planning of organization. The activities of traditional personnel specialists are also enhanced: in the HRM they are referred to as HRM professionals who, next to their traditional functions, provide support to managers in solving the HRM problems.

The preparedness of managers to implement the HRM concept is related not only with the awareness of differences in the concepts of personnel management and HRM, but also and first of all – a positive attitude towards the concept of HRM, its use for the organization and knowledge of its practical implementation.

References

1. Adamonienė, R., Sakalas, A., Šilingienė, V. Personalo valdymas. Kaunas : Technologija. 2000.
2. Armstrong, M. A handbook of human resource management practice. Cambridge University Press. 2006.
3. Bakanauskienė, I. Personalo valdymas. Kaunas: VDU leidykla. 2002.
4. Boxall, P., Purcell, J., Wright, P. *The oxford handbook of human resource management*. Oxford New Yourk: Oxford University Press. 2003.
5. Bratton, J., Gold, J. *Human resource management: theory and practice*. Basingstoke: Palgrave. 2007.
6. Jocytė, K. Besikeičiantis žmogiškųjų išteklių vadybos vaidmuo. *Ekonomika ir vadyba-2002*. Kn. 1: Žmogus ir verslas: tarptautinės konferencijos pranešimų medžiaga, 2002, p. 66-67.
7. Jucevičienė, P. Organizacijos elgsena. Kaunas: Technologija. 1996.
8. Juknevičienė, V. Laikmečio iššūkiai viešojo administravimo žmogiškųjų išteklių valdymui. *Ekonomika ir vadyba: aktualijos ir perspektyvos*, 2006, 1 (6), p. 96 – 102.
9. Langbert, M., Friedman, H. Continuous improvement in the history of human resource management. *Journal of Management History*, 2002, vol. 40 (8), p. 782 – 787. http://www.emeraldinsight.com/Insight/viewPDF.jsp?contentType=Article&Filename=html/Output/Published/EmeraldFullTextArticle/Pdf/0010400807.pdf.
10. Maslow, A. H. Eupsychian management. 1965, p. 262.
11. McConville, T. Devolved HRM responsibilities middle-managers and rolle dossonance. *Personell Review*, 2006, vol. 35, no. 6, p. 637 – 653.
12. Renwick D. Line manager involvement in HRM: an inside view. *Employee Relations*, 2003, vol. 25(3), p. 262 – 280.
13. Sakalas, A., Šilingienė, V. *Personalo valdymas*. Kaunas: Technologija. 2000.
14. Storey, J. *Human resource management: a critical text.* London: Routledge. 1995.
15. Узнадзе Д. Н.. Психологические исследования. Москва : Наука. 1966.
16. Ulrich, B. *World Risk Society*. Cambridge: Polity Press. 1998.
17. Walton, J. *Strategic Human Resource Development*. Pearson Education Britain, Great Britain: FT Prentice Hall. 1999.

Palmira Jucevičienė, Vilma Fiodorova

Vadovų pasirengimas diegti naująją žmogiškųjų išteklių vadybos koncepciją

Santrauka

Visuomenėje vykstantys kaitos procesai sąlygoja kintančius reikalavimus individams bei organizacijoms. Organizacijos pranašumo konkurencinėje kovoje „ginklu" vis dažniau laikoma organizacijos gebėjimas būti kompetentinga ne tik individualiame, bet ir kolektyviniame bei organizaciniame lygmenyse.

Daugeliui šiuolaikinių vadovų žmogiškųjų išteklių diegimas tampa ne tik iššūkiu, bet taip pat ir tikslu, kurio įgyvendinimas reikalauja iš vadovų pasirengimo, t.y. žinių apie pastarąją koncepciją, teigiamo požiūrio į ją bei naujų vaidmenų adaptavimo.

Straipsnyje atskleidžiamos ne tik žmogiškųjų išteklių vadybos bei personalo valdymo sampratos, bet ir esminiai skirtumai, kuriuos akcentuoja šios koncepcijos. Taip pat pagrindžiamos koncepcijos diegimo įmonėje charakteristikos.

About the authors

Palmira Jucevičienė, Prof. Dr.Habil, Director of the Institute of Educational Studies, Head of the Department of Educational Systems (Kaunas University of Technology), e.mail: palmira.juceviciene@ktu.lt, tel. no. +37061454772; research interests: higher education, knowledge management, human resources management and development, organizational behavior, learning regions, cities and organizations.
Vilma Fiodorova, Master degree in Management and Business. Kaunas University of Technology. Research interests: human resources management.

DETERMINATION OF FACTORS INFLUENCING ORGANIZATION'S KNOWING IN A MULTINATIONAL COMPANY

Palmira Jucevičienė, Vyda Mozūriūnienė
Kaunas University of Technology, Lithuania

Abstract

Organization's knowing is one of the most significant organizational factors guaranteeing the competitive advantage. Organization's knowing is of great importance for multinational companies.
The aim of this article is to determine the factors influencing organization's knowing as well as their parameters in a multinational company and validate their research methodology.
The first part of this article reveals the essence of the creation of organization's knowing. The second part validates the structural and the third section the cultural factors as well as their parameteres influencing organization's knowing. The fourth part validates the reseach methodology of structural and cultural factors.

Keywords
Organization's knowing, multinational company, explicit knowledge, tacit knowledge, structural factors, cultural factors.

Introduction

Taking interest in the factors influencing organization's knowing is associated with the need of enterprises to acquire a potentially bigger competitive advantage. The competitive advantage more often is acquired by the organizations that are able to employ the whole organization's knowing, including both collective knowledge and individual knowledge that may be explicit, tacit and implicit which earlier were not known or perceived as important.
Research in knowledge management area has escalated during the past decade. Researchers (Nonaka, 1994; Hedlund,1994; Nonaka and Takeuchi, 1995; Gamble and Blackwell, 2001; Stankevičiūtė, 2002; Mooradian, 2005; Chiva, Alegre, Lapiedra, 2007; Johnson, 2007; Jucevičienė,2007; Passerini, 2007; Feghali, El-Den, 2008, Jen-te Yang, 2008; Chiva and Alegre, 2009) analyzed the functions and structures of knowledge management, the development of conceptual understanding of knowledge and knowing, the creation of research methodology of organization's knowing and knowledge and other areas.
Reseach accomplished in this area has expanded the concept of *organization's knowing: organization's knowing* represents the holistic approach to knowledge in its entirety prevailing in organization. If *organizational knowing* is limited by the knowing that is perceived by organization as important, so, the *organization's knowing* embraces *the whole* knowing of *all* individuals, who make an organization, *all* groups in organization and *all* knowing of organizational level (which is implied but not articulated), - explicit, implicit and tacit (Jucevičienė, 2007). *Organization's knowing* is one of the most significant factors that ensures competitive advantage and is associated with people, technologies, structures, and organizational culture.
Organization's knowing is of exceptional significance to multinational companies, the multiculturalism of which under certain conditions may create an added value of organization's knowing, but under different conditions may result in miscommunication and may become an obstacle to knowledge creation. The decision making processes are tightly associated with human resources. In the multinational companies, where knowledge in their branches and departments is exchanged among various countries and regions, broad collaboration and compatibility are of exceptional importance (Ghoshal and Westney, 1993). Therefore, international companies must foresee organizational systems, in order to agree upon common actions and to fully utilize the international as well as knowledge and organization's entire knowing existent in specific countries. This can be impacted by various characteristics, including cultural, of the countries that are included in the multinational company's range.
Knowledge management methodologists (Holden, 2002) define the parrarel between culture and knowledge management, where intercultural management is considered as 'an art to manage and to join general knowledge/ variety of values through interactive assessment'. Santoro and Gapalakrishnan (2000) emphasize organization's culture, associated with organization's structure, as two main elements determining organization's knowledge management success. Cultural knowledge is considered the part of organization's knowledge system and intercultural management is considered management of complex processes of knowledge. It is true that culture is comprehended in a wider spectrum than ethnic/national categories, but national cultural differences remain under the conditions of globalization and now their role is noticed more often than previously (Jucevičius, 2004).
All these concepts, however, are rather fresh. Various discussions are in progress, the researchers analyze the conception of organization's knowing and the aspects that influence it. However, the clarity in the attempts to determine the factors, their characteristics, and their underlying potential influencing the organization's knowing is still lacking. There is not enough theoretical and empirical research on multinational companies that would analyze organizational knowing and the factors influencing it.
What *factors determine organization's knowing* in the international companies? What are structural factors and how do they impact organization's knowing? If and what national cultural characteristics determine organization's

knowing? Unfortunately, these and other questions, have not yet received the proper attention of researchers.

The aim of our article is to reveal the factors influencing *organization's knowing* and their parameters in the multinational company and to construct their research methodology. The methods applied to accomplish this aim are the analysis of scientific literature.

The main conceptual positions: a) the formation of *organization's knowledge* is most successful in the organization that is able to act as the community of practice (Wenger, 2001); b) knowledge in organization is created and applied during the interaction between the explicit and tacit knowledge (Nonaka & Takeuchi, 1995); c) culture – "the general values, beliefs and expectations for all society members" (van Maanen, Schein, 1979); "collective mind programming, separating one group members from another" (Hofstede, 1980); d) "society's cultural values influence the nature of its dominant forms of the organization of economic activities" (Hofstede, 1991; Jucevičius, 2004).

According to Walczak (2005), structure and culture are the two variables that in their own interface are defined as the elements the most necessary for the success of knowledge management (Santoro and Gapalakrishnan, 2000). Thus, we will limit ourselves to these two groups of factors considering them as the most significant when analyzing their impact on organization's knowing.

This article cotains four parts. The first part reveals the essence of creation of organization's knowing. The second part grounds the structural and the third part the cultural factors as well as reveals their parameteres influencing organization's knowing. The fourth part presents the reseach methodology of structural and cultural factors.

Organization's knowing creation

In aiming to ensure organization's knowledge creation in a multinational company it is important to recognize factors that influence explicit and tacit knowledge, collective and individual knowledge interaction at the individual, collective and organizational levels. However, the first task is to find out how the organization's knowing is created.

It is Nonaka, Takeuchi (1995) organizational knowledge creation model that reflects organization's knowing with a notable success. Nonaka, Takeuchi (1995) claim that explicit and tacit knowledge should be analyzed not in isolation, but rather as an interdependant undivided phenomenon. The authors have designed the dynamic knowledge transformation (SECI) module in which tacit and explicit knowledge intertransformation happens between individuals in the middle of a social interaction. During this social transformation both explicit and tacit knowledge increase both in quality and quantity (Nonaka, 1990). There are four transformations in this process:

1. Socialization – the first stage starts from creating an atmosphere of cooperation, and it is when employees' experience and individuals' intelectual models interact. While acting together members of an organization transfer some of their tacit knowledge to other group members, and thus turn this knowledge into group/division collective tacit knowledge. As Nonaka,

Toyana and Byosiere (2001) state, since tacit knowledge is context-specific and hard to express, it can be transferred through experience, activity, working together or imitating the master's work.

Example: *four cooks are working in a narrow kitchen; providing it is an excellent team of cooks, the work is done quickly, without exchanging words and the food is that of splendid taste. There has been socialization between them, and they have shared their tacit knowledge. No one but them are aware of this fact. When asked how it happens their answer is: we got used to it. That is a collective habit.*

At this organization's knowing stage an individual acquires new individual tacit knowledge from other group members. This knowledge has not been either described in writing or orally, however, this group or division has tried them and mastered in their activity, and while working they "understand each other without words". This process is hard to manage since it is the transformation of tacit knowledge. But as Nonaka, Toyana and Byosiere (2001) say, the abundance of tacit knowledge stimulates knowledge creation and it becomes motivational to create high quality knowledge, at the same time members of the organization find the atmosphere of security and confidence important so they could break internal barriers and share their tacit knowledge. Intelectual modules and technical innovations are created at exactly this stage of organization's knowing.

2. Externalization initiates a dialogue, collective thinking, during which with the help of metaphors and analogies individuals and group members express their tacit knowledge articulating it as explicit individual and group collective knowledge.

Example: *a new chef comes to work to the same restaurant and demands description of the whole newly developed and smooth process. Concept knowledge of how sequential processes are done and what cooks should do to achieve the desired result is received. One cook should do „this", another cook should do „that" and „at that time". They formalize, communicate knowledge, i.e. rules are designed for this kitchen.*

As Nonaka, Toyana and Byosiere (2001) claim, out of the four knowledge transformation stages, internalization is the key in the knowledge creation process because of the group tacit knowledge transforming into explicit knowledge. This knowledge is crystallized and becomes basis to new knowledge creation. Nonaka and Takeuchi (1995) state that successful transfer of individual tacit knowledge and its transformation into explicit knowledge depends on the sequential use of metaphors, analogies and symbols during social interaction. The use of metaphors enables intuitive understanding of certain meanings through the symbols of other meanings. A metaphor allows to relate concepts which are distant from each other but relate on an abstract level. Analogies allow to perceive unknown phenomena in comparison with known ones and fill the gap between imagination and logic models. Thus, knowledge expressed during the internalization is communicated in the shape of rules, procedures, technologies etc.

3. During *Combination* relation between newly created knowledge explicit knowledge expressed in isolated groups and/or divisions and already possessed knowledge of organization structures is formed and explicit knowledge at an organization level is created. At this

stage knowledge in the organization is formalized and a new product or management system is created (Nonaka, Takeuchi, 1995).

Example: *a manager of the same restaurant who has several groups of cooks, waiters etc. under him demands the working process descriptions from all other members of all other groups as well. They are not happy about that and they are angry, but nevertheless perform the task – formalize their tacit knowledge, lay down their rules, and rules for the kitchen as for organization are created. Thus, several groups of employees create rules for the whole organization – the kitchen.*

New and formally necessary knowledge of organizational level received at this stage is specified

in activity descriptions, organization principles, strategies, concepts.

4. During the *Internalization* explicit knowledge of organizational level is embodied as tacit collective knowledge of organizational level. This explicit knowledge during organization training is transferred to individuals and their groups and is accepted by them (often with some transformations) as tacit embodied knowledge. As Nonaka, Toyana and Byosiere (2001) claim, first of all organization's explicit knowledge must be embodied in action and activity, because training helps the trainee to know the organization and him/herself better. Next, explicit knowledge should be embodied in simulations, tests, so that trainees could apply their training knowledge in practice.

Example: *newly created kitchen rules are presented to the whole organization- the kitchen staff, all the groups of cooks, waiters etc. They learn the rules and how to perform processes accurately and in the right way to achieve a good result and internalize into their operational knowledge, learn them. Thus, there is internalization, operational knowledge creation happening in activity. Cognitive education from explicit knowledge and its application in activity by the employee, as if from „inside him/her"transforms this knowledge into competence and skill.*

Such internalized tacit collective knowledge of organizational level change mental models or the technical "know-how" of individuals or their groups and become a valuable asset to the organization or individual ((Nonaka, Toyana and Byosiere, 2001). This tacit knowledge of organizational level accumulated at the individual level return to the stage of socialization as new tacit knowledge of individuals. In this way organization's knowing creation process repeats in a spiral starting from the individual level and goes through all organization levels only each time advancing one level (Nonaka and Kanno, 1998).

In this SECI model Nonaka and Takeuchi (1995) present knowledge creating organization as an open system which shares knowledge with its surrounding environment on a constant basis. In such organization there occurs creation and formalization of knowledge which in turn becomes new products, technologies, services and management systems.

In the works produced later Nonaka, Toyama and Byosiere (2001) present a theory of knowledge creation process, which changes the traditional notion of knowledge as of substantiated truth. The authors say that knowledge is dynamic because it is created in a dynamic social interaction between individuals and organizations. Knowledge is created by individuals, that is why it is active and subjective, and expressed in terms of "commitment" and "belief". The roots of this knowledge lie deep in the value system of individuals. Knowledge is mainly related to people's activity and emotions (Sherer and Tran 2001). There occurs conversion between the from-tacit-into-explicit knowledge.

The understanding of the SECI model can be deepened with the help of Johnson's (2007) tacit knowledge pattern recognition and synthesis model (PRS), which emphasizes individual knowledge, the importance of individuals in the knowledge creation process them being the synthesis driving force which enables to create and spread knowledge. The author of this model states that tacit knowledge comes from an individual's inner self. That is why the transfer or sharing of knowledge always occurs through an individual's perception, which is usually conditioned by an individual's certain framework and which is either expressed or not expressed more or less by an individual. Thus, this perception can be the condition for *conscious perception* or remain *tacit perception*. One way or another both these qualities are an outcome of an individual's mental activity. In other words individuals can express their tacit knowledge through independent reflection during their working activity. In this way new explicit knowledge at the individual level is created. This new knowledge consciously or unconsciously as artificial models (data and information „coming out of" an individual) is communicated to colleagues who repeat this activity in their thinking process.

Example: *all the kitchen staff is altogether again working according to newly learned rules, but one employee reflects on his work with creativity, tries new ways, analyzes the working process and finally succeeds. He discovers a new and quicker way for the same job to be done and naturally shares this news with his team of cooks. Wishing to improve the processes he „draws out" his tacit knowledge by himself and tells it to everybody by explaining all the details etc. Being creative all the employees accept the novelty immediately.*

Nonaka and Takeuci's (1995) dynamic knowledge transformation model (SECI), deepened by Johnson's (2007) PRS model, allows to reveal the dynamics of organizational training and its result – the structure of organization's knowing in a multinational company.

In this way three organization's knowing levels are distinguished: individual, that of a group/division and the whole organization. At each level tacit and explicit knowledge can be singled out. The essence of organization's knowing conception also enables the insight into two more knowledge profiles: a) considered by organization as significant (called organizational knowledge, knowing); b) not considered significant (even though being an individual's personal knowledge or non-formal knowledge of a working group in concrete situations they can become significant, however, these situations have simply not been foreseen or assessed by the organization).

Having estimated the possibilities of the classification of all the knowledge created in an organization we have proven characteristics of organization's knowing (Juceviciene, Mozuriuniene, 2009). See table 1.

Table 1

Characteristics of organization's knowing (Juceviciene, Mozuriuniene, 2009)

Level of organization's knowing	Characteristics of organization's knowing
Individual	Tacit (formally *considered* necessary by organization) knowledge
	Tacit (formally *not considered* necessary by organization) knowledge
	Explicit (formally *considered* necessary by organization) knowledge
	Explicit (formally *not considered* necessary by organization) knowledge
Group/division	Explicit (formally *considered* necessary by organization) knowledge
	Explicit (formally *not considered* necessary by organization) knowledge
	Tacit (formally *considered* necessary by organization) knowledge
	Tacit (formally *not considered* necessary by organization) knowledge
Organizational	Explicit (formally *considered* necessary by organization) knowledge
	Explicit (formally *not considered* necessary by organization) knowledge
	Tacit (formally *considered* necessary by organization) knowledge
	Tacit (formally *not considered* necessary by organization) knowledge

Structural factors of organization's knowing and their parameters

In trying to ensure the creation of organization's knowing in a multinational company it is important to recognize factors influencing tacit and explicit, collective and individual knowledge interaction at an individual, collective and organizational levels.

Management structures. Management structure determines working relations which in the organization can be not only formal, but non-formal as well; so usually there is formal organizational structure functioning next to non-formal (Hendriks, 2006). According to Blackler (1995), management structure (specifically its character) is a very important factor in individual interpersonal and collective relationships, influencing organization's knowledge creation process and its organizational embedding in a multinational company.

What is needed for a successful organization's knowing creation is the entrepreneurial managament of the company and willingness of employees to share their tacit knowledge and also transform it into explicit knowledge. Teece (2000) states that the following qualities are characteristic of companies involved in intensive exploitation of knowledge and creation: flexible boundaries of the organization, high level motivational system, flat hierarchy, innovative and entrepreneurial culture, non-bureaucratic structure. Two management structures of multinational companies match these characteristics: team-based structure and hypertextual (Nonaka, Toyana and Byosiere, 2001).

Team-based structure is based on project task performance conditioned by a team work. A team is defined as a group of people efficiently working together to pursue the same aim and while trying to achieve this aim is capable of enriching its human resources rather than wasting them. From the knowledge perspective the main advantage of a team-based structure is that teams can be formed with the aim of integrating certain knowing in order to achieve certain objectives (Hendriks, 2006). They break the barriers between subdivisions and decentralize decisions as they have the right to make them. It allows to improve all the organization's knowing creation process inside the team. The main disadvantage of a team is that its members' concentration on achieving success hinders horizontal relationships with other teams.

That decreases cooperation between teams in terms of knowledge creation and knowledge sharing. However, team-based structure matches most of the characteristics describing a company involved in intensive exploitation of knowledge. Therefore, it is likely that in this type of organization sharing of tacit and explicit knowledge is strongly expressed, i.e. organization's knowing is successfully created at a team level.

Hypertextual structure is based on task-force system management. Such organization according to Hendriks (2006) has two levels of management which supplement each other: team –based organization model and hierarchical bureaucratic organization part. The traditional functional bureaucratic structure and effective project-based created organization distinguishing in flexibility necessary for knowledge-creating organization. Nonaka, Toyama and Boyesiere (2001) present a structural form which is based on a business system ordered as a hierarchical pyramid. At the top of the pyramid the authors show project team level important for the organization's knowing creation activity. At this level unique tasks of different teams (from various units of the business system to project team) are coordinated. The tasks are coordinated as long as the whole project is finished. Knowledge is accumulated and spreaded (shared) at the foundation level of the hierarchy. Coordination of these two levels requires a strong corporate culture which is considered the basis of the organization's knowing by Nonaka (1994). That is why Nonaka, Toyama and Byosiere (2001) use the term "hypertext" to name the structure being analyzed trying to show that from the aspect of knowing such structure possesses more flexibility and additional potential relations between different parts and levels of an organization.

Mental structures. Macharrzina, Oesterle and Brodel (2007) describe thinking as explanatary repertoires which have two aspects. First is the social subject's knowledge fund (what is known?). Second is the social subject's „system of meaning" (how is it getting to known?). It is related with an individual's qualifications, competence, language, i.e. semantics. There should be a separate definition of knowledge structures of high level professionals, when these structures are connected with their qualifications and competences, i.e. professional activity. It is for the most part influenced by the

professional training, i.e. specific sphere, sometimes even knowledge of scientific discipline. Cohen (1990) emphasizes two essential differences in conceptual knowledge structures. The first, called the newtonic, is determined by the positive approach to the world, i.e. accepting the world and its phenomena as objectively existing "on the human being's outer self". It is the tradition of natural and exact sciences. The second is the constructivist position, accepting the world as subjectively interpreted by the human being. It is the tradition of humanitarian and social sciences. What is also essential is that in the system of meanings of an individual language plays an important role being also a reflection of this system. The semantic structure shows that a human being's perception and behaviour are defined hierarchically ordered perception about notions, facts and their interrelations when word meanings are divided into certain categories following the hierarchy principle. For example, in a multinational company the semantic structure can acquire this expression: there is arrangement about the adequacy of conceptions of main terms, used in several languages. Therefore, knowledge circulating among several subsidiaries established in different countries and headquarter organization in the context of semantic structuring can be easily transferred and mastered. According to Argyris (1985, 1993), knowledge, the understanding of which is complicated, or it contradicts the system and is unacceptable, will evoke the so-called "defensive regime" in the result of which it will be turned down.

Knowledge structures. Having analyzed activities of multinational companies Solvell and Zander (1995) distiguished two models influencing the choice of knowledge structures when trying to create knowledge effectively and realize the innovation processes in globally intergrated multinational companies. They can be considered *centralized* and *decentralized* choice of knowledge structures. *Centralized choice of knowledge structures* in a multinational companies means that essential knowledge structures to all subdivisions established in different countries are provided by the headquarters. Such approach reflects headquarter's strategic perspective that different countries and regions condition unequal possibilities of subsidiaries, therefore, headquarter's provided knowledge structures facilitate in equalizing the possibilities of subsidiaries, established in different countries, regions (Macharzina, Oesterle ir Brodel, 2007). Attention to that has been drawn by Porter (1990) as well, who stressed out the roots of competitive ability of global companies, among them the acquired competitive advantage of the headquarters before establishing subsidiaries in other countries. Porter (1990) thinks that multinationals in their global sturcture could organize knowledge generation processes in the most simple way: the headquarters of the company creates main organization's knowing base and becomes the main developer of innovations and training. Thus, headquarters serve as a source of opportunities and skills making impact on the whole international company ((Macharzina, Oesterle ir Brodel, 2007) and the subsidiaries functioning in other countries simply adapt the acquired knowledge in their activity.

The decentralized choice of knowledge structures in a multinational company means that more attention is drawn to knowledge created not by headquarters. This knowledge can be taken from international, national environment or even from concrete organizations.

The choice of knowledge structure from an international environment occurs when multinational companies activity allows to get specialized knowledge about products and markets managed by its foreign subsidiaries and the international relationships of these subsidiaries. As Macharzina, Oesterle and Brodel say (2007), special attention should be paid to and confidence shown to "frontline" employees, who possess particularly important special knowledge and expertise. Multinationals which decentralize decision making delegating them to their foreign subsidiaries are more adapatable, innovative and active than those multinationals which emphasize centralized decision making and strict activity coordination. Collecting information in the decentralized way there occurs healthy competition between foreign subsidiaries by means of spreading information and creating knowledge. In this way a multinational is united by a strongly absorbed competence (Cohen and Levinthal, 1990). As Ghoshal (1987) states, the main asset of a multinational company is its potential to learn from its actitivity done in a foreign environment.

Since in the globalisation situation particular attention is paid to local advantages based on knowledge, collecting knowledge structures from a national environment is becoming more and more important. In different regions national innovation systems create branch clusters which attract qualified work force, investment, scientific and technological competences. A multinational developing its activity in such a region benefits from the region's competence from local competitors, buyers, suppliers, research institutes. As Ghoshal (1987), Van Maanen and Laurent (1993) say, multinationals enjoy the possibility to receive local knowledge and experience independent from geographical location. Nonaka (1990) also points out the advantages of the system for organization's knowing creation by combining geographically expanded internal and external knowledge resources.

Collecting knowledge structures from knowledge possessed by the organization takes place when multinational companies develop its organization's systematic specific advantages by performing multinational operations. These advantages rise from turning the subsidiaries' collected information into the asset of the whole organization. In this case multinationals have a possibility to benefit from the accumulated inter-national regional competence, which takes the shape of organization's knowing and is is transferred to company's subdivisions. Multinational companies functioning in an integrated independant network through cooperation connect their foreign subdivisions and in this way create the biggest potential to overcome competitors (Bartlett, 1986).

Knowledge structure possessed by an individual. One of the main representatives of cognitive constructivism Piaget (1929) whose field of research was the influence of the environment to the formation of an individual's knowledge, states, that an individual uses and/or applies

his/her thinking to master new ideas and knowledge. According to the author, formation of new knowledge can take place through assimilation and accomodation. *The assimilation of knowledge* occurs when during the process of mastering the new knowledge an individual's possessed conceptual thinking structures (conditioned by knowledge) are not changed because the new information corresponds to his/her internal thinking structure (Piaget, 1929). From the aspect of employees' activity in the organizations particular importance belongs to nature-scientific and humanitarian profile thinking structures. Another thing is if an individual is capable of mastering the necessary knowledge: it depends on, according to Vygotsky (1986), the human being's „level of advancement", in other words base readiness to interact with the environment supplying the knowledge. *The accomodation of knowledge* is necessary when there is the aim to master such knowledge structures which in their essence are different from a knowledge structure possessed by an individual. In such a case an individual

must change the essential concepts, even the thinking structures, he/she possesses. For example, a manager must change the nature-scientific thinking structure (positivistic approach to phenomena) into the thinking structures of humanitarian sciences (constructivist approach to phenomena) if he wants to perceive collegial organization behaviour model.

In summary of what has been analyzed in this chapter of the article, it can be noticed that the success of organization's knowing creation is influenced by structures: management structures, knowledge structures, thinking structures and knowledge structures possessed by an individual. All this is structural factors influencing organization's knowing creation at four knowledge creation phases (socialization, externalization, combination, internalization), and also during an independant relection of an individual. The factors influencing organization's knowing are presented in table 2

Table 2

Structural factors influencing organization's knowing

Factor characteristics	Criteria defining characteristics	Indicators/ statements reflecting factor characteristics and criteria
Management structures	Team-based	Company's activity is based on teams formed for a certain timing to achieve a certain purpose
	Hypertextual	In the company „bureaucrats" and activity team members operate smoothly as it is most important to commonly pursue company's success
Thinking structures	Nature-scientific	1. Employee's thinking mode formed by natural sciences is perceived by team members 2. Employee's thinking mode formed by natural sciences matches the thinking mode dominating in the company
	Humanitarian	1. Employee's thinking mode formed by humanitarian/social sciences is understood by team members 2. Employee's thinking mode formed by humanitarian/ social sciences matches the thinking mode dominating in the company.
	Semantic	1. In an international company there is precise arrangement of what main notions used in the English language mean 2. In the company there is precise arrangement of what main notions used in state language mean
	From headquarter	1. Knowledge created and circulated by an international company headquarters 2. Work relations of an international company headquarter and its subsidiary
	From another international environment	*1. The most up-to-date information from international databases* *2. Advanced experience of other international and foreign organizations* 3. Common activity with employees of other foreign and international organizations
Knowledge structures	From national environment	1. Present knowledge created in native country 2. Advanced experience of the country's enterprises 3. Common activity with other country's enterprises and organizations
	From own organization	Knowledge created in a subsidiary, classified, ready to use and easily accesible
Individual's possessed knowledge system	Assimilation	Volume and character of knowledge is changing in the company, and it *does not require* the change of essential concepts and thinking modes of employees
	Accomodation	Volume and character of knowledge is changing *in the company* and *does require* the change of employee's essential concepts and mode of thinking

Cultural factors of organization's knowing and their parameters

The main asset of multinational companies is their

possibility to influence creativity and skills spread all over the world. Decision making processes of multinational companies requires wide cooperation and mutual compatibility between headquarters and subdivisions, because they are closely interrelated

through resources which are shared between regional and world bases (Ghoshal and Westney, 1993). As Macharzina, Oesterle and Brodel (2007) state, being international adds a new dimension in search for optimal solutions between stability and changes. In order to benefit from international expansion multinational companies have to support local thinking and decentralized intitiatives, coordinate and manage common actions, so that they could use the acummulated knowledge at an international level.

National cultural differences in the circumstances of globalisation are seen very well. As Hofstede (1990) states there is a big variety of national cultures in the very organization and shows in different working values of employees at these similar working structures. Values of national level mostly form in family and school, whereas organizational practices, and thus, knowledge forms during socialization at workplace when basic values of employees have already formed (Jucevicius, 2004). Therefore, national cultural characteristics of employees' influence stages of organization's knowing creation as *factors* of organization level.

At the same time *national cultural characteristics* influence the organization's culture as a context in the aspect of a concrete country. Laurent (1983) research showed that managers of subsidiaries of different countries working in one multinational company distinguished for strong organizational culture had different beliefs in terms of work organization issues than managers working in different companies in the same country. As Adler (1997) says, strong organizational culture of a multinational can reduce the impact of national culture but can not eliminate it. Thus, national culture is this environment of values where country's organizational cultures form (Jucevicius, 2004). National culture determines essential working values, beliefs, philosophies. The efficiency of a multinational company activity will be higher if foreign management practices are applied to a concrete country's national culture (Newman, Nollen, 1996). Thus, country's *national cultural characteristics* as *factors* of national level can influence organization knowledge in a multinational company through organizational culture. As Hofstede (1990) states, country's cultural characteristics influence the culture of an organization and results of an activity, whereas the organisational culture of multinationals is mostly determined by their origin of country's national cultural characteristics. In other words, a multinational's headquarter's country's national culture as a context conditions organizational culture and at the same time all the stages of organization's knowing creation. According to Jucevicius (2004) it is especially important in the case of young economy specialists when the efficiency of local subsidiary activity for the most part depends on successful management of „the imported" and adaptation of organizational structure. Hence, country's *national characteristics* of a multinational headquarter may strongly influence the process of organization's knowing creation as *factors* of international level.

While analyzing cultural factors, there is a traditional approach to culture as a factor differentiating countries or organizations (Hofstede, 1980). Methodology based on this approach will facilitate in highlighting cultural characteristics making conditions for the formation of organization's knowing. In the intercultural research methodology Hofstede (1980) presents and defines fours cultural dimensions:

Power distance shows to what extent the society is tolerant to unequal distribution of power among its members. In this way country's society's attitude towards hierarchy, authority and power relationships reveals.

In the cultures of high power distance managers and subordinates consider one another unequal. It is acknowledged that hierarchy is a natural unequality. Authority is more centralized and subordinates are expected to carry out orders. Orders are not subject to discussion, higher level management is not easy to approach, employees avoid airing their views, show disagreement, there is no big confidence in others. At such a situation present there usually are set and accepted (formalized) rules. Thus, these cultures are acknowledged as knowledge oriented, i.e. explicit organization's knowing, rather than organization's knowing in which tacit individual and collective knowledge are emphasized. Therefore, it means that an organization in favour of power distance in fact loses higher competence opportunities which can be possible to find by individual and collective knowledge based on tacit knowledge.

In cultures of *low power distance* managers and subordinates are more equal. In organizations there exist the tendency of decentralization and reduction of managerial staff, horizontal relationships. In an organization of such culture it is the human resource that is important, not only relationships defined by formal rules, but also relationships not defined in advance, especially those conditioning the formation of tacit knowledge. It is exactly the reason why low power distance culture allows opportunities for achieving higher organization competence.

Uncertainty avoidance characteristics assess how issues of uncertainty about the future are solved, to what extent people feel the threat of unclear situations and try to avoid them. This dimension shows to what extent separate groups tolerate uncertainty.

In countries of *high uncertainty avoidance* there can be felt a need for rules and orders, early detailed arrangements, search for absolute truths and values. Managers do not like to make risky decisions or take responsibility, they are more detail-oriented. In these cultures, also as in those which are high-power-distance oriented, there is more emphasis put on explicit knowledge. In this way organization limits its competence without estimating tacit knowledge found at individual and collective levels.

In countries of *low uncertainty avoidance* there is less emphasis on rules and procedures, and rather there is more trust in flexible competence. Managers are more strategic-issues-oriented, ready to take risky decisions and are not afraid of responsibility. In these cultures high creativity is more likely- organization's knowing which is connected not only with explicit, but with tacit knowledge in particular.

Relationship of individualism and collectivism shows what is prevailing: individualism or collectivism.

The dimension of individualism shows to what extent priority is given for individual interests in respect of

group interests. In this way relationship of an individual and other people is assessed. This dimension is closely related to the country's economic development and shows to what extent an individual is important to its society in comparison to the group he/she belongs to.

In countries distinguished for *high level of individualism* there is emphasis laid on an individual and family. Independence and autonomy are appreciated. In cultures characterictic of high level of individualism, there is emphasis on individual knowledge (explicit and tacit), independence. In countries characteristic of *low level of independence* collectiveness is appreciated. Personal identity is based on belonging to a group. Collectivist society requires a person's higher emotional dependence from an organization and respectively higher organization's responsibility for its employees. Low level of individualism permits collective knowledge (explicit and tacit) to be expressed. Unfortunately, with the economies growing the level of individualism is increasing respectively.

Relationship of masculinity and femininity shows whether *yin* or *yang* prevails in the organization behaviour.

The cultural dimension of *masculinity* reveals the relationship between the importance of personal and professional aims in the society, defines what the society emphasizes more- purpose achievement or task implementation.

It is connected with traditional perception of male and female roles. From the position of the organization masculinity is highlighting the ego with respect to working activity, emphasizing the „living for the job" role, i.e. purpose-achievement-orientation. As in cultures prone to individualism, in these cultures also orientation to explicit and tacit knowledge at an individual level prevails.

Femininity means the social ego and is related to "the job for living", i.e. orientation to task implementation when working together. The emphasis is put on relationships in working group. Thus, it is very likely that explicit and tacit knowledge at a collective level will be used and created. Cultural factors, making a positive impact on organization's knowing creation, are summarized in table 3.

Table 3

Cultural factors influencing organization's knowing

Factor Charakteristics	Criteria defining characteristics	Indicators/statements reflecting factor characteristics and criteria
Power distance	Low power distance	1.Frienly and liberal relations between managers and subordinates in the company 2. The company appreciates what you sayand not who you are
Uncertainty avoidance	Low uncertainty avoidance	1. In the company there is flexible decision making regarding the present situation 2. In the company it is understood that a lot depends on how people perceive and interpret different things
Individualism and collectivism relationship	Collectivism	1.There is respect and every kind of support for teams and their activity in the company 2. There is team work between company employees in the company
Masculinity and femininity relationship	Femininity	1. Priority is given to group decision making and search for consensus in the company 2. The climate of employee care prevails in the company

Methodology of structural and cultural factors

While doing the research of cultural and structural factors influencing organization's knowing in a multinational company it is purposeful to apply *case study,* and also *triangulation strategies,* combining *qualitative and quantitative research*. Case study strategy is chosen to go deeper into concrete multinational companies with the aim of revealing the object under research. Since the object being researched is complicated, triangulation is used to open it from all sides, in combination with observation, document analysis, written polls, sometimes combined with an interview or focus group.

1. First of all it is necessary to find out what influence headquarter organisation of a multinational company makes to its subsidiary companies founded in other countries. That is why it is important to know the history of the company foundation (methods – document analysis), formation of the primary culture of the organization. Since a multinational company being researched has been operating for some time already, reconstruction strategy is applied, by interviewing main people who took part in formation of the organizational culture: former or still present managers, main specialists.

The fundamental task is to establish the headquarter's expression of cultural characteristics at the beginning of its foundation and its shift until the present timing. Actually establishing the expression of cultural characteristics at present timing could be enough as well. Should this be the case it should be necessary to find out how these cultural characteristics influence organization's knowing of headquarters and subsidiaries.

If there is a possibility to do research over a longer period of time, especially by observing the processes happening in the multinational company from the inside, longitudinal observation can be applied, combining it with document analysis. The purpose of such observation is to establish the structural and cultural changes of a multinational company development in its subsidiary companies.

2. Having found out the existing cultural and some structural (mentioned) factors the main research is done. Its purpose is to establish cultural and structural factors influencing employees' organization's knowing in a multinational company. A strategy of a quantitative research is applied, method – written poll of employees of subsidiary of a multinational company, applying semi-structured questionnaire. Next to other questions it also

holds a matrix the horizontal axis of which is made of cultural and structural parameters, while the vertical – organization's knowing structural parameters. Respondents are asked to estimate the degree (rank scale) of factor influence for different kinds of knowledge formation. If any of these factors do not exist in the organization, respondents are asked to mark them.

3. Also a semi-structured survey is done to interview subsidiary managers. They are presented with a modified questionnaire questions of which reflect the intermediate position of subsidiary managers between headquarters (especially its managers) and subsidiary subordinates. The purpose of this survey is to establish headquarter's cultural and structural factor influence on subsidiaries' organization's knowing creation at the level of managers of the latter.

4. Interpretation of the achieved research results with the purpose of validation is very much dependant on how respondents who took part in the research perceive the benefit of the knowledge possessed by them and how they interpret this knowledge. According to Denzin and Lincoln (1994) perception and interpretation is a time-consuming process, that is why as a method aiming to deepen the understanding and enable interpretation an interview with important respondents regarding the knowledge they possess (especially managers, executive specialists) can be used and/ or a focus group method can be applied. It is particularly purposeful to organize a focus group by inviting managers and executive

specialists of subsidiary companies established in different countries in order to compare their assessment of the received results and arosed issues.

Conclusions

The multinational company organization's knowing is conditioned by structural and cultural factors.

Among structural factors the following can be distinguished: management structures (team –based and hypertextual); thinking structures (nature-scientific, humanitarian, semantic); knowledge structures (from headquarter, other international environment, own organization); employee's knowledge system (conditioning assimilation, accommodation).

Among cultural factors the following can be distinguished: low power distance, low uncertainty avoidance, collectivism, femininity.

Research methodology of structural and cultural factors influencing organization's knowing is based on *case study*, and also *triangulation* strategies, combining *quantitative and qualitative research*.

Multinational company is researched by reconstructing its functioning overtime and by doing the longitudinal research, which allow the observation of the organization's knowing creation. Structural and cultural factors and their influence to organization's knowing is established by written polls of managers and executive specialists or focus group method is applied.

References

1. Adler, N. and Jelinek, M. Is "Organizational Culture" Culture Bound? Human Resource Management. 25. 1986. p.73-90.
2. Al-Alawi, A., Al-Marzooqi, N. Organizational culture and knowledge sharing: critical success factors. Journal of Knowledge Management: 11/ 2. 2007. p. 22-42. [žiūrėta 2008-03-01]. Prieiga per internetą: <http://www. emeraldinsight.com/Insight/viewPDF.jsp?Filename=html>
3. Argyris, C. On Organizational Learning. Cambridge, Mass.: Blackwell Publishers. 1992.
4. Argyris, C., Schon, D. Organizational Learning II: theory, method and practice reading. Addison:Wesley. 1978/1996.
5. *Argyris*, C. Action science and intervention Journal ofApplied Behavioral Science. 19. *1983*. 115-135.
6. *Argyris*, C. Knowledge for Action: a Guide to Overcoming Barriers to Organizational Change. San Francisco. CA: Jossey-Bass.*1993*.
7. Bartlett, C.A., and Ghoshal, S. Managing Across Baorders: The Transnational Solution. Boston. Harvard Busines School press. 1989.
8. *Blackler,* F. The Management School. Lancaster University. UK. Organization Studies. 16(6). 1*995. p.* 1021-1046.
9. Chiva, R. and Alegre, J. (2009). Organizational Learning Capability and Job Satisfaction: an Empirical Assessmentin the Ceramic Tile Industry. British Journal of Management. 20. p. 323–340.
10. Chiva, R., Alegre, J. Lapiedra, R. Measuring organisational learning capability among the workforce. International Journal of Manpower. 28. 2007. p. 224-242.
11. Cohen, W. M. and Levinthal, D.A. Absorptive capacity: a new perspective on learning and innovation, Administrative science Quartely.35(1). 1990. p. 128-152.
12. Denzin, N. K. (1994). Symbolic Interactionism and Cultural Studies. Oxford: Blackwell.
13. *Denzin*, N. K. & *Lincoln*, Y. S. Handbook of Qualitative Research (Second Edition). Thousand Oaks, CA: Sage. 2000. (First edition: *1994*).
14. Easterby-Smith, Shenxue Li, Bartunek „Research Methods for Organizational Learning: The Transatlantic Gap. Journal of Management Learning. 2009.Vol. 40(4): 439–447, 1350–5076
15. Feghali, T. El-Den, J. Knowledge transformation among virtually-cooperating group members. Journal of Knowledge Management. 12(1). 2008. p. 92-105. [žiūrėta 2008-02-29]. Prieiga per internetą: <http://www. emeraldinsight.com/Insight/viewPDF.jsp?Filename=html>
16. Gamble, P. R. and Blackwell, J. Knowledge Management. A State of the Art Guide. Kogan Page. 2001.
17. *Ghoshal*, S. Global Strategy: An Organising Framework. Strategic Management Journal. 8. *1987*. p. 425-440.
18. *Ghoshal*, S. & *Westney*, E. Organization Theory and the Multinational Corporation. St Martin's Press. New York. *1993*. p.73. .
19. Hedlund, G. A. Model of Knowledge Management and the N-Form Corporation. Strategic Management jurnal. 15. 1994. p. 73-90.
20. Hendriks, P. H. J. Organizational Structure. Encyclopedia of Knowledge management.David Sschwartz, Editor. 2006. p. 749-756.
21. Hofstede, G. Culture's consequences.London. Sage. 1980.
22. Jen-te Yang.. Individual attitudes and organisational knowledge sharing. Tourism Management. 29. 2008. p.345–353.
23. Jucevičius, G. Integruotas požiūris į vadybos modelius ekonominės transformacijos sąlygomis kultūrinių ir institucinių veiksnių aspektu. Daktaro disertacija. Kaunas. Kauno technologijos universitetas. 2004.
24. Jucevičienė P. Besimokantis miestas. Kaunas: Technologija, 2007.
25. Jucevičienė, P., Mozūriūnienė, V. Organizacijos žinojimo santykis su Organizacijos žiniomis: pažinimo ir formalizavimo ribos. EKONOMIKA IR VADYBA. ISSN 1822-6515: 2009. 14.
26. Johnson, W. H. A. Mechanisms of tacit knowing: pattern recognition and synthesis. Journal of Knowledge Management. 11(4). 2007. p. 123-139. [žiūrėta 2007-11-15]. Prieiga per internetą: http://www.emeraldinsight.com/Insight/ viewPDF.jsp?Filename=html/Output/Published/EmeraldFullTextArticle/Pdf/2300110410.pdf
27. *Laurent,* F. Jean-Jaques Perrey and the Ondioline. Computer Music Journal. 18. (4.)Cambridge, MA: MIT Press. *1994*. p. 19-25.
28. Macharzina, K., Oesterle, M. J.and Brodel, D.. Learning in Multinationals. Handbook of Organizational Learning & Knowledge. Oxford University Press. 2001. p. 631-656.

29. *Newman*, K. L., *Nollen*, S. D. Culture and congruence: the fit between management practices and national culture. Journal of International Business. *1996*.

30. Nonaka, I., Toyama, R., Byosiere, P. "A theory of organizational knowledge creation: understanding the dynamic process of creating knowledge" in Dierkes, M., Antal-Berthoin, A., Child, J. Nonaka, I. (Eds). Handbook of Organizational Learning and Knowledge Creation. Oxford University Press. New York. NY. 2001. p. 491-517.

31. Nonaka, I., Teece, D.J. H. Managing Industrial Knowledge – Creation, Transfer and Utilization. Sage. 2001. [žiūrėta 2008-02-27]. Prieiga per internetą: http://books.google.com/books?id=g-GUqCESPIoC&printsec=frontcover&hl=lt

32. Nonaka, I., Kanno, N., "The concept of 'Ba': building a foundation for knowledge creation", California Management Review. 40(3). 1998. p. 40-54

33. Nonaka, I. and Takeuchi, H. The knowledge-creating company. New York: Oxford University Press. 1995.

34. Nonaka, I. A. Dynamic Theory of organizational Knowledge Creation. Organization Science. 5(1), 1994. p. 14-37.

35. *Nonaka*, I. Redundant overlapping organization: A Japanese approach to managing the innovation process. California Management Review, 32(3). *1990. p.* 27-39.

36. Nonaka, I.. Redundant Overlapping Organizations: A Japanese Approach to Managing in Innovation Process. California Management Review. 3. 1990a p. 27-38.

37. Piaget, J.. The child's conception of the world. London: Routledge and Kegan Paul. 1929.

38. Porter, M. E. The competitive advantage of nations.N.Y.Feepress. 1990.

39. Porter, M. E. Don't collaborate, compete. Economist. 9. 1990. p.23-26.

40. Santoro, M. & Gopalakrishnan, S. The institutionalization of knowledge transfer activities within industry-university collaborative ventures. Journal of Engineering and Technology Management, 17. 2000. p. 299-319.

41. *Scherer*, K.R., *Tran*, V. "Effects of emotion on the process of organization learning", in I. Nonaka (Eds). Oxford University Press, Oxford, UK, 2001.

42. *Sölvell,* O., *Zander,* I. Organization of the dynamic multinational enterprise. International Studies of Management and Organization. 25. *1995. p.*17–38

43. Stankevičiūtė, J. Organizacijos žinojimo didinimo metodologija. Daktaro disertacija. Kaunas. Kauno technologijos universitetas. 2002.

44. Teece, D. J. Managing Knowledge Assets in Diverse Industrial Contexts. In Despres C., Chauvel D., Knowledge Horizons. The Present and Promise of Knowledge Management. (2000). p. 131-148.

45. *Van Maanen,* J. and *Laurent,* A. The flow of culture: Some notes on ... New York: St. Martin's Press. *1993*. p. 275-312.

46. Van Maanen, J. and E. H. Schein "Toward of Theory of Organizational Socialization." Research in Organizational Behavior. 1. 1979. p. 209-264.

47. Vygotsky, L. Thought and language. Cambridge: MA. 1986.

48. Walczak, S. Organizational Knowledge Management Structure. The Learning Organization. 12(4). 2005b. p. 330-339.

49. Wenger, E. Supporting communities of practice: A survey of community-oriented technologies. interaktyvus. 2001. [žiūrėta 2006-07-30]. Prieiga per internetą: <http://www.ewenger.com/tech/index.htm>.

50. Wenger, E. KM is a doughnut: shaping your knowledge strategy through communities of practice. Ivey Business Journal, January-February. 2004.

Palmira Jucevičienė, Vyda Mozūriūnienė

Organizacijos žinojimą sąlygojančių veiksnių nustatymas multinacionalinėje kompanijoje

Santrauka

Organizacijos žinojimas yra vienas svarbiausių organizacijos veiksnių, užtikrinančių konkurencinį pranašumą. Ypatingą svarbą organizacijos žinojimas turi multinacionalinėms kompanijoms.

Mūsų straipsnio tikslas – atskleisti organizacijos žinojimą sąlygojančius veiksnius ir jų parametrus multinacionalinėje kompanijoje ir pagrįsti jų tyrimo metodologiją.

Straipsnį sudaro keturios dalys. Pirmojoje dalyje atskleidžiama organizacijos žinojimo kūrimo esmė. Antrojoje dalyje pagrindžiami organizacijos žinojimą įtakojantys struktūriniai, o trečiojoje dalyje – kultūriniai veiksniai bei jų parametrai. Ketvirtojoje dalyje pagrindžiama struktūrinių ir kultūrinių veiksnių tyrimo metodologija.

About the authors

Palmira Jucevičienė, Professor, Habilitated Doctor in Educational Science, Director of the Institute of Educational Studies, Faculty of Social Sciences, Kaunas University of Technology, Chair of the Department of Educational Systems. E-mail: palmira.Juceviciene@ktu.lt; Telephone. 861454772. Research interests: knowledge management, human resources management, organizational behaviour, learning regions, cities, organizations, lifelong learning.

Vyda Mozūriūnienė, Ph.D. Candidate of the Department of Strategic Management, Institute of Business Strategy, Faculty of Social Sciences, Kaunas University of Technology. E-mail: vim@comfortheat.eu; Telephone. 869844021. Research interests: knowledge management, human resources management.

ROLE OF TRUST IN DIFFERENT TYPES OF TRANSACTIONS: KNOWLEDGE SHARING AND BUYER-SUPPLIER RELATIONSHIPS

Giedrius Jucevičius
Kaunas University of Technology, Lithuania

Abstract

This paper explores the impact of different types of trust on various types of inter-organizational transactions – knowledge sharing and buyer-supplier relationships.
The existing research in the field of business and strategic management reveals the impact of inter-company trust on the long-term business performance. Trust is a valuable asset both in the *buyer-supplier* (i.e. tangible) and *knowledge* (i.e. intangible) transactions. The analysis of academic literature shows that the more sophisticated and intangible the resource is subject to interaction, the more advanced level of trust is needed. The *deterrence-* and *calculus-*based trust may be sufficient for the short- to medium-term *economic* buyer-supplier transactions; however, the effective exchange of *knowledge* depends on the *knowledge-* or *identification-*based trust among partners. Nevertheless, even in the innovative partnerships the advanced forms of trust may not fully replace the traditional elements of deterrence- and calculus-based trust (e.g. fulfilling the contract obligations).

Introduction

The issues related with *trust* have always been at the focal point of interest in social sciences. It is increasingly being recognized as a critical ingredient in the social, economic, political, legal and organizational relations due to the following reasons:

 The rise of knowledge economy, in which the success of economic interactions depends on increasingly intangible elements, such as the social capital and trust;

 The paradigm of open innovation puts emphasis on cooperation among the holders of knowledge, which is enabled by trust as an essential ingredient.

 The rise of networks as one of the most important forms of inter-organizational relationships replacing the formal hierarchies.

Trust serves as an essential binding element in every social interaction that involves an element of cooperation and co-ordination involving multiple actors. Cooperation is sustained by the "shadow of the future", where as the long-term relations among partners tend to reduce their transaction costs. The economic benefits are significant when the potentially opportunistic behavior is prevented by the means of trust rather than formal bureaucratic control. In most cases, social institutions (both formal and informal) are constructed to increase trust and to prevent the costly free-riding (Williamson, 1993).

Although traditionally regarded as an essential element of *economic* transactions, nowadays trust is increasingly recognized as critical to the sustainable *knowledge-based* partnerships. In most cases, knowledge is a highly intangible asset and its exchange is surrounded by many uncertainties. However, if an enterprise is willing to get an access to valuable external knowledge, it cannot simply rely on formal mechanisms of control. Building mutual trust becomes an essential precondition for a successful knowledge partnership.

In this paper, a question is raised whether all types of trust are of equal importance to the economic and knowledge exchange. The *economic* exchange is represented by the *buyer-supplier relationships*, while the *knowledge* exchange is represented by the *innovative partnerships*.

Therefore, **the aim of this paper** is to explore the relationship between the typologies of trust and the typologies of inter-organizational exchange.

In the first part, the concept of trust is discussed in relationship with the topic of the paper. In the second part, the typologies of trust are presented. In the third, the presence of the types of trust in different forms of inter-organizational interaction is discussed based on the analysis of existing research and some empirical findings by the author of this paper (based on the survey of the Lithuanian innovative firms).

Trust: the social glue of economic and knowledge-based interactions

Levin and Cross *et al.* (2002) claim, that trust is this "magic ingredient", which links strong ties and knowledge sharing. Trust is important "social glue" in both economic and knowledge-based relationships. In the first case, it reduces the transaction costs. In the second case, trust is necessary for the sharing of "intangibles" to take place.

There is the most direct link between the trust and collaboration in the socio-economic system. Collaboration without trust is only possible when the coercive means, such as formal rules and regulations, are applied (Fukuyama, 1995). Besides, the collaboration tends to generate trust. Thus, the relationship between trust and collaboration is mutually reinforcing. There is more than enough empirical evidence to suggest that centralization and strong formal controls inhibit the development of trust.

During the last decades, social researchers from as diverse fields as economics, politics, law, sociology and psychology paid attention to *trust* as the key ingredient of socio-economic system. The emergence of knowledge economy has further reinforced the positions of this multi-dimensional subject.

The alternative definitions of trust are presented in Table 1.

Table 1

Definitions of trust

Author	Definition of trust
Child, Faulkner, Tallman (2005)	"Confidence in a partner to commit valuable know-how or other resources to transactions with it despite the fact that, in so doing, there is a risk the partner will take advantage of this commitment"
Sako (1992)	"Expectation held by one trading partner about another, in which the other one behaves or responds in a predictable and mutually acceptable manner"
Williamson (1993)	"Calculation of the likelihood of future cooperation"
Luhman (1988)	"An essential factor that permits all sorts of risk taking in any social system"
Powell (1990)	"A remarkably efficient lubricant to economic exchange that reduces complex realities far more quickly and economically than prediction, authority, or bargaining"
Gambetta (1988)	"Specific expectation that another's actions will be beneficial rather detrimental"
Garfinkel (1967)	"Generalised ability to take for granted a vast array of features of the social order"

The aim of this paper is not to go deep into the phenomenological analysis of trust, but to look instead into the typologies of trust and its relationship with the exchange of economic vs. knowledge resources in inter-organizational relations.

Typologies of trust

Trust is a relatively abstract phenomenon. Its role in the social sciences as the "glue" of the system is in a way similar to the role of love in the catholic theology. This parallel somewhat ironically symbolizes the abstract nature of trust as a social construct. To understand its role in the business transactions where the pragmatically minded partners are involved, one must look deeper into its substance and typologies.

The typologies of trust are related with the types of risk that partners undertake in a relationship. In most cases, the partners of a strategic alliance face at least three types of risk (Child, Faulkner, Tallman, 2005):

- ☐ Risk that partner will act opportunistically (i.e. behavioural problem)
- ☐ Risk that partner will be incapable of fulfilling its part of obligations (i.e. competence-related problem)
- ☐ Risk of sinking specific assets into capital-based alliances, such as joint ventures (generally, the highest trust is present in the alliances where partners share equity, such as the JVs, while the

lowest trust is found in the non-equity alliances). The modern *network* form of governance is based on the interdependence and the complementary strengths of partners, who share a reciprocal open-ended commitment to partnership and value their individual reputations (Powell, 1990)

Heckscher and Adler (2007) regard the contemporary firm as a *collaborative community*, which builds on trust as a key resource in its economic and knowledge exchange. It is an advanced hybrid form bridging the "traditional" *Gemeinschaft* vs. "modern" *Gesellschaft* divide.

Gemeinschaft is a traditional community with the strong *informal, collectivist hierarchy*-based relationships, in which trust usually rests on loyalty, honour, duty and status deference.

Gesellschaft, on the other hand, is usually regarded as a more modern form of the *formal, individualist market*-based community, in which trust relies on integrity, competence, conscientiousness and personal integrity.

Collaborative community, according to Heckscher and Adler (2007), is a hybrid form, which seeks to build on the strengths and minimize the weaknesses of the traditional "G vs. G" divide. In such community, the trust is based on contribution, concern, honesty and collegiality. Its highest value is interdependent contribution that seeks to strike a balance between the *individualist* and *collectivist*, *universalist* and *particularist* value orientations. It is the collaborative community that enables the effective processes of networking and knowledge sharing. Thus, a modern firm in the knowledge economy should ideally combine the rational and emotional element of identification and trust.

Levin, Cross *et al.* (2002) distinguish between two general types of trust: *benevolence-based* trust and *competence-based* trust. *Benevolence-based,* or *goodwill-based* trust relies on the assumption that an individual will not intentionally harm another when given the opportunity to do so. However, it is the *competence–based* trust that has an important impact on the success of knowledge sharing activities. "*Competence-based trust* describes a relationship in which an individual believes that another person is knowledgeable about a given subject area" (Levin, Cross *et al.,* 2002).

Benevolence and competence do not necessarily go hand-in-hand. A person may be regarded as benevolent enough, yet lack the required knowledge for sharing, and the other way around – one may be highly knowledgeable, but lack the goodwill to share own knowledge. The sharing of knowledge is at its best when high level of *competence-based trust* is matched with high level of *benevolence-based trust*.

The typology of trust is not limited to benevolence vs. competence dichotomy. Other researchers distinguish other types of trust.

Lane (1998) identifies three possible bases for trust:

- ☐ *calculation* – the *calculative trust* is based on economic interest of partners.
- ☐ *understanding* – the *knowledge-based trust* is based on understanding the thinking of a partner and for predicting the partner's actions
- ☐ *personal identification* – the *identity-based trust* is the highest form of trust, which relies on

common values and moral obligations to develop a long-lasting relationship.

McAllister (1995) makes a distinction between the rational *"cognition-based trust"* and the emotional *"affect-based trust"*. The first one is based on the information and knowledge we have about the partner, while the latter has more to do with feelings and intrinsic value of the relationship. Business relations are first and foremost characterized by the cognition-based trust, while the affect-based trust may emerge, but only after a substantial period of reciprocal communication. The prevalence of

Schoorman, Mayer and Davis (2007) note that three factors – ability, benevolence and integrity – contribute to trust in a group or organization. The *ability* shows the capacity of partner to fulfill the expectations of another party; *benevolence* shows the willingness and desire to meet customer needs, whereas *integrity* implies the partner's consistency in fulfilling the promises made to another party.

The study carried out by Ganesan (1994) has shown that the long-term relation between the buyer and seller is a function of two factors: mutual dependence and trust. Trust in business relations is influenced by such factors as: 1) partner's *reputation* (i.e. prior knowledge about potential partner's trustworthiness); 2) *satisfaction / reciprocity* (i.e. equitable outcomes that meet both partners' expectations); 3) *experience* (i.e. the more interaction with partner, the more trust is likely to emerge); 4) perception of partner's *specific investments* (i.e. the more investment partner makes into relationship the more mutual trust is likely to be built).

Koskinen and Pihlanto (2003) talk about **deterrence-, role-, knowledge-** and **identification-based** trust and their relative importance to the project work that involves the knowledge sharing.

Deterrence-based trust depends on consistent behaviour and the threat of punishment if people don't follow through on what they say they will do. Individuals who are in this type of relationship do what they say because they fear the consequences of not fulfilling their obligations (Koskinen, Pihlanto, 2003). The deterrence-based trust is based on potential sanctions, such as loss of reputation or repeat business. Deterrence-based trust is common in the formal bureaucracies and "X type" of organizations. It is not uncommon to find deterrence-based trust in the organizations that rely on the compulsive power in relationship to its members (e.g. criminal organizations). *Deterrence-based trust* tends to prevail in the generally low-trust environments.

Calculation-based trust is grounded not only in the fear of punishment for violating trust, but also in the rewards for preserving it. In calculus-based trust, the parties of relationship weigh the potential loss against the potential benefits of violating the agreement. Whereas the deterrence-based trust is most of all based on the fear of sanctions, there is a more rational element to the calculus-based trust, in which the relationship by each party is sustained by the calculus of pros and cons of violating the agreement. The calculus-based trust relies on the control of another person's behaviour.

Role-based trust occurs when team members deal with each other as roles than as individuals. Such type of trust occurs in the depersonalized professional environment. The role-based trust can be exemplified by a phrase "We trust academics because we trust science and research, which is based on reason rather than emotions".

Knowledge-based trust is grounded in behavioural predictability based on the history of interactions between the individuals. It occurs when an individual has enough information and understanding about another person to predict that person's behaviour. This is the most usual type of trust in organizational relationships, which is built through repeated interactions and communication of parties. During the process of communication, the parties collect information about each other's motives and behaviour in various contexts so that it becomes predictable.

Identification-based trust is the most emotional of all other types of trust and is achieved when there is an emotional connection between the parties. Identification enables us to think, feel and respond like the other person. Identification-based trust is the highest form of mutual understanding and endorsement, when both parties internalize and harmonize each other's motives and perceptions. Identification-based trust allows one party to act as an agent for the other and substitute for that person in interpersonal interactions. It builds on knowing and predicting another person's needs and preferences, which are also shared. Identification-based trust takes substantial time and effort to be developed, and is not often encountered in the pragmatic business world.

Typologies of trust and knowledge exchange

The relationship may evolve over different types of trust. In most cases, business relationship starts out on the calculus-based trust. This trust is often set out in the contract (therefore, it can be also regarded as a *contractual trust*). Quite often, this is where it all starts and ends because parties may not have interest in moving beyond the short-term economic contract. However, if the relationship unfolds, it may enter the stage of *knowledge-based trust*, which allows for more long-term commitment from both sides. In most cases, the initial stage of business relationship or a project is related with the economic decisions of investment and delivery, while only later it proceeds towards more sophisticated research, development and design projects that call for higher forms of trust-based coordination.

The more *mechanistic* the form of management, the more *deterrence-* and *calculus*-based trust prevails in the organizational system. On the other side of the spectrum, the *organic* forms of management rely on *knowledge-* and *identification*-based trust.

The *deterrence-based* trust is counter-effective for the knowledge sharing because:

- ☐ It is basically impossible to compel the "knowledge workers" to share their knowledge;
- ☐ Much of the knowledge is tacit, and can never be shared by following the formal procedures or commands;
- ☐ It does not promote the partnerships, which are necessary for knowledge sharing and organizational learning;

☐ *Deterrence-based trust* may only be effective in promoting the sharing of codified information or highly confidential knowledge.

The *calculus-based trust* is only partially helpful for the sharing of knowledge because:

☐ Knowledge is an intangible asset that is often not subject to traditional economic transactions (especially when the tacit knowledge is involved)

☐ Calculus-based trust is oriented towards achieving the tangible economic *outcome*, whereas the knowledge sharing is effective when regarded by both parties as an ongoing beneficial *process*.

☐ Calculus-based trust is related with the contractual trust. However, an effective knowledge sharing cannot be limited to fulfilling obligations under the formal contract (it is more likely a part of an informal contract between parties)

Thus, the deterrence-base trust and calculus-based trust may be sufficient for enabling the short-term buyer-supplier relations where no substantial economic and knowledge resources are involved from either side. However, they are insufficient for the long-term exchange of valuable intangible assets, such as specialized knowledge in the R&D partnerships and networks of innovations.

Knowledge-based trust and, in particular, *identification-based* trust are the most appropriate forms of trust for the later type of inter-firm interactions involving knowledge. However, in the first case the partners must already have solid reputations, while building the latter type of trust may be time-expensive.

Trust is usually built through frequent and regular communication, which often requires a lot of time. Nevertheless, the research by IBM Institute for Knowledge-based Organizations (IKO) has shown that trust can develop even if there was infrequent interaction between individuals (Levin, Cross *et al.,* 2002). So the effectiveness of knowledge sharing does not depend so much on the *strength of ties* as on the *presence of trust* in the relationship.

Paradox can be noticed in the fact that *weak* ties led to *more valuable* knowledge than strong ties. People get most useful knowledge from trusted weak ties (i.e. relationships that they do not maintain on a regular basis). The strong ties in the same social networks often lead to sharing similar knowledge. Besides, people and organizations possessing strong ties with each other often compete for the same resources, what inhibits the willingness to share valuable knowledge.

The research by IKO (Levin, Cross *et al.,* 2002) has shown that it is trust, not the presence of strong ties per se that leads to effective knowledge sharing. The more sophisticated and tacit the demanded knowledge is, the more competence-based trust is needed. It is enough to have *benevolence-based trust* in getting the right road directions, yet if intelligence-related information is needed, *competence-based trust* becomes of utmost importance. Thus, the more *tacit* the knowledge, the more *competence-based* trust is needed (along with the *benevolence-based trust*). In the case of sharing the *explicit* and *codified* knowledge, in most cases, the *benevolence-based* trust is enough.

The IBM research has also revealed that the *competence-based* trust is more related with the professional attributes, such as common vision, common language and discretion, whereas *benevolence-based* trust is related with both *professional* and *social* attributes, such as receptivity (extent to which the knowledge source is a good listener) and strong ties (the extent to which the knowledge seeker and source converse frequently with each other and have close relationship).

The larger the organization, the more difficult it is to have both competence-based trust and benevolence-based trust because the ties and communication among the employees are often dispersed. According to Levin, Cross *et al.,* (2002), managers can contribute to the atmosphere of trust in organizations by:

1. Creating the *common understanding* of how the business works by promoting shared language, goals and ways of accomplishing them, as well as the reward systems.

2. *Demonstrating the trust-building behaviours* by showing receptivity and discretion to the concerns of employees.

3. *Bringing people together* by creating the environment for knowledge sharing.

To what extent does the trust based on shared worldviews promote the knowledge sharing within the organizations? Paradoxically, in certain instances, trust based on homogenous norms and values may even prevent the effective sharing of knowledge because it may deprive the social interactions from needed diversity of perspectives. Therefore, trust built between the people and organizations from different cultural backgrounds may be more effective in terms of knowledge dissemination than between the members of highly cohesive groups where the potential for learning could be more limited. Trust based on common values and worldviews should not undermine the diversity that plays an important role in learning (Huotari, Iivonnen, 2004).

On the other hand, the cognitive distance between partners often inhibits the collaborative efforts. Different backgrounds and expertise may likewise impede it. Trust becomes the binding social "glue" that makes helps the diversity work. Therefore, the innovative knowledge partnerships are in a constant need to strike a balance between the cohesiveness of the group in terms of fundamental values and the diversity of the group in terms of knowledge and experiences.

The author of this paper has conducted a survey of innovative enterprises in Lithuania regarding their innovation culture (Jucevicius, 2009). 136 managers of innovative enterprises were surveyed. The study has also touched upon the aspects of trust. 62 percent of managers responded that their organizations can be characterized by trust-based relations, 67 percent claimed that trust is first of all of informal, personal nature.

The managers were also asked about the way their firms deal with uncertainty – whether they (1) introduce formal regulations, (2) follow the position of authority, (3) search for the informal solutions based on personal relations or (4) try to build a compromise. 61 percent of respondents claimed that they usually adopt the position of authority, 47 percent are looking for the compromise, 45 percent tend to introduce the formal regulations, while

only 38 percent are trying to manage uncertainties by informal means. It implies that despite the declared high level of trust, even the innovative firms in Lithuania still rely on the bureaucratic means of control when confronted with uncertain situations. Such approach is more favourable to managing the economic transactions than interactions where the advanced specialized knowledge is involved.

Conclusions

The existing research shows no clear linear relationship between the type of trust and the type of transaction. Nevertheless, one can conclude that the more sophisticated and intangible the resource is subject to interaction, the more advanced level of trust is needed. The *deterrence*- and *calculus*-based trust may be sufficient for the short- to medium-term *economic* buyer-supplier transactions, yet the effective exchange of *knowledge* depends on the *knowledge*- or *identification*-based trust among partners.

However, this relationship should not be oversimplified. Successful learning partnerships often emerge on the *ad hoc* basis, which would be impossible in the case of identification-based trust, which usually takes a long time to build. Moreover, the overreliance on identification-based trust may in certain cases even reduce the innovativeness of the partnership, especially if it comes at the expense of diversity, which is crucial for innovation. In most cases, innovative firms tend to enter the partnership agreements based on the informal reputation controls (i.e. knowledge-based trust) and formal contractual agreements (deterrence- / calculus-based trust).

References

1. Child, J., Faulkner, D., Tallman, S. Cooperative Strategy. Managing Alliances, Networks and Joint Ventures. Oxford: Oxford University Press, 2005.
2. Fukuyama, F. Trust: The social Virtues and the Creation of Prosperity. New York: Free Press, 1995.
3. Gambetta, D. Trust: Making and Breaking Cooperative Relations. Oxford: Basil Blackwell, 1988.
4. Ganesan, S. Determinants of long-term orientation in buyer-seller relationships. Journal of Marketing, 58. 1994. p.1-19.
5. Garfinkel, H. Studies in ethnomethodology. Englewood Cliffs, NJ: Prentuice Hall, 1967.
6. Heckscher, Ch., Adler, S. P. The Firm as a Collaborative Community. Reconstructing Trust in the Knowledge Economy. Oxford: Oxford University Press, 2007.
7. Huotari, M-L., Iivonen, M. Managing Knowledge-based Organizations through Trust. Idea Group Inc., 2004.
8. Jucevičius, G. The Innovation Culture in Modern Lithuanian Organizations: Values, Attitudes and Practices, Socialiniai mokslai, Nr. 1 (63), 2009, p. 38-45.
9. Koskinen, K.U., Pihlanto, P. Trust in a Project Work Contest. Presentation at the International Project Management Conference, 2003. http://www.nsp.ntnu.no/nordnet2003/presentations/A3_Koskinen_Pihlanto_pres.pdf
10. Lane, C. "Introduction", in C. Lane and R. Backman (eds.), Trust Within and Between Organizations. Oxford: Oxford University Press, 1998.
11. Levin, D. Z., Cross, R., Abrams, L.C., Lesser, E. L. Trust and knowledge sharing: A critical combination. Study by IBM Institute for Knowledge-Based Organizations, 2002.
12. Luhman, N. Familiarity, confidence, trust: Problems and alternatives. In D. Gambetta (ed.), Trust: Making and breaking cooprative relations, Oxford: Basil Blackwell, 1988, p. 94-108.
13. McAllister, D. J. "Affect- and Cognition-Based Trust as Foundations for Interpersonal Cooperation in Organizations", Academy of Management Journal, 38, 1995, p. 24-59.
14. Powell, W. Neither markets, nor hierarchy: networks forms of organizations. Research in Organizational Behavior, 12. 1990. p. 295-336.
15. Sako, M. Prices, quality and trust. Cambridge: Cambridge University Press, 1992.
16. Schoorman, F. D., Mayer, R. C., Davis, J. H. An Integrative Model of Organizational Trust: Past, Present and Future, Academy of Management Review, vol. 32, No. 2, 2007, p. 344-354.
17. Williamson, O. E. Competitive Economic Organization. In S. Lindenberg and H. Schieuder (eds.), Interdisciplinary Perspectives on Organization Studies. Oxford: Pergamon, 1993. p. 3-38.

Giedrius Jucevičius

Pasitikėjimo vaidmuo ekonominiuose ir žinių sandėriuose

Santrauka

Pasitikėjimas kaip esminis socialinio kapitalo komponentas susilaukia vis daugiau socialinių tyrinėtojų dėmesio. Jeigu tradicinėje ekonomikoje į pasitikėjimą tarp žmonių ir įmonių buvo žvelgiama kaip į veiklos kaštų mažinimo instrumentą, tai žinių ekonomikos kontekste pasitikėjimas tampa tais esminiais socialinės sistemos "klijais", įgalinančiais žinių sklaidą ir atvirųjų inovacijų procesus.

Šio straipsnio tikslas – atskleisti skirtingų pasitikėjimo formų raišką ekonominiuose sandėriuose ir žinių partnersytėse.

Socialinių mokslų tyrinėtojai išskiria skirtingus pasitikėjimo tipus: 1) pasitikėjimą, grindžiamą sulaikymu nuo prasižengimo; 2) pasitikėjimą, grindžiamą išskaičiavimu, 3) pasitikėjimą, grindžiamą žiniomis, 4) pasitikėjimą, grindžiamą bendru identitetu. Taip pat išskiriamas pasitikėjimas, grindžiamas gera valia ir pasitikėjimas, grindžiamas kompetencija.

Atliktas tyrimas parodė, kad kuo yra kompleksiškesni santykiai tarp įmonių ir kuo labiau neapčiuopiamais ištekliais (tokiais kaip žinios) įmonės dalinasi, tuo labiau sofistikuoti yra šių įmonių pasitikėjimo ryšiai. Elementarūs trumpalaikiai ekonominiai pirkėjo-pardavėjo santykiai gali remtis pirmaisiais dviem pasitikėjimo tipais. Tuo tarpu inovacinėse partnerystėse ypatingą svarbą įgyja žiniomis ir identitetu grindžiamas pasitikėjimas. Antra vertus, galima teigti, kad net ir žinių ekonomikoje išlieka tradicinių, mažiau subtilių pasitikėjimo formų svarba. Šią tendenciją iš dalies atskleidžia ir Lietuvos novatoriškose organizacijose atlikta apklausa.

About the author

Giedrius Jucevičius, doc. dr, Kaunas University of Technology, Business Strategy Institute, Lithuania. E-mail: giedrius.jucevicius@ktu.lt, tel: +370 37 300120

PRECONDITIONS FOR REGIONAL BUSINESS SYSTEM FORMATION

Robertas Jucevičius, Sigita Kriaučiūnienė
Kaunas University of Technology, Lithuania

Abstract

Countries apply many instruments and tools for their economical development. Lately, one particular direction is the promotion of business cooperation and networking by creating favorable environment for the establishment of clusters, technology platforms, national innovation systems, industrial, local business systems, etc. This article reveals the preconditions for business partnerships appearance on a regional level.

Keywords
Regional business system, regional competitiveness, structure of regional business system, formation of regional business system

Introduction

In 1990, Porter has contended that national competitive advantage is industry-specific, i.e. that countries are not more or less competitive as such, but only more or less competitive with regard to specific industries (Haake, 2002). There is no doubt that not only business organizations, but also countries, regions and urban territories aim to be competitive in order to survive in a new global market and a new competition formed by information and knowledge economy (Best, 1990, 2001). They compete among each other by attracting more capital, professional and intelligent workforce, innovative companies, universities, etc.

The meaning of the region in this article is not related to traditional geographical distribution of the country when it is divided to regions, districts or lands. Here we look at the region as the social-economical system, existing in a specific territory and managed by individual and corporative actors – interested bodies in economical development process of the territory. This point of view lets to describe a region as *the organization* where people and their groups are united and connected by conscious relations that combine all members' efforts to reach common aims (Zakarevičius, Kvedaravičius and Augustauskas, 2004). Common interests, common aims and joint actions for realization of these aims are the main preconditions for regional business system development as we will find out further in this article.

Concept of a „system" is a conditional one. It means that each „system" could be explored as the element of a higher system. Deok Soon Yim (2006) studied national and sub-national innovation systems and generalized that sub-national innovation system has its background and roots in the national innovation system and has similar characteristics as the upper level innovation system. He makes a conclusion that sub-national innovation system is a reduced national innovation system and several sub-national innovation systems constitute the national innovation system. In addition, he points out that sub-national innovation system has more local-specific characteristics due to its local geography, innovation culture, resources and so on.

The same logic could be applied for regional business system, which is a part of a national business system and shares the same characteristics as a national business system, several regional business systems constitute the national business system, but every regional business

system has specific local characteristics providing its uniqueness in many aspects in the national business system. Generally speaking, national business system level competitiveness is the result of regional business system level competitiveness, which is the sum of individual industrial and/or corporate competitiveness. Since regional business system is also a system concept, it has its own actors, structure (networks), and activities (Deok Soon Yim, 2006).

R. Jucevičius (2007) raises a consideration in the national business system definition, which, as it is written above, is also suitable for a system in a regional level. He describes a national business system as the collective interaction of industrial, business, governmental institutions, science, education and other social groups which create the environment generating added value. It covers ways of interaction and cooperation between the main actors, inter-structure of companies, system of labor preparation and improvement, financial institutions and financial support schemes, public infrastructure, traditional norms and standards of behavior. All of these institutions, organizations and values suit together and the quality of this harmony is determined by the system maturity (Jucevičius, 2007).

A strong regional business system is attractive for communitarian business which has complex and ambitions aims, therefore demand more developed infrastructure; on the other hand, companies in narrow scale and with narrow aims act in the conditions where less possibilities for co-operation exist (Haake, 2002). Regions with high concentration of industry, creating high added value, have professional and intelligent work power which is the main factor for business competitiveness in the region.

Being a macro level organization or system, regional business system shares the same characteristics as micro level organization. So it is possible to use decomposition of organizational system, proposed by Bartlett C.A. and Ghoshal S. (1995) for better understanding of regional business system. Figure 1 shows its main components: structure of the system (anatomy), processes (physiology) and culture of the system (psychology).
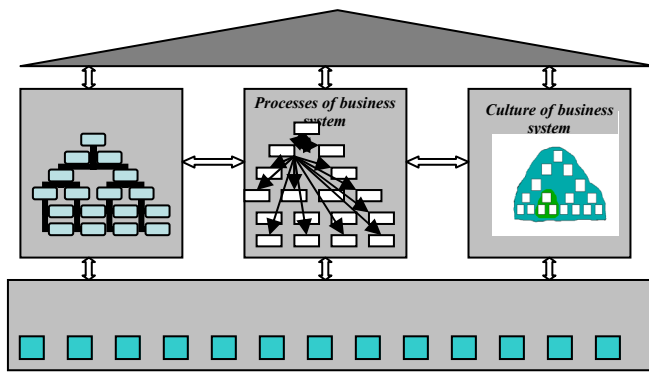
Figure 1. Main components of regional business system (Bartlett C.A. and Ghoshal S., 1995)

Structure of the regional business system

Structure of regional business system depends on many circumstances: industrial specialization, technology and knowledge, standpoint of governmental institutions and others, but the main regional business system subjects always are those that create added value in the region: companies, local authorities, business associations, education institutions and social-cultural actors. The interaction between these subjects generates the whole added value in the region.

Deok Soon Yim (2006) in his studies of national and sub-national innovation systems lists the subjects of the sub-national innovation system which are presented in Figure 2. The main elements of interaction here are Knowledge, Money, and People. The main activities are knowledge creation, transfer and utilization in the market. For this purpose, all of the innovation actors interact with each other and exchange knowledge, financial and human resources.
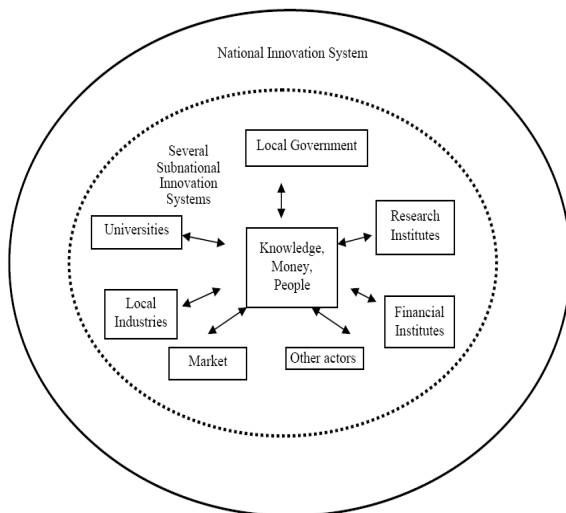

Figure 2. Structure of sub-national innovation system (Deok Soon Yim, 2006)

In the regional business system structure the main element of interaction is quality of life. The main regional actors interact with each other for creation of higher quality which has a significant effect for further development of the whole system (see Figure 3). In other words, subjects of the regional business system, generating added value in the region, purposefully or not with the purpose create the conditions where they have to act themselves. Thus,

analyzing structure of the regional business system, it is crucial to look upon the environment it is exist in: industrial specialization and other economical characteristics of the region as well as the potential of local authorities to influence the development of the business system, i.e. effectiveness of regional strategies for economical development, structure of the region budget that shows the prior sectors for the local government.
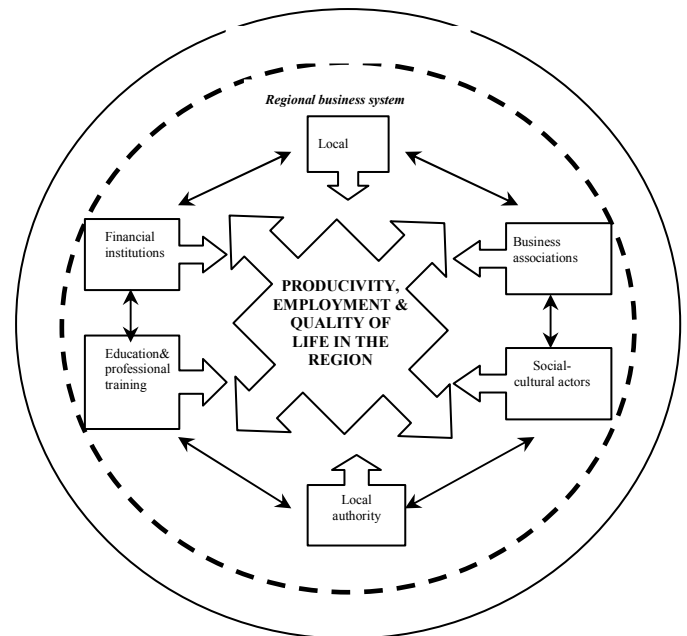
Figure 3. Structure of regional business system

Processes of the regional business system

The concept of regional business system is based upon the collective interaction in the region, generating added value which fosters further development of the system. The key feature of the concept is that a regional economy's ability to generate value does not only depend on how individual actors (firms, universities, organizations, research institutes, governmental institutions, etc) perform, but rather on how they interact as parts of a system. Therefore the regional competitiveness is most effectively achieved through networks of interactions between firms and organizations, often linked into clusters of activity (Joung Hae Seo, 2006).

Processes in the regional business system mean common agreements, linkages, procedures, and shaped order which is used for creation of added value in the region. Though all of these processes are formalized until relevant level, many informal processes take place: support through personal relationships, informal groups of interest, influence over decision making through informal negotiations, contracts, based on trust, etc. Thus, analyzing processes in the business system it is important to clear out norms and trust that enable participants to act together more effectively to pursue shared objectives that permit cooperation among them (Castells, 2005).

Regional business system, focused on linkages, forms the complementary networks under the principle of

competition and cooperation and activates the organizational learning. It means the subjects in the networks learn and assure by participating in the networks that firms in the network could not survive without continuous learning and self-renewal. An interaction and an interactive learning will be also intensified by the linkages. As a result, the effects of synergy will increase (Joung Hae Seo, 2006).The role of public authorities is exceptionally important in the regional business system processes because of its political decisions directly or not directly shaping the form of the system (Klasterių kūrimo Lietuvoje prielaidų analizė ir rekomendacijų parengimas, 2002). Other stake holders such as labor union, NGO, groups of citizens also constitute the view of the system.

The core processes in the regional business system should aim to form and run future orientated networks in order to exploit the existing regional potential and to promote collective learning on the defined development platforms. Since regional business system's networks are defined as loose multi-actor networks composed of many different actors, particular attention must be given to the relationships in the networks. In this context, the critical question is how is it possible to create a trusting atmosphere in the networks, in order to achieve positive externalities in the interactive and joint learning processes. This leads to how social cohesion or social capital could be promoted in the regional business system (see Harmaakorpi, Pekkarinen, 2003). Since the processes are highly co-operative in the regional business system, the actors of the networks "need to develop a common language and modes of interpretation and, above all, trust in order to overcome some of the uncertainties" (Lundvall and Borras 1999).

Interactions in the regional business system are formed by existing groups' interests which foster companies and organizations either to co-operate or to compete, either contribute for strengthening the regional competitive advantage or to avoid any participation. Co-operation culture, norms and values, traditions, standards of behavior are the elements, shaping the nature of regional business system and its maturity.

The regional business system culture

Being an organization, regional business system has its own culture. Following the definition,proposed by Jucevičienė (1996) for the organization culture, culture of regional business system could be defined as the system of fundamental values that are recognized by the subjects at the regional business system. These values shape and support their behavior in the region. The more values are recognized, the stronger is the culture in the system. The existing culture in the regional business system strongly affects newly established entities: if the values of a separate subject are similar to the ones in the region, new entity easily integrates itself into the system, but if the values are too different, cultures overlap. It is essential to stress that different systems has different cultures, thus it is important to study the culture of the system before making any steps towards the business system formation.

Culture of the regional business system is not only business culture: management style, inner-culture of the companies and organizational behavior, but also co-operation with other entities, level of innovation, activity in the decision making process, abundance and strength of personal relations, based on trust, aim to leadership, competition, etc. Culture of the regional business system is based on strong relations that help to exchange complex knowledge between key players and other participants, located in specific geographical territory (Jucevičienė, 2005).

Being the element of regional business system its culture can help as a strong mechanism of integration which controls and co-ordinates the behavior of the system actors and force them to follow the model of „our region". Though the culture of the system is not homogenous – distinguished sub-cultures exist and create some barriers inside the system (Jucevičienė, 2005).

There is no doubt to believe that the firms and organizations in the regional business system have to be ethical, and the market should generate the spontaneous order based on the rules of justice such transparency, objectivity, and fairness in the transaction which result in the social trust (Joung Hae Seo, 2006). The question is what is the view of the regional business system as a culture? Has the community of key economical players in the region any identity or self conceptualization? Do they share common aims, a sense of group culture, „fellow feeling" or commandership? Do the features of the social life – networks, norms and trust – enable key players to act together (Calstells, 2005)?

The reasons why key economical players in the region take part or not in the economical development of the region are the most varied possible.

Preconditions of regional business system formation

As Valiukonyte and Zabotkaite (2005) notice, „the organizational formations in societies can be different by their nature, structure, size, independence or sector based character. No ‚single recipe' exists for it". Besides, the concept of regionalbusiness system is very complex and sophisticated. That is why there are so many suggestions by different authors for the formation of regional business system.

In this article we take a glance at the deeper level of the regional business system, trying to identify the preconditions of its formation. We observe the reasons bringing out the results. Therefore the main question here is how to consolidate the key players for reaching the common aims contributing to the prosperity of the region. What has to be done that key economical actors start to identify themselves as the subjects of the same system?

At first, industrial specialization of the region has to be determined, because for the formation of the business system critical mass of companies acting in the same or complementary industry is necessary. M. Porter's concept of clusters, which became a theory and a policy of economical competitiveness in different countries, stresses the key principal that a national or a regional competitiveness is determined by the competitiveness of the main specific business concentrations in relevant territories. That is why formation of regional business system has to be understood as the tool for speeding up the regional economy competitiveness and directed towards industrial branches region has specialization in. Such criteria as number of companies in the industry, occupied labor in economical activities (%), added value

and turnover, created in an industry (%) could be used for the determination of regional specialization.

Second, very important, point is that policy makers should dedicate more attention for facilitating the soft infrastructure such as networks and collaborations in the region. Even if it did not guarantee the success, as Huggins (2008) notices, most policies across the globe have focused far too much on the structural products of development - especially hard infrastructure - to the detriment of the functional processes, for example, the networks and the value and supply chains underlying successful growth. Huggins presumes that the reason for this is the chosen easier way to replicate structures than to understand and apply the lessons of facilitating softer infrastructure. However, replication is no guarantee of regional business system success, as it varies across industries, locations, and operating dimensions, meaning there is no one set of policies that will make a business system successful (see Cortright, 2006).

So, the policy of regional business system formation inherently concerns the development of relationships, exchange, and interaction by facilitating the generation of communication networks (Huggins, 2008). It means that all regional strategies, aiming at economical development of the region, have to be orientated to stimulate business partnerships and co-operation. But the role of policy makers does not end at this stage. Continuous collaboration with business companies trying to understand their needs, organization of conferences, forums, work groups, round tables, researches, etc. could strengthen the stimulation of regional business system formation. It means that two approaches of „bottom-up" and „top-down" have to be combined in the processes of regional business system formation (Lietuvos pramonės klasterių plėtros programinė studija, 2003).

Thirdly, original business system has its own unique logic and unique relations between its members, therefore cannot be managed in a simple administrative way. Even more – general managerial methods do not suit for its management, because networks of companies and specialists operate under other principles. Management of such networks is based on principles of virtual organizations management. That is why coherent leaders and their groups are necessary for coordination and representation of interests. Formation of regional business system identity, international marketing and other activities, could help to unite the key players (Lietuvos pramonės klasterių plėtros programinė studija, 2003).

Indication of traditional regional business system in Lithuania

In 2009 the research was carried out in Lithuania with the aim to substantiate the model of X region business system development. Its object was the cooperation between business entities and public bodies in X region. Results of this research helped to indicate the main features of traditional regional business system in Lithuania.

Region X has a specialization in three industrial branches: manufacturing industry (wood and metal processing and furniture manufacturing), building and construction, trade and maintenance of vehicles and motorcycles. Qualified work labor in these sectors is concentrated in the region. Though only the companies in manufacturing industry export their production. Structure of export fits to the one, existing in the developing countries: the dominant braches of industry consume the low qualified labor force. Entities, operating in other leading sectors, sell their products and services only for inner market.

There are several institutions in the region, providing services for the business companies, but not all of them provide quality and effectiveness. The one established by local government and the ministry of economy administrates the local funds for business support in the region, but unfortunately, it does not use all the money, allocated for this purpose. According to the experts who took part in the research, mostly possible reason for the low quality of work in this institution is that the public bodies has a tradition to put the ‚right' people into the managing positions without any requirements for person's expertise in the field. Most popular institution, providing highest quality service for business in the region is the chamber of commerce.

During the research the public and political role in the development of regional economy was analyzed through the strategies and budget structure of the region. Documents and budget figures lead to the decision that there is a huge logical gap between the initiatives, written in the strategies and the real actions of the politicians. In simple words, strategies are prepared just because to have them but not to implement them.

Economical development of the region is not of a high importance in the budget structure. It goes after education, execution of governmental functions, social security, leisure, culture and religion. Besides, 61 % of money, allocated for the economy development, goes to farming and constructions. Experts confirm that most of the decisions, concerning economical development of the region are made in a close circle of ruling political parties without involvement of interested groups. Only 17 % of respondents indicate that public authorities pay attention to business needs. Thus it is easy to conclude that public authorities do not identify themselves as the part of the regional business system. Besides, there is a vivid standpoint of local politicians that local authority should not care if the business co-operates together or not, implements any innovative projects together or work individually within the region. According regional political leaders, the main thing that local authorities should care about is that business pays taxes on time.

Research shows that co-operation between business companies in the region is understood as relations between supplier and buyer. Executives of companies, participating in the research, specify the main reasons, making barriers for closer co-operation and partnerships in the region. They are lack of trust and co-operative culture as well as insufficient support for regional economical development. 45 % of respondents indicate that existence of protected business in the region damages the competitiveness of companies. It also splits business community and does not create favorable conditions for consolidation key players to seek prosperity of the region. That could be one of the reasons why leading industries in the region do not form the community with an exceptional identity, do not share the same values because of too different interests. The shortage of special ceremonies and events when the companies are publicly acknowledged for their inputs into the development of the region also does

not help for the formation of regional business system. So, it is obvious that there would be no clear leaders from the critical mass of companies which would see the use of co-operation and partnerships in the region.

Even the understanding of business co-operation in the region is a narrow one, companies have the potential for more solid interaction. As research shows, the most potential directions are technical co-operation, business development, labor training and selection, creation of new products. Managers of companies pointed at the prior options for stimulation closer co-operation: development of long term relationships, stimulation of trust in other leaders of companies, stimulation of personal relations with other managers as well as periodical communication, also strengthening the image of the region.

Conclusions

Regions in Lithuania, as in the whole world, have to search for solutions that help to gain and maintain the long-term competitiveness. There is a public recognition that competitiveness of the region directly depends on the competitiveness of business operating in the region. That is why formation of regional business system as a unique system having its own traditions, experience, standards and dominant co-operation culture becomes important in the competition of regions. Since there are no identical regions, there are no identical regional business systems. Each business system requires different toolkit of political and strategic decisions that have to be proposed taking into account history of the region, its industrial specialization, culture of co-operation and partnerships, existing experience of economical development of the region.

References

1. Bartlett, C. A., and Ghoshal, S. (1995). *Readings in Cross-border Management*. 2nd ed. Burr Ridge, Ill, Richard D. Irwin Inc.
2. Best, M. (2001). *The New Competitive Advantage: The Renewal Of American Industry*. Oxford, Oxford University Press.
3. Castells, M. & Cardoso, G. (2005). *The Network Society. Fom Knowledge To Policy*. Washington, DC: Johns Hopkins Center for Transnatlantic Relations.
4. Haake, S. (2003) *National business systems and industry-specific competitiveness.* http://findarticles.com/p/articles/mi_m4339/is_5_23/ai_97822729
5. Huggins, R. (2008) *The Evolution of Knowledge Clusters: Progress and Policy.* University of Wales Institute: Sage Publications 10.1177/0891242408323196
6. Jucevičienė, P. (1996). *Organizational behaviour*. Kaunas: Technologija.
7. Jucevičienė, P. (2007). Learning city: *monograph*. Kaunas: Technologija.
8. Jucevičius, R. &. Rybakovas, E. (2007). *Map of Industry And Business Clusters in Lithuania.* http://www.ukmin.lt/lt/veiklos_kryptys/pramone_ir_verslas/pramone/doc/Ataskaita.pdf
9. Economy Ministry of Lithuania (2002). *Analysis Of Cluster Formation Preconditions And Preparation Of Recommendations*. Vilnius.
10. Seo, J.H. (2006). *Regional Innovation System and Industrial Cluster: Its Concept, Policy Issues and Implementation Strategies.* Beijing, China.
11. Valiukonytė, D. & Zabotkaitė, V. (2005) *Business systems: national, institutional and cultural contexts* // Social Sciences = Socialiniai mokslai / Kaunas University of Technology. ISSN 1392-0758. No. 2(48). p. 29-36.
12. Yim, D.S. (2006). *Technology Capacity Building of SME's In Sub-National Innovation System.* http://www.nis.apctt.org/doc/china/Technical_Session_I/Mr.Deok-Soon-Yim-2006010-Beijing.ppt.
13. Zakarevičius, P., Kvedaravičius, J., Augustauskas, T. (2004). *Paradigm of organizations development*. Kaunas: Vytauto Didžiojo Universitetas.

Robertas Jucevičius, Sigita Kriaučiūnienė

Regioninio verslo sistemos išankstinių sąlygų formavimas

Santrauka

Pastaruoju metu verslo bedradarbiavimo, partnerystės bei tinklinio verslo skatinimas, tampa vienas iš prioritetų šalies ir jos regionų ekonomėje plėtroje, pati idėja būtų sunkiai suvokiama be kompanijos aukščiausios valdymo struktūros ir viešų įgaliojimų.

Yra viešai priimta nuomonė, kad regioninis konkurentiškumas tiesiogiai priklauso nuo regioninio verslo konkurentiškumo. Todėl stiprios regioninio verslo sistemos formavimas tampa svarbus pasaulinėje konkurencijoje. Kiekvienai regioninei verslo sistemai reikia skirtingo politinio požiūrio kaip ir skirtingų strateginių sprendimų.

About the authors

Robertas Jucevičius, Proff., PhD, Habil. Dr., Institute of Business Strategy, Kaunas Technology University, rjucev@ktu.lt, tel.: +370 37 30 01 21.

Sigita Kriaučiūnienė, Institute of Business Strategy, Kaunas Technology University, sigita.kriauciuniene@gmail.com, tel.: +370 610 14842.

POSSIBILITIES OF POSITIVE SOCIO-EDUCATIONAL EXPRESSION FOR CHILDREN AT RISK IN A TERRITORIAL COMMUNITY

Audronė Juodeikaitė, Irena Leliūgienė
Kaunas University of Technology, Lithuania

Abstract

The article analyses a few of social interaction theories, which are orientated in the possibilities to create a positive socio-education expression for children at risk in a territorial community. The all thought and problems that emerge in socio-education expression for children at risk in a territorial community are based of empirical research. The article also analyses the ambiguity and the expedience of conception "a children at risk", the concept of risk, brief the goal of positive socio-educational expression, the overview of society attitudes to it, and the negative provisions of the cause of the children at risk.

Keywords
Positive socio-educational expression, children at risk, territorial community, non-formal educational programs/projects.

Introduction

Full-fledged expression of each person as well as his/her positive existence is directly related to creation of the conditions stimulating person's expression, i.e. to positive socio-educational environment (Rebecca, Allen, Cordes, 2000; Brander, Gomes, Keen, 2002; Eberts, Scott et al., 2004). In such environment a person interacting with information sources and individuals possessing greater experience acquires readiness to solve the problems he/she faces in their life or activity by means of constructive, voluntary and expedient educational media in social environment (P. Jucevičienė, G. Tautkevičienė, 2002). In addition, during the creation of new conditions for positive expression not only possibilities for person's activity expand, but if it fails, he/she is protected from other possible negative evaluations of society members. Referring to the definition of the concept of person's positive expression by M. Baldwin, J. Sadd (2006), impact of positive socio-educational environment upon a person directly emerges through the model (expression) of behaviour chosen by the person and inducing internal pleasure, further experience, which guarantees his/her full socialisation in the surrounding environment as well as empowering him/ her to adjust to constant changes in the society, different situations of social educational action. Yet, referring to the opinion of J. M. Stern (1997), J. Midgley (1997), I. L. Liu (2003), R. E. Cheit (2003) and others, all processes are oriented to creation of welfare for the society and a person inevitably determine the up rise of an inverted situation. According to R. Civinskas, V. Levickaitė, I. Tamutienė (2006), R. Prakapas, B. Kairienė, I. Kuginytė – Arlauskienė (2007) and other researchers the emerging problems of children the early falling from the education system, incomplete guarantee to the security of the child in the family and society, different psychological and socio-education peculiarities of child, these are yet several based problems, on which great attention is focused in a socio-educational process. Current increasing disposition to delinquency, criminality, drug addiction, etc. (Babachinaitė, 2000; Sakalauskas, Jatkevičius, 2003; Gogelienė, 2004, et al.) – are only several phenomena in child's trivial life, disclosing constant risk growth and complexity in his/her environment. To, I. Lukašinska (2002) and other foreign researchers, the greatest problem is that different negative manifestations as well as constantly growing risk further remains a concurrent in child's life especially when the society itself outlives the change of moral values. This reason, according to C. Rogers (1969), discloses the essential problem in formation of child's firm moral base, the latter being unable to properly evaluate and to choose moral values, adequate forms for expression. The works by T.L. McLaughlin (1997, 2000), P. Brander, R. Gomes, etc. (2002), M.E. Haskett, S.M. Scott et.al (2003), Zepke, L. Leach (2006) and other researchers point out that in socio-educational environment a child has to be helped to develop commitment partly coinciding or common to societal values as the very socio-educational process is oriented to an achievable positive change of a person, i.e. to the positive. But in this context the following question emerges: how to reduce the negative socio-education effects for the child? Various scientists (Holloway, Valentine, 2000; Butkus, Kuklinskaitė, 2004; Bulotaitė, 2006 and others) trying to find the answer to this question and recommends to employ the possible media for disciplining, encouraging, etc., sometimes being oriented to groups of particular children. Nevertheless, in this situation, as J. Sheldon, (2002), J.S. Coleman (2005), D. Grundey (2007) and others point out, constant distribution of children to certain groups in order to find the most effective ways of problem-solution in a socio-educational process; it often loads down the pursuit of a positive result or makes it absolutely unrealisable. The situation, as sometimes strict attribution of a child, who experiences different difficulties, to a risk group or to "normal" children, by this trying to find the most effective ways to solve problems as well as by striving to decrease child's disposition to negative socio-educational expression, should be relatively applied because, a child's attribution to a risk or other group as well as limitation of his/her activity most frequently does not reveal difficulties of individual character experienced by the child as well as it does not help to create alternatives able to purposefully direct him/her towards positive socio-educational expression. The following question emerges: how to attain positive socio-educational expression of a child attributed to a risk group?

The aim of the article is to disclose and to substantiate possibilities of positive socio-educational expression created for risk-group children in a territorial community **The object of the article** – possibilities of positive socio-educational expression for risk-group children.

In order to answer the aim set, qualitative research methods were applied: content analysis of the content of programs/projects (total 13); a semi-structured interview with experts (total 9) working with children at risk and implementing non-formal education programs directly. Quantitative study has been used for the questionnaire to the students. The questionnaire was composed of 32 questions. For research was to select the students who study in five territorial education institutions, which functioning in the choose Z community. The data analyzed using statistical data processing methods (SPSS 14.0): descriptive statistics, correlation analysis, and variance analysis and cluster analysis methods. The results were considered to be statistically significant when the value of the probability of error was $p<0,05$ (2-tailed) or $p<0,01$ (2-tailed).

Children at risk in society

The term "risk" (English risk, French *risque*, Italy *risicorus*, Russian риск) is usually interpreted as the situation that causing unpleasant associations linked to the risk or the lack of anything. This phenomenon is always oriented towards negative behavior consequences of one individual to others, to realize the individual goals (Jovaiša, 1993; Calder, 2002, etc.). Scientists studied and presented the conception about the children at risk can be distinguish several special features:

1) The reasons, which influencing the negative expressions of the child usually directly related, and sometimes identified with the street, i.e., the child's chosen activity area outside the social institutions. These descriptions (Lööf, 2003; Kvieskienė, 2005, Brandt, Ward, and other, 2005; Campa, Bradshaw and other, 2008, etc.) highlight problematical relations in the family between children and adults, the lack of a secure environment, experienced violence, exploitation, the uncertain future, etc. For example: "Risk group of children – any girl or boy, which street, in the broadest sense has become a normal life in their housing and/or livelihood ..." (Lusk, 1992; Aptekar, 1994); "... the children living in families with incomes below the official poverty line, whose parents are addicted to alcohol, drugs, or deprived of their parental (maternity) rights, which is a prison" (Christensen, Bilenberg, 2000; Christensen, O'Brien, 2003), etc. The child's exit to the street in the definition is disclosed as a result of the final negative finding, in order to highlight the unsatisfactory situation in which the child has, and the ways in which he tries to "protect" them from a possible future risk arising from the immediate environment.

2) The definitions focus on the society moral and legal spheres. These definitions are intended the child's tendency to ignore the violation and permanently established the generally accepted norms and rules. For example: Risk child "means any individual, whose behavior does not comply with community norms and the family or they are not a substitute for the support of life"

(Cosgrove, 1994); "Young people, their behavior defiant moral norms adopted by society ..." (Bielecka, 1999).

3) Definitions focus on the child's personal characteristics. These definitions are a description of the child's health problems and learning difficulties in the education process. For example: "...Is not motivated, special needs, constantly running from the school children or children not in school at all" (Jose, Eulogio, Vazgvez Recio, Rautakilpi, 2003); "The children inherited their parents' genetic diseases, causing serious health problems" (Ringen, De Jong, 2003), etc.

All the definitions, it is mentioned before, in order to reveal and define the main issues and risks, which affect negatively to the child's socio-educational expression, creates a reverse effect. The negative effects of exposure on children's personal characteristics and the socialization process, to promote similar positions to and within the society. Those definitions of "child at risk" united all the child's features, which are afraid of society and raises the internal panic: 1) these children's behavior does not conform to society norms and their primary area of expression is always associated with the street, i.e. with uncontrolled and ill-defined area. In addition the child out to the street in society is perceived and interpreted not only as parents of an incorrect result of the family functions, but is perceived as a threat to society safety. Children "living in street" activity is associated with a favorable medium to carry out various criminal acts against society (e.g.: criminal groups, radical subcultures, etc.) or themselves (e.g., suicide, drug addiction, etc.). 2) Growth of non traditional families (when the child's father is unknown, when the father only grants his family name to the child, or when a man is just used as a genetic donor), according J. Pikūnas (1994) and others, the majority of children and young people not only causes psychological shock, but also blocks the further development of their humane values, promotes the formation of the culture of poverty. Such self-upbringing of the child determines origination of the new type of young generation, which B.E. Hurloc (1973) describes as swamped in the crowd following and worshiping of status symbols. These young people understand their responsibility, intelligence in a different way; they have a perverted scale of values, and a tendency to spontaneous meeting any their wishes and desires. The assessment of the child's at risk conception and the provisions of an emerging society of these children, the question arise: how to change society attitudes to the child at risk and to address the problems associated with its expression in society?

The goal of positive socio-educational expression

Positive socio-educational expression is defined as a person's behavior pattern, evocative inner satisfaction, further experience, which guarantees his/her full socialization in the surrounding environment as well as empowering him/her to adjust to constant changes in the society (Baldwin, Sadd, 2006). However, the social environment provided alternatives are not always positive. This limit is not particularly a young person, seeking his own way of life, when at home, at school or in the society are not of the values stability. Social

exclusion of young people and their socio-educational process becomes more difficult when they start to feel the lack of positive relationships with people in the society. As in this situation to reduce the negative environmental impact on the child and find him suitable for positive social-educational opportunities for expression? The answer to this question may be the trial to find on the basis of social interaction theories (see Table 1).

Table 1

Social interaction theories

Environmental	Theory	The main idea
Micro-environment	Symbolic interactionism (Mead, 1964)	Social interactions are analyzed according to their symbolic content. In the interaction between people is seen as a continuous process of dialogue, during which individuals observe one another, trying to understand one another's intentions and react to them.
	Exchange theory (Homans, 1961; Blau, 1964)	People looking for compensation in social interaction, so its behavior depends on whether and how much was the reward for the behavior of the past. If people expect high rewards from interaction with others, they spare no effort of expense (mental, intellectual, physical) to achieve the remuneration. If this satisfies the need for interaction, the people begin to reduce the effort to get the reward.
Macro Environment	Structural functionalism (Parsonsas, R.K. Merton)	According to this theory, the society is interpreted as a system, consisting of interconnected and dependent elements, and balance among parts as a means of maintaining the smooth functioning of the whole. Positive functioning of the system is achieved only through the following steps: rendering assistance to person to adapt to society, to achieving the society goals (integration), and implementing various models of development, who are constantly motivated the society members to participate in this process.
	Social Constructivism (Blumer, 1969)	This is knowledge creation theory, in which the most important is a personal experience, gained actively participation of society life. Personal understanding and knowledge of the socio-education process of the developments seen by its activities. Whereas each participant's experience and knowledge about the socio-education process are different, there is a need to create a learning environment where they could update of the previous your experience, knowledge, and be an active recipient of information.
	Conflict theory (Collins, 1971)	Society is the arena of conflict. Prevailing in society due to disagreements between the various valuable resources (money, education, social status, etc.) unequal distribution among different groups of people

Analysis of all the positive features of social interaction (see Table 1), can be distinguished by several common elements: 1) both micro-and macro-level point up the need to involve the all members of the society in the development of positive person socio-educational expression; 2) positive socio-education expression is associated with the development of the positive environment for person. Implementation of this media is constantly available to motivate the person to act in the society and using directives functions, to encourage him to choose a positive expression.

The necessity to include members of the society in the development process of the positive socio-education expression are also discussed in various research works (Thomas, O'Hanlon, 2002; McCart, Tumbull, 2006, etc.), which directly analyzed the child's at risk social-education-expression problems. However, the above-mentioned research works, differently neither in the theories of social interaction (see Table 1), more emphasis on the importance of territorial communities for child, and not the society. Scientists that preference based on the following arguments: 1) the community meets the family mini-model of its structure, so the activities of the child in known environment is conducive to learning to express their feelings and better understand the values, the uptake of the principles of life; 2) adults in this area, better knowledge of the risk group of children and can better provide to social educational measures for them, not excluding this children from the environment; 3) all

of the territorial community of the existing public and non-governmental organizations may be included in a more efficient assistance to the child and his family, to create greater opportunities for the application of different methods, depending on the child's needs, and so forth. However, comparing the benefits of the territorial community with the society the broadest sense, there is the need to discover the socio-education activities that may induce children at risk motivation, and it will also include other territorial community members. According M. Kuenzi (2005), K. Watters (2008) the system of formal education, to which a lot of hopes have been related in preparing a young human being for his/her life, is not capable to justify them due to the transformation of child's own socio-educational, society-underlying values as well as needs emerging in it. According to various countries of the socio-educational experience (Sharpe, Brown, Crider, 1995; Subrahmanyam, Kraut, et.al., 2000; Tiét, Huizinga, 2002; Otero, McCoshan, Junge, Winter, 2005; Pearce, 2006, and others.) creating opportunities for expression of children at risk are increasingly begun to associate with non-formal education programs. The advantage of non-formal education, comparing it to formal, is associated with: 1) the natural environment and freedom of its rendered content by using different forms of activity and cultural peculiarities, the detachment of which becomes inexpedient in contemporary society; 2) non-formal education is oriented to timeliness (what a child needs), 3) creation of inter-functioning of the

institutions within a territorial community, 4) compatibility of different activity forms and methods among institutions and the specialists as well as their qualified application by evaluating child's peculiarities in a natural environment, etc.

All identified benefits of the non-formal education, as discussed in the social interaction theories, reveals the importance of involving all territorial community members in the create to the positive socio-educational expression for the children at risk too. However, there are a number of questions: whether these requirements and how they manage to implement in non-formal education practice?

Possible positive impact of a territorial community in creating possibilities of socio-educational expression for children at risk

In order to respond to the issues raised, the investigation has been chosen one of the Kaunas Z territorial community. These choices have fated some of the reasons: 1) it has deep cultural traditions; 2) it is a strategically favorable geographical part of the city; 3) there are many and various institutions, whose non-formal activities focus on working with children at risk.

Sample. Upon analyzing possibilities of positive social educational expression of children at risk, first of all selection of operating institutions within the chosen territorial community was carried out. For investigation, analysis of verbal documents was applied (Kardelis, 2002) and 12 social educational institutions were selected in total. From the aforementioned 12 institutions (Desmond, Tatemichi, Hanzawa, 1994), just 7 ones where the non-formal education programs/projects in progress met the following predefined analysis criteria have been chosen for investigation: a) the institutions shall be attended by children at risk living in selected territorial community Z; b) in the selected institution, work shall be carried out with 14-16 years old children at risk; c) for analysis, just programs being in progress at the moment shall be selected taking into account their succession and types of the services offered. For analysis at 7 institutions selected for investigation, 13 programs, designed for 14-16 years old children were chosen.

At the aforementioned institutions, analysis data of the selected programs were supplemented by 9 experts directly working with children at risk with data of a verbal interview. After completion of analysis of programs some data were missing, therefore, data were supplemented by the results of a semi-structured interview. The questionnaire for students was used to verify the data obtained after the program analysis and implementation of semi-structured interview of specialists.

Data processing. The obtained data of document analysis are provided in the form of matrices. This form of data introduction has assisted in defining regularities prevailing between different social educational institutions and tendencies in respect of the criteria being analysed. The collection and processing of data about the non-formal education programs/projects, was carried out based on the institutional level, according isolated positive social-educational-resolution creating the assumptions and the form of expression issues (see Table 1). For the purposes of a qualitative study, it was first performed an analysis of documents, according to this sequence: 1) collection of the primary information (for example, the newspaper reports, information leaflets, Internet sites and etc.); 2) selection of documents in accordance with the selected empirical criterions, constructed in the theoretical model; 3) repeated reading of text; 4) information grouped into categories and to more sizeable groups – subcategories; 5) interpretation of the data according to selection categories and subcategories. Data obtained during an interview of experts was processed applying qualitative analysis of results: by sense relations, the obtained variants of answers by respondents were grouped into subcategories first of all and then to more sizeable groups that unite subcategories, i.e. categories.

In order to preserve confidentiality with respect to the organisations being analysed, the organisations operating in Z territorial community are coded in the capital letters of Lithuanian alphabet, whereas the organisations attended by children outside the community are coded in the capital letters of non-Lithuanian alphabet. Furthermore, symbol **i** at the capital letters means that the organisation being analysed is a public institution (e.g. Bi, Qi, Φi).

To identify positive socio-educational opportunities for expressions of children at risk in a territorial community, in this article we will deliver only a few of the results of the research.

Inter-institutional cooperation. The analysis of non-formal education documents, it was found that the respondents employed in the socio-educational institutions cooperate with experts in various fields (see Table 2). The partners are generally identified institutions, which direct them to problem children, provide support and perform other similar functions. Priority according to the sequence is usually given to financial sponsors, the related non-formal education programs and engaged in the socio-educational services institutions. However, the opposite situation, which was determined by analysis of documents obtained during the interviews: the majority of the respondents (66.7%) said that cooperation between various institutions from all over is not. According to the respondents, the main reasons that hinder the development of interagency cooperation are not appropriate for some institutions of direct execution of functions and shortcomings of mutual exchange of information.

Table 2

Cooperation between the socio-educational institutions

Organization Criteria	A	Bi		Di	Qi	W	Фi
1. Cooperation between the various institutions	+	+	+	+	+	+	+
2. Cooperation between several institutions	-	-	-	-	-	-	-
3. Cooperation does not fully	-	-	-	-	-	-	-

The study participants from the A and W socio-educational institutions, talking about their collaboration with other institutions, mainly indicated in the specific individuals ("One of the library staff organized a very interesting tour for children in the library, they are calling to work with children", "...our organization employs people of various professions, but we all agree very well with each other...", etc.). However, they also have very significant requirements: "People – the volunteers, trainees – which want to work in the our institution, are very strictly selected according to certain criteria laid down…", "...no, we do not want to trainees, as they come, because they know nothing and does not pay, with them to be a lot of work and interpret them", etc. Only 33.3% of respondents interviewed at the time indicated that the cooperation between the institutions engaged in similar activities only. Based on the survey responses of participants, they often choose partners from other territorial communities or even abroad. Respondents failed to clarify the reasons for such cooperation in connection with other institutions.

Only 33.6% children at risk evaluated positively the activity of the socio-educational institutions (see Fig. 1). The current situation shows that the subjects in this group of predominantly negative aspects of (33.7% of operations evaluated "poor" or "very poor"). Avoidance of talking about the socio-educational institutions and their operations in revealing the majority of the children at risk to respect the neutral position (on average) or total avoidance to speak on this topic (32.7% of the subjects indicated that they are not interested in this area of the total) (see Fig. 1)
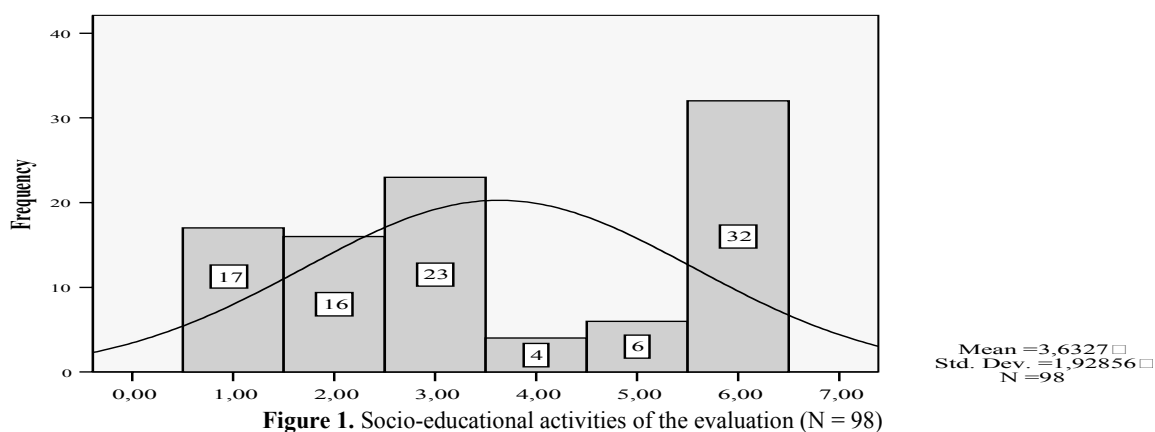

Figure 1. Socio-educational activities of the evaluation (N = 98)

Concept of the reasons which influenced the risk of child attachment to the socio-educational institutions revealed that the adults are affected by the misinterpretation of actions, i.e. these institutions are often intended to cause fear in children, and highlight the negative consequences of behavior (stick "label").

Persons involved in the socio-educational opportunities for expressions of children at risk. In all tested non-formal education programs (see table 3) parents, children and other community members to participate in the promotion of socio-educational activities are identified as a prerequisite to the child's expression of positive results (in particular the emphasis on A, B, C, and the W). Results of interviews showed that the main initiators for the non-formal activities for children are the respondents working in the socio-educational institutions (example: "... most experts to select the activities, according to the child's observation and conversation with him..."). Of the respondents said they have no access to oblige parents to participate in their children's socio-educational process, the single parents' participation in the cases are based on the principle of their voluntarism. The study found that the requirements of the course are organized for the light to the child's age: the higher children, the more they demand of others.

The situation is completely different in socio-educational institutions, where the sessions are not strictly regulated (Di ir Фi). For example: "...Child at risk may participate in all activities of interest to him ..."; "... the child may choose activities ..." and so on. Sometimes, the activities make the students or volunteers carrying out practice in the socio-educational institutions (e.g.: "... children are often shown a new interest in volunteer activities ...").

Children classified as high-risk group, of their questionnaires (19.04%) mostly indicated "other" option, directing that the tackles the problems they have recourse to several people – peers, teachers and parents (see Figure 2). The results of analysis show that the socio-educational problems of children helps to address the school administration too (school deputy stated 15.81%, and school directors – 14.77% of respondents). Friends (4.44%), parents (7.42% – as mentioned in the provision of individual assistance), teachers (7.42%) and peers (7.53%) at least contribute to various problematic situations
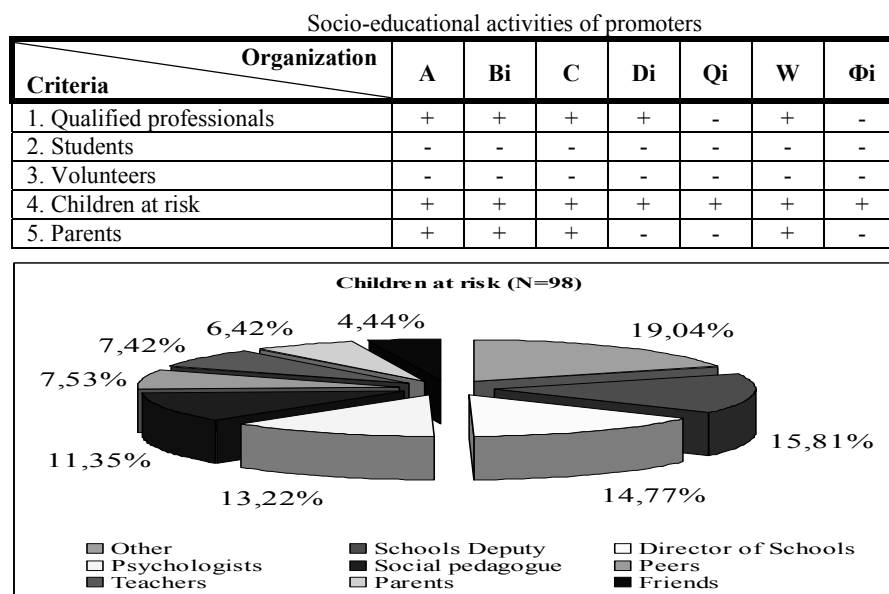
Table 3

Socio-educational activities of promoters

Organization Criteria	A	Bi	C	Di	Qi	W	Φi
1. Qualified professionals	+	+	+	+	-	+	-
2. Students	-	-	-	-	-	-	-
3. Volunteers	-	-	-	-	-	-	-
4. Children at risk	+	+	+	+	+	+	+
5. Parents	+	+	+	-	-	+	-

Figure 2. Persons contributing to the risk group of children to address the socio-educational problems

Conclusions

• Risks are associated with the negative consequences of the action, or similar events occurring in society, and therefore a permanent personal characteristics and socialization process of highlighting the negative consequences in terms of the children at risk to promote similar approaches to the emergence and establishment of the society.

• Positive socio-educational opportunities for expressions of children at risk is associated with all members of the society involvement in this process, unified requirements for child-raising, and the achievement of the objectives of the systematic and purposeful implementation. However, the implementation of these objectives are increasingly being linked to the territorial community, which also highlights the greater the ability to observe and assist if needed, to control the child and the process towards enhanced communication between its members and cooperation.

• Survey results showed that investigated the territorial community of the positive socio-educational opportunities for expression of children at risk are being adequately enclosed area in which the various socio-educational institutions is very weak set of mutual communication and cooperation. Analyzed the non-formal education programs found fictitious persons who do not participate in creating positive socio-educational expression for children at risk.

• People who are important and significant for child at risk, the activity depend on their voluntary participation in social self-organization of educational institutions. The study did not reveal the ways in which are intended to include members of the positive socio-educational opportunities for the development of expression at risk children in a territorial communities. The main persons in this process and the implementers are only experts working with such children and mplementing the non-formal education programs for the socio-education institutions.

References

1. Aptekar, L. Street children in the developing world: A review of their condition. Cross-Cultural Research. 1994. Available: www.ebsco.com.
2. Babachinaitė G. Nusikalstamumo prevencijos viktimologiniai aspektai. Vilnius: LTU. 2000.
3. Baldwin, M, Sadd, J. Allies with Attitude: Service users, academics and social services agency staff learning how to share power in running a social work education course. Social Work Education, Vol. 25, No. 4 June 2006, p.348-359.
4. Bielecka E. Children of the Street – Upbringing and Help in an Open Environment. 1999. Available: www.eera.ac.uk.
5. Brandt, R., Ward, C.L., Dawes, A. & Flisher, A.J. 2005. Epidemiological measurement of children's and adolescents' exposure to community violence: Working with the current state of the sciences. Clinical Child and Family Psychology Review, 8(4): 327–343. ISI Web of Science.
6. Blau, P. Exchange and Power in Social Life. New York: Wiley, 1964.
7. Blumer, H. *Symbolic interactionism: Perspective and method*. Englewood Cliffs, NJ: Prentice Hall. 1969.
8. Brander, P., Gomes, R., Keen, E., Lemineur, M.L., Oliveira, B., Ondráčková, J., Surian, A., Suslova, A. A manual on human rights education with young people. England: Compass. 2000.
9. Bulotaitė L. Alkoholio ir narkotikų vartojimo prevencija mokykloje. 2006. Available: www.stok.lt.
10. Butkus, G., Kuklinskaitė, K. Sociokultūrinių auklėjimo nuostatų įtaka taikant fizines bausmes jaunesniojo mokyklinio amžiaus vaikams. *Jaunųjų mokslininkų darbai*, Šiauliai, Nr.2, 2004, p. 102-108.
11. Calder, M.C. A Framework for Conducting Risk Assessment, in: Child Care in Practice, No 1, January, 2002, p. 9 – 10.
12. Campa, M. I., Bradshaw, C.P., Eckenrode, J., & Zielinski, D. Patterns of problem behavior in relation to precocious behavior and indicators of thriving in late adolescence. *Journal of Youth and Adolescence. 37*, 2008, p.627-640. ISI Web of Science.
13. Christensen, H.B., Bilenberg, N. Behavioural and emotional problems in children of alcoholic mothers and fathers. *European Child & Adolescent Psychiatry,* No. 9, 2000, p. 219-226. ISI Web of Science.
14. Christensen, P., O'Brien, M. Children in the City: Home, Neighbourhood and Community, London: Routledge Falmer. 2003.
15. Civinskas, R., Levickaitė, V., Tamolienė, I.Vengiančių lankyti mokyklą vaikų problemos ir poreikiai. Monografija. Vilnius: Garnelis. 2006.

16. Cheit, R.E. What hysteria? A systematic study of newspaper coverage of accused child molesters. In the *international journal* International Journal of Psychology, Vol.27, Number 6, June, 2003, p.607 – 623. ISI Web of Science.
17. Coleman, J.S. Socialinės teorijos pagrindai. Vilnius: Margi raštai. 2005.
18. Collins, R. Functional and conflict theories of educational stratification. American Sociological Review, 1971, 1002-1019. ISI Web of Science.
19. Cosgrove, J. Towards a working definition of street children. International social work. 1994.
20. Desmond, D.W., Tatemichi, T. K., Hanzawa, L. The Telephone Interview for Cognitive Status (TICS): Reliability and validity in a stroke sample. *International Journal of Geriatric Psychiatry*, Vol. 9, No. 10, 1994, p. 803-807. ISI Web of Science.
21. Eberts, P.R., Scott, M.E. Community Social Capital and Economic Development along the Erie Canal: How Local Organizations Influence Development of Public, Professional, and Business Services in Canal Corridor Communities. 2004. Available: www.cardi.cornell.edu/canal/Eberts_Scott_Ec_Dev.PDF).
22. Haskett, M.E., Scott, S.M., Grant, R., et al. Child-related cognitions and affective functioning of physically abusive and comparison parents. *Child Abuse & Neglect*; 27, 2003, p. 663-686. ISI Web of Science.
23. Homans, G. *Social Behavior*. New York: Harcourt, Brace & World. 1961.
24. Holloway, S.L., Valentine, G. Spatiality and the new social studies of childhood. *Sociology,* 34, 2000, p. 763-783. ISI Web of Science.
25. Hurloc, E. B. Adolescent development. New York: McGraw-Hill, 1973, p. 125-237.
26. Gogelienė, G. Socialinio pedagogo veikla vykdant vaikų ir paauglių nusikalstamumo prevenciją mokykloje. Magistro darbas. Vilnius:VPU. 2004.
27. Grundey, D. Global marketing ethics: social and emotional-psychological issues in advertising to children // Transformations in business and economics. 2007, vol. 6, no. 2, suppl. A, p. 41-64. ISI Web of Science.
28. Jatkevičius, A., Sakalauskas, G. Tarptautiniai dokumentai, reglamentuojantys vaikų ir jaunimo baudžiamąją atsakomybę. *Teisės problemos*, 2003, Nr. 3-4.
29. Jose, O.J., Garsia Valinas, E., Vazgvez Recio, R.M. Social Guarantee Pragrammes. *The Education challenge of the Resocialisation of Youth People at risk social marginalization or exclusion.* University of Leeds. 2003. Available: www.eera.ac.uk.
30. Jovaiša, L. Pedagogikos terminų žodynas. Kaunas: Šviesa. 1993.
31. Jucevičienė, P., Tautkevičienė, G. "Triangle of competences" as one of the basic characteristics of the university library learning environment. European Conference of Education Research, Lisabon, 11-14 September, 2002, p.1-9.
32. Kuenzi, M. Non-formal education and community development in Senegal. *Community Development Journal,* 41(2), 2005, p. 210-222.
33. Liu, Y. L. Parental – Child interaction and children's depression: the relationships between parent – child interaction and children's depressive symptoms in Taiwan. *Journal of Adolescence,* 2003, vol.26, Issue 4, August. ISI Web of Science.
34. Lööf, L. What are street children? *Meeting „Children on the street*, Moscow, April, 2003, p.9 – 17.
35. Lukašinska, I. Street children in Latvia: problems and solutions. Latvia. 2002.
36. Lusk, M. Street children of Rio de Janeiro. International Social Work, Vol 35 (3), 1992, p. 293-305.
37. Mead, G. *Selected Writings*. Chicago: University of Chicago Press. 1964.
38. McCart, A., Tumbull, D.A. Positive Approach to problem Behavior. 2006. Available: www.pbs.org.
39. McLaughlin, T. H. Šiuolaikinė ugdymo filosofija. Kaunas: Technologija. 1997.
40. McLaughlin, T. H. Philosophy and educational policy: possibilities, tensions and tasks. *Journal of Educational policy,* vol. 15, No 4, 2000, p. 441-457. ISI Web of Science.
41. Merton, R. *Social Theory and Social Structure*, revised and enlarged. London: The Free Press of Glencoe. 1957.
42. Kvieskienė, G. Pozityvioji socializacija: [monografija]. Vilnius: VPU. 2005.
43. Midgley, J. Social work in international context. Challenges and Opportunities for the 21ˢᵗ Century. California: Pine Force Press, 1997, p. 59-61.
44. Otero, M. S., McCoshan, A., Junge, K., Winter, J. A European inventory on validation of non-formal and informal learning. *Overview of findings: needs and initiatives.* Priestley Hous. 2005. Available: www.ecotec.com.
45. Parsons, T., *Sociological Theory and Modern Society*, New York, Free Press, 1967.
46. Pearce, J.Ch. *The evolution finish. The Journal of Applied Developmental Psychology.* No. 1, 2006, p.10-13. ISI Web of Science.
47. Pikūnas, J. Asmenybės vystymasis. Kaunas: VDU. 1994.
48. Prakapas, R., Kairienė, B., Kuginytė-Arlauskienė, I. Mokinių smurto mokykloje raiškos tendencijos. *Kultūra-ugdymas-visuomenė*. Vilnius, Nr. 2, 2007, p. 168-175.
49. Rebecca, F., Allen, J .C., Cordes, S. Predicting Community Satisfaction Among Rural Residents: An Integrative Model. Rural Sociology, N.65. 2000. ISI Web of Science.
50. Ringen, S., de Jong, Ph. R. Fighting Poverty: Caring for Children, Parents, the Elderly and Health. The Social Capital Foundation, Malta, Buggiba. 2003.
51. Rogers, C. Freedom to learn. Colombus, OH: Merrill, 1969, p.247.
52. Sharpe, T., Brown, M., Crider, K. The effects of a sportsmanship curriculum intervention on generalized positive social behavior of urban elementary school students. *Journal of Applied Behavior Analysis*, 28, 1995, p. 401-416. ISI Web of Science.
53. Sheldon, J. A Word in Your Ear's: A Study of Foster Carer's Attitudes to Recommending Fostering to Others, in: *Journal of children and youth services review*, No 1, January, 2002, p. 20 – 22. ISI Web of Science.
54. Stern, J.M. Poverty and Postmodernity. *Social work in 21ˢᵗ Century*. California: Pine Forge Press, 1997, p.49-61.
55. Subrahmanyam, K., Kraut, R.E., Greefield, P.M., Gross, E.F. The Impact of Home Computer Use of Children's Activities and Development. *Journal Future of Children and Computer Technology*. 2000. Vol.10, No2. ISI Web of Science.
56. Tiét, Q. Q., Huizinga, D. Dimensions of the construct of resilience and adaptation among inner-city youth. *Journal of Adolescent Research*, vol. 17, 2000, p. 260–276. ISI Web of Science.
57. Watters, K. Non-formal education and training opportunities for youth living in the rural areas of South Africa. *Beyond Primary Education: Challenges and Approaches to Expanding Learning Opportunities in Africa. (Maputo, Mozambique*). May, 5-9. Association for the Development of Education in Africa (ADEA). 2008.
58. Zepke, N., Leach, L. Improving Learner Outcomes in Lifelong Education: Formal Pedagogies in Non-Formal Learning Contexts? *International Journal of Lifelong Education.* Vol. 25, No 5, 2006, p. 507-518, Sep-Oct. ISI Web of Science.

Audronė Juodeikaitė, Irena Leliūgienė

Pozityvios socioedukacinės raiškos galimybių rizikos grupės vaikams sudarymas teritorinėje bendruomenėje

Santrauka

Straipsnyje yra nagrinėjama keletas teorinių pozicijų, sukuriančių prielaidas rizikos grupės vaikams sudaryti pozityvios socioedukacinės raiškos galimybes teritorinėje bendruomenėje. Minėtų prielaidų realizavimo galimybės yra analizuojamos neformalaus ugdymo programų bei saugios ir palaikančios aplinkos rizikos grupės vaikui sudarymo aspektais, empiriniais tyrimais pagrindžiant vyraujančias jų realizavimo kryptis bei problemas. Taip pat analizuojant pozityvios socioedukacinės raiškos galimybių rizikos grupės vaikams sudarymą teritorinėje bendruomenėje yra aptariama vaiko priskyrimo minėtai grupei dviprasmiškumo bei tikslingumo aktualija. Tyrimo rezultatai parodė, kad tirtoje teritorinėje bendruomenėje pozityvios socioedukacinės raiškos galimybės rizikos grupės vaikui yra kuriamos pakankamai uždaroje erdvėje, kurioje tarp įvairių socioedukacinių institucijų

nustatytas labai silpnas tarpusavio bendravimas ir bendradarbiavimas. Asmenų, kurie yra svarbūs ir reikšmingi rizikos grupės vaikui, dalyvavimas socioedukacinių institucijų veikoje priklauso nuo jų pačių savanoriško apsisprendimo. Tirtoje teritorinėje bendruomenėje nenustatyta priemonių, kuriomis būtų stengiamasi sudominti teritorinės bendruomenės narius pozityvios socioedukacinės raiškos galimybių sudarymu rizikos grupės vaikams, todėl pagrindiniai šio proceso dalyviai bei įgyvendintojai yra tik asmenys, šioje srityje tiesiogiai dirbantys su minėtais vaikais.

Raktažodžiai: pozityvi socioedukacinė raiška, rizikos grupės vaikas, teritorinė bendruomenė, neformalaus ugdymo programos.

About the authors

Audronė Juodeikaitė, Dr. social sciences (Educational Science), at the Institute of educational Studies, Faculty of Social Sciences, Kaunas University of Technology. Address: K. Donelaicio st. 20, 44239 Kaunas.
Research interests: children's learning motivation, children at risk, venture community, Non-formal education, Social pedagogue activities in the territorial community
E-mail: juodeikaite@blog.lt
Irena Leliūgienė, Dr., Professor social sciences (Educational Science), at the Institute of educational Studies, Faculty of Social Sciences, Kaunas University of Technology. Address: K. Donelaicio st. 20, 44239 Kaunas.
Research interests: social pedagogy, social work theory and practice, comparative studies of social education, social education and social empowerment of individual community, the individual social integration and globalization processes in a changing society grouping, socio-educational staff in line with the European dimension.
E-mail: ei@ktu.lt

COMPARATIVE ANALYSIS OF FOOTBALL BUSINESS SYSTEMS: THE CASES OF LITHUANIA, ENGLAND AND SCOTLAND

Tomas Karpavičius, Giedrius Jucevičius
Kaunas University of Technology, Lithuania

Abstract

This paper provides a comparative analysis of national football business systems (FBS) of three countries – England, Scotland and Lithuania, based on the theoretical model of football business system. The analysis of English and Scottish football business systems has shown that the football business micro-environments in both countries are analogical in structure; however, it does not guarantee the same flows of income and expenditures. In both England and Scotland the maximizing of income generation efficiency is realized through three subsystems of FBS, which play different roles: (1) the main (top) league exclusively oriented to commerce, (2) second league, which is in the intermediary position between the commercially-based top league and public interest- oriented lower leagues, (3) football association whose primary task is the administration and development of the sports activities.

The analysis of the developing football business system of Lithuania has led to the following findings: (1) in Lithuania, the second football league has no financial independence which is typical for the English and Scottish second leagues, and this is the reason why there are only two income accumulation subjects in the Lithuanian football business; (2) in Lithuania, the largest share of income in FBS is generated by the main managing organization what weakens the commercial interests of the entire system; (3) Lithuanian FBS is more dependent on the support of private sponsors what makes football business more risky; (4) the Lithuanian FBS faces the problem of insufficient investment into football infrastructure what leads to disproportions in income sources.

Introduction

Research problem. The sports business has been analyzed by Vrooman (1995), Hoehn and Szymanski (1999), Smith (2004). However, most researchers limit their analysis to fragmented aspects of the sports business. In most cases, they focus on the economic foundations of sport business (Quirk, Fort, 1992; Kesenne, 1996; Vrooman, 1995; Rapp, 2004; Noll, 2003; Garcia, Rodriguez, 2002), the specifics of labor market (Noll, Zimbalist, 1997; Kesenne, 2000; Gius, Johnson, 2000), the specifics of competition (Zimbalist, 2001; Humphreys, 2002; Fort, Maxcy, 2003) or the relations between the sport business and the mass media (Turner, 1999; Helland, 2004; Baimbridge et al, 1996).

The business system approach enables a systemic conceptual analysis of the football business. In this article three football business systems – Lithuanian, English and Scottish – are analyzed. The aspects of the developed football business systems (English and Scottish) and the developing ones (Lithuanian) are compared.

The analysis is based on the theoretical model of football business system formulated by Karpavičius (2009), which conceptualizes the structural aspects of football business system.

The object of the paper – football business system.

The aim of the paper - to compare the Lithuanian, English and Scottish football business systems on the basis of the model of football business system.

Originality of the research. The research of Lithuanian, English and Scottish national football business systems is based on the business system methodology adopted for the analysis of football business. This model presented by Karpavičius (2009) defines the structural aspects of football business and is a managerial instrument for systemically developing the football business. The research presented in this article shows practical applicability of football business system model by comparing the football business systems at different levels of development.

Research methods: document analysis and in-depth interviews with experts.

The methods for the analysis of football business systems

As already mentioned, the model of football business system (FBS) was formulated by Karpavičius (2009) and presented in the paper "The application of the business system concept to the analysis of football business" and the conference material "Football business system: concept and structure" (Karpavicius, Jucevicius, 2009). This model enables the characterization of the common football business system structure, which can be divided into three main elements (figure 1):

- *Football business micro-environment*, which covers the characteristics of American and European football business, and outlines the relations between football clubs as well as central organization of FBS, which is treated as football association.

- *Football business income sources structure*, where the available income sources and related income generating activities are distinguished. The structure of income sources is related with football business micro-environment through income allocation mechanism, which characterizes the primary allocation of football business income across the members of football business micro-environment.

- The structure of football business expenditure, which covers all available directions of football business expenditure and related expenses generating activities. The structure of expenditure is related to football business micro-environment through the expenditure allocation mechanism, which characterizes the final allocation of football business expenditure among the members of

football business micro-environment.
The above mentioned three main parts of FBS connects all elements of football business and its environment, what implies that the FBS structure covers all activities of football business related to the commercial interests of football organizations.
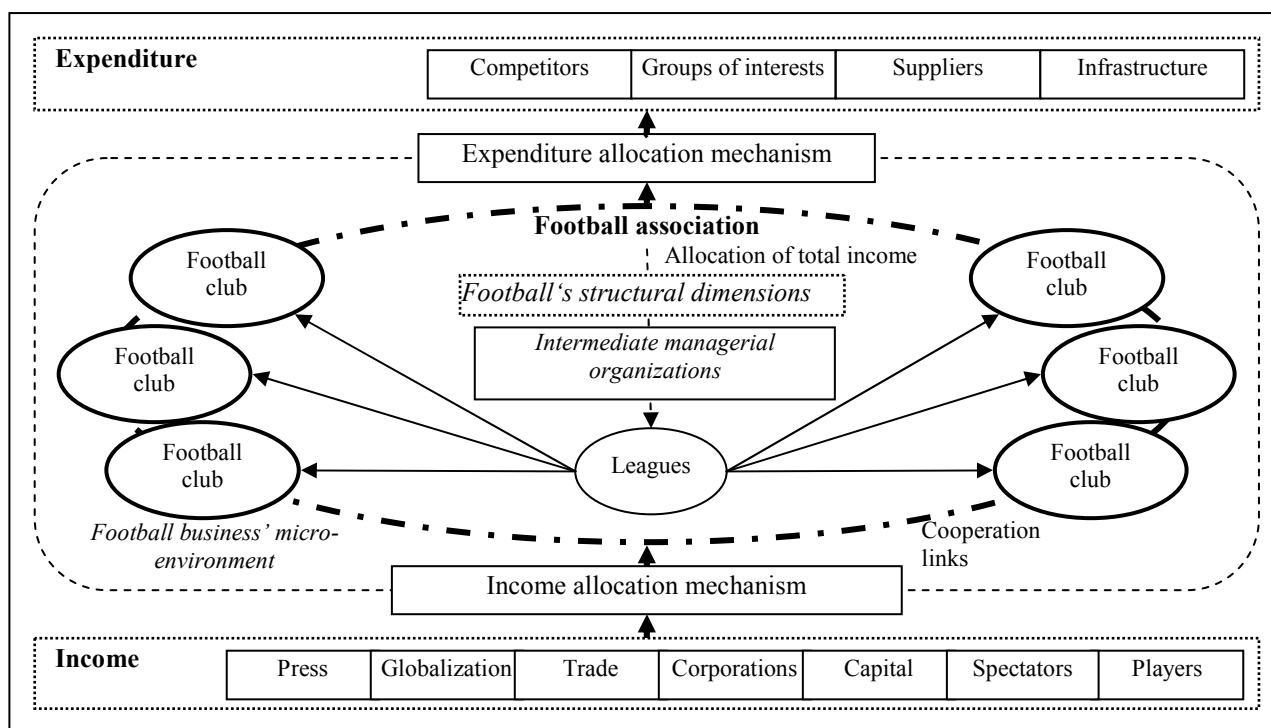

Figure 1. The structure of football business system model

On the background of the discussed FBS model the analysis of three football business systems – English and Scottish (as developed business systems) and Lithuanian (as developing business system) – is made, which is realized in three steps:

1. Detailing of football business micro-environment structure.
2. Analysis of FBS income flows and their allocation mechanism.
3. Analysis of FBS expenditure flows and their allocation mechanism.

1. The structure of football business micro-environment. The first step of FBS analysis is the detailing of football business micro-environment structure, which allows to determine the managing organization of FBS, its dependent structures that participate in the formation and maintenance of FBS, the relation between football clubs and managing organizations and the common complexity of football business micro-environment.

The football business micro-environment can be described by four main sections:

- The main managing organization of football business micro-environment.
- The intermediary managing organization, which coordinates the specific areas of football business.
- The football business micro-environment is detailed by football's structural dimensions (age, sex, professionalism, game type).
- The main sources for football business income generation– football leagues and their controlling organization.

2. Football business system income flows and the

mechanism for their allocation. FBS income flows and related activities are characterized in the presented FBS model. As can be seen from the model, the income is channeled to the football business micro-environment (for the actors of football business) through the specific income allocation mechanism, which determines the proportions and sources of total income for the individual primary receivers of football business' income. For this reason, the income flow analysis in FBS requires a three-step analysis:

a. The primary income receivers' income allocation by income sources and related activities.
b. Income allocation by primary receivers.
c. The allocation of total FBS income by income sources and related activities.

The presented steps of FBS income analysis should be analyzed in a broader context. The form presented in Table 1 is used for the analysis of different national football business systems. In this form three FBS income analysis dimensions are reflected: (1) the income of primary income receivers by income sources, (2) income by primary receivers, (3) the total income by income sources.

Using the aforementioned form of FBS income allocation the first action is to determine the income flows of primary income receivers and the structure of their income.

The primary income receivers are determined by using the findings of football business micro-environment structure analysis, where the main football business subjects that are oriented to economic performance are defined and all other subjects that are oriented to sports achievements (e.g. structures for national team

performance coordination) are treated as one entity. The differences between the economically distinct football business elements are highlighted what allows distinguishing the advantages and disadvantages of analyzed FBS in separate section of football business.

After the income of primary income receivers income is structured by its sources, the next step of income allocation analysis – the analysis of income structure by the main income receivers – can be performed. Those parts of income receivers are encoded as coefficients G_A and G_B. Such analysis highlights the main (with the biggest income) subjects of football micro-environment and it also allows to determine the impact of every subject of football business micro-environment on the functionality of FBS.

The analysis of football business system income allocation by sources

Income source	The activity of income source	Income allocation		
		In the income of primary income receivers, %		In the total income of FBS, %
		Receiver A	Receiver B	
Press	TV / radio translations	Zi_{A1}	Zi_{B1}	$Zi_{A1} * G_A + Zi_{B1} * G_B$
	Publishing	Zi_{A2}	Zi_{B2}	$Zi_{A2} * G_A + Zi_{B2} * G_B$
	Total	Σ	Σ	Σ
Globalization	International development	Gl_A	Gl_B	$Gl_A * G_A + Gl_B * G_B$
	Total	Σ	Σ	Σ
Trade	Souvenirs	P_{A1}	P_{B1}	$P_{A1} * G_A + P_{B1} * G_B$
	Infrastructure	P_{A2}	P_{B2}	$P_{A2} * G_A + P_{B2} * G_B$
	Total	Σ	Σ	Σ
Corporations	Promotion	Ko_A	Ko_B	$Ko_A * G_A + Ko_B * G_B$
	Total	Σ	Σ	Σ
Capital	Stock trade	Ka_A	Ka_B	$Ka_A * G_A + Ka_B * G_B$
	Total	Σ	Σ	Σ
Spectators	Tickets	Zr_A	Zr_B	$Zr_A * G_A + Zr_B * G_B$
	Total	Σ	Σ	Σ
Players	Trade for players	Zd_A	Zd_B	$Zd_A * G_A + Zd_B * G_B$
	Total	Σ	Σ	Σ
The share of primary receivers' income in the total income of structure of FBS, %		G_A	G_B	100,0

The data about the primary receivers' income structure by income sources and the income structure by income receivers allows determining the allocation of total FBS income when the income structure by income receivers' indicators is used as weighted coefficients.

The results of FBS income flows and their allocation mechanism analysis identify the most important business system income flows and the main receivers of those flows. This information may be treated as the data for comparative analysis of different football business systems, which allows identifying the advantages and disadvantages of every FBS. The need for more comprehensive analysis of football business requires adding one more step of FBS research – the analysis of expenditure flows and their allocation mechanism in every FBS.

3. *Football business system expenditure flows and their allocation mechanism*. FBS expenditure flows analysis is made following the same principle as income flows analysis by using a three-step procedure:

    a. The primary expenditure centers' expenditure allocation by expenditure sources and related activities.

    b. Expenditure allocation by primary expenditure centers.

    c. The allocation of total FBS expenditure by expenditure centers and related activities.

The findings of FBS expenditure flows and their allocation mechanism analysis are summarized in the form presented in Table 2.

The expenditure flows analysis is made by determining the same football business micro-environment actors like in the income flows analysis, what guarantees the continuity of FBS analysis and the ability to compare the results of different business system analysis.

The comparison of the results of several FBS income and expenditure flows is important because the differences between income allocation by income receivers and expenditure allocation by expenditure centers characterizes the internal FBS income reallocation, which is performed when primary income receivers distribute the received income for all other subjects in the football business micro-environment. In this way, one can assess the scale of income reallocation in football business micro-environment and the economic independency of individual football business subjects. This ability is an important aspect of the research for it allows to determine the internal income reallocation which is usually not revealed to the public, because in the complex football business structures it is difficult to determine the total scale of income reallocation from primary documents.

    Research is carried out by applying two methods:

- The analysis of English and Scottish football business systems is based on document analysis.
- The analysis of Lithuanian FBS and the comparative analysis of all three football business systems is based on the document analysis and the in-depth interviews with experts.

The document analysis method. For the research the public internal (the reports of football business subjects) and external (statistical data, public reports) documents are used. The analysis of English and Scottish football

business systems is based on the reports by Deloitte (2006, 2007) covering the information on financial flows and the material from England and Scotland football associations, which is presented on internet sites and public reports.

The table for analysis of football business system expenditure allocation by expenditure directions

Expenditure direction	The activity of expenditure direction	Expenditure allocation		
		In the expenditure of expenditure centers, %		In the total expenditure of FBS, %
		Receiver A	Receiver B	
Competitors	Football promotion between sport fans	K_{A1}	K_{B1}	$K_{A1} * I_A + K_{B1} * I_B$
	National teams	K_{A2}	K_{B2}	$K_{A2} * I_A + K_{B2} * I_B$
	Total	Σ	Σ	Σ
Groups of interests	Football promotion in society, public relations	In_{A1}	In_{B1}	$In_{A1} * I_A + In_{B1} * I_B$
	Taxes	In_{A2}	In_{B2}	$In_{A2} * I_A + In_{B2} * I_B$
	Total	Σ	Σ	Σ
Suppliers	Football promotion, football players' training	T_{A1}	T_{B1}	$T_{A1} * I_A + T_{B1} * I_B$
	Trade for players	T_{A2}	T_{B2}	$T_{A2} * I_A + T_{B2} * I_B$
	Total	Σ	Σ	Σ
Infrastructure	Investment to stadiums	If_{A1}	If_{B1}	$If_{A1} * I_A + If_{B1} * I_B$
	Administration	If_{A2}	If_{B2}	$If_{A2} * I_A + If_{B2} * I_B$
	Total	Σ	Σ	Σ
The part of expenditure centers' expenditure in the total expenditure of FBS, %		I_A	I_B	100,0

To analyze the Lithuanian FBS, the data presented in annual reports of Lithuanian football federation (LFF), LFF performance development strategy, LFF annual program – budget and the material in federation's internet site are used.

In-depth interviews. The members of this research are the representatives of Lithuanian football business who have the most experience in Lithuanian football business and the specialist from Scottish football business as a representative of developed FBS. Totally six experts were interviewed: two representatives of Lithuanian football clubs that participate in top league, two representatives of LFF, one representative of National Football Clubs Association and one representative of Scottish Football Association. Every expert was interviewed individually by using the type of informal conversation and discussing the topics prepared in advance.

The results of Lithuanian, English and Scottish FBS analysis are presented in the next section of this article.

The findings of the comparative analysis of Lithuanian, English and Scottish football business systems

The analysis of Lithuanian, English and Scottish football business systems is based on the methods presented in the previous section of this article in order to characterize those systems and to compare them, which would allow finding the solutions for developing the Lithuanian football business system. This section presents a brief summary of findings of the comparative analysis of Lithuanian, English and Scottish football business systems. The comparison of those business systems is made in three stages of football business analysis:

- The analysis of structures of Lithuanian, English and Scottish football business micro-environments.
- The analysis of differences between the Lithuanian, English and Scottish FBS income allocation.

- The analysis of differences between the Lithuanian, English and Scottish FBS expenditure allocation.

The comparison of Lithuanian, English and Scottish football business micro-environment structures. The structures of football business micro-environments of the analyzed countries are similar and correspond to the classic European sports business type. This is because English FBS is maybe the most important FBS in the world and most of the developing European football business systems tend to orient themselves towards the English football business model. It applies to the Lithuanian and Scottish football business systems too: the developing Lithuanian FBS is formed in accordance with English football business model, while the Scottish FBS, which functions in the same geopolitical area as English FBS, can be treated as identical copy of this system. This is proved by the analysis of English and Scottish football business micro-environments, which have the same structure.

The analysis of English and Scottish football business micro-environments showed that there are three main elements of the micro-environment:

- Football association as the managing subject in FBS, which govern all national football structures;
- The top league (named "Premier league") that has a wide performance independence (though it acts in the jurisdiction of football association). This league acts as an individual subject of football business micro-environment and generates the biggest income in FBS.
- Second football league (named "Football league"), which is directly managed by football association but acts as a distinct subject of football business micro-environment in close collaboration with football association in developing the sports aspects of football.

The analysis of Lithuanian FBS enables to determine two main elements of football business micro-environment:

- Football federation, which is responsible for

coordination of the entire FBS and pays most attention to the sports performance and popularity of football;

- National Football Clubs association (NFKA), which performs analogical functions as the "Premier" league in English FBS, i.e. the independently functioning main football league, which orients its performance towards the commercial results.

The main difference between English / Scottish and Lithuanian football systems is that Lithuanian second league (LFF I league and parallel competitions) has no such autonomy as the English or Scottish second football leagues. This difference was emphasized by four out of six football business experts who participated in the in-depth interviews. Those experts stated that in the Lithuanian football business micro-environment only two primary income receivers can be defined: LFF (together with coordinated organizations but football clubs) and NFKA. The third element of Lithuanian football business micro-environment is conditional from structural point of view – it consists of football clubs that do not belong to NFKA.

The current structure of Lithuanian football business micro-environment, in the opinion of football experts, is not efficient enough in comparison with English and Scottish football business micro-environments because of the discussed difference in the structure of primary income receivers (and also expenditure centers). Three experts stated that the third primary income receiver in Lithuanian football business micro-environment, formed in the example of English and Scottish football business micro-environments, could promote the development of FBS.

The comparison of Lithuanian, English and Scottish football business system income allocation. The discussed Lithuanian football business micro-environment structure difference from English and Scottish football business micro-environments can be seen clearly in the analysis of income allocation by primary receivers of analyzed football business systems. The comparative data of income allocation by primary receivers presented in table 4 shows that Lithuanian FBS differs from other two business systems.

The comparison of income allocation by primary receivers (Table 3) allows distinguishing three main categories of income receivers:

- The managing organization (top football association), including the directly coordinated leagues. In the Lithuanian case, this category consists of LFF and other football micro-environment subjects that are coordinated by LFF, except NFKA.
- Top league. In England and Scotland it is "Premier" leagues, in Lithuania – "A league", managed by NFKA.
- Second league, which is treated as an economically independent element of football business micro-environment but from the sports point of view is situated on lower level than the top league. In England and Scotland these are the Football leagues, while in Lithuania there is no such element.

The comparative data shows that Lithuania differs because of strong role of managing organization in FBS

income allocation. The managing organization accumulates 69.9 % of total FBS income and top league receives only 30.1 % of total income. In England and Scotland the situation is different: the main share of income in these systems is accumulated by the top leagues (in England – 67.1 %, in Scotland – 55.4 %). This difference emerges because of the lack of financially independent second league in Lithuania. Such leagues in England and Scotland accumulate respectively 22.2 % and 30.2 % of the total income, and the managing organizations accumulate only respectively 10.8 % and 14.4 % of total income.

Table 3

The comparison of Lithuanian, Scottish and English FBS income allocation between the primary receivers, %

	Lithuania	England	Scotland
Managing organization (the top football associ-ation), including the directly coordinated leagues	69.9	10.8	14.4
Clubs of the top league	30.1	67.1	55.4
Clubs of the second league		22.2	30.2

Another important difference between the Lithuanian and English / Scottish football business systems is the different income allocation by income sources and related activities (table 4).

The structures of analyzed football business systems highlight the main difference in the economic potential of the developed English and Scottish football business systems and the developing Lithuanian FBS. The presented data shows that the most of income (38.7 %) in Lithuanian FBS is received in the form of support from sponsors. In England and Scotland the importance of this income source is significantly lower (respectively 21.1 and 27.8 %) and is almost as important as the income from ticket sales (respectively 19.4 and 29.3 %). Those differences imply that the Lithuanian FBS is much more dependent on the private sponsors' interest to be involved in the football activities. Two experts interpret this difference as the additional business risk in football because in such case football business becomes closely related to other business sectors, where the main supporters of football perform.

Three of six experts in the in-depth interviews emphasised that Lithuanian FBS is more oriented to corporations as potential supports and not to the spectators (the source of ticket sales income). This situation should be treated negatively because of limited development possibilities and it allows concluding that that the Lithuanian FBS income structure is partly faulty.

In the analysis of English FBS income structure it can be noticed that the biggest income in this system is generated by the TV and radio broadcasting. In England the income from this source creates 42.9 % of total income (in Scotland – 19.9 %, in Lithuania – 15.8 %). The main part of this income is accumulated in the top league by broadcasting the league and national team matches. In the context of the scale of total English FBS income it can be stated that the close cooperation between football business subjects and TV and radio companies is one of the main factors behind the economic success of national FBS.

Table 4

The comparison of Lithuanian, Scottish and English FBS income allocation by sources, %

Income source	The activity of income source	Income allocation, %		
		Lithuania	England	Scotland
Press	TV / radio translations	15.8	42.9	19.9
	Publishing	0.0	0.5	1.2
	Total	**15.8**	**43.4**	**21.1**
Globalization	International development	15.5	2.1	2.6
	Total	**15.5**	**2.1**	**2.6**
Trade	Souvenirs	3.6	2.2	5.5
	Infrastructure	9.8	10.1	11.2
	Total	**13.3**	**12.3**	**16.7**
Corporations	Promotion	38.7	21.1	27.8
	Total	**38.7**	**21.1**	**27.8**
Capital	Stock trade	0.0	0.0	0.0
	Total	**0.0**	**0.0**	**0.0**
Spectators	Tickets	10.5	19.4	29.3
	Total	**10.5**	**19.4**	**29.3**
Players	Trade for players	6.2	1.9	2.5
	Total	**6.2**	**1.9**	**2.5**

Other differences between the Lithuanian and English / Scottish FBS income structures are related to a comparatively small turnover of Lithuanian football business. Because of small turnover the more important elements of Lithuanian FBS income structure becomes "globalization" (i.e. LFF income from participation in the international football structures) and trade of players (respectively 15.5 and 6.2 %).

The comparison of Lithuanian, English and Scottish football business system expenditure allocation. The comparative analysis of Lithuanian, English and Scottish football business micro-environment has shown that the Lithuanian case is different in the fact that the managing organization coordinates most of FBS and allows autonomy only for the top-league. For this reason the expenditure of managing organization (just like in the case of income structure) sets the most of total FBS expenditure (68.8 %). In comparison, the expenditure of English and Scottish managing structures sets respectively 5.3 and 6.1 % of total FBS expenditure (table 5).

Table 5

The comparison of Lithuanian, Scottish and English FBS expenditure allocation between primary expenditure centers, %

	Lithuania	England	Scotland
Managing organization (the top football association), including directly coordinated leagues	68.8	5.3	6.1
Clubs of the top league	31.2	68.7	58.9
Clubs of the second league		26.0	35.0

The comparison of all three FBS income and expenditure structures shows that the top leagues are characterized by almost absolute economic independence because their income practically matches the expenditure and it means that the top leagues are able to participate in football business micro-environment financially independent of other football business micro-environment subjects.

Second leagues in England and Scotland spend more than their accumulated income as primary receivers (English second league receives 22.2 % of total income and experience 26.0 % total expenditure, Scottish second league – respectively 30.2 and 35.0 %) and this means that they are economically dependable on managing organizations, which allocate a part of accumulated income for second leagues' expenditure cover.

The comparison of Lithuanian, English and Scottish FBS expenditure (table 6) shows that the main part of total expenditure in those football business systems falls to suppliers (respectively 66.1 and 66.9 %). In general those expenditures fall to trade for players (players' salaries and the compensation of negative balance in players' trade transactions). In Lithuanian FBS those expenditures also are the biggest part in total expenditure (51.4 %) but it is smaller than in England or Scotland. Besides, the bigger part of those expenditures are allocated for players' training (4.7 %, then in England this element receives only 2.5 % and in Scotland 3.3 % of total expenditure).

The second important expenditure direction in all three football business systems is infrastructure, which accounts for a quarter of all expenditure. But the allocation of this expenditure is different in the analyzed football business systems: in England and Scotland investment in stadiums and administrative expenditure are almost equal, and in Lithuanian FBS administration accounted for twice much expenditure than the investment in stadiums (respectively 18.5 and 9.1 % of total expenditure). It shows that Lithuanian FBS lacks investment to football infrastructure. As all experts during the in-depth interviews stated, it can be treated as one of the most important reasons behind the comparatively low income from ticket sales.

One more important difference between the Lithuanian, English and Scottish FBS expenditure allocation is a quite big part of total expenditure (9.4 % of total expenditure) in Lithuanian FBS for financing the national teams. In England and Scotland the expenditure for this activity makes up only 0.2% of total expenditure.

Table 6

The comparison of Lithuanian, Scottish and English FBS expenditure allocation, %

Expenditure direction	The activity of expenditure direction	Expenditure allocation, %		
		Lithuania	England	Scotland
Competitors	Football promotion between sport fans	4.1	3.8	2.5
	National teams	9.4	0.2	0.2
	Total	**13.5**	**4.0**	**2.7**
Groups of interests	Football promotion in society, public relations	1.0	2.0	2.2
	Taxes	6.5	1.6	4.6
	Total	**7.5**	**3.6**	**6.8**
Suppliers	Football promotion, football players' training	4.7	2.5	3.3
	Trade for players	46.7	63.6	63.6
	Total	**51.4**	**66.1**	**66.9**
Infrastructure	Investment to stadiums	9.1	12.1	10.4
	Administration	18.5	14.1	13.3
	Total	**27.5**	**26.2**	**23.6**

Such difference is related with the different sizes of absolute expenditure in analyzed football business systems: in all three countries there is the same number of national teams (the main of them are men, women, and youth) and the support for those teams must be quite equal in all football business systems. The total expenditure of English and Scottish football business systems, like the total income, is much bigger than in Lithuania and it implies the smaller weight of national teams financing in total financing need. Three interviewed experts emphasized that in this case the Lithuanian FBS has a low cost advantage – the budget of Lithuanian national teams is much lower than budgets of English and Scottish national teams (according to the experts, difference is around 30 – 65 %).

Conclusions

1. The structure of FBS, which is based on the above-mentioned characteristics, can be divided into three distinct structural groups of football business: (1) football business micro-environment; (2) football business income structure; (3) football business expenditure structure. Such structuring of FBS allows distinguishing the inter-relations between the individual elements of FBS and their relations with the external environment.
2. The analysis of English and Scottish football business systems allows concluding that football business micro-environments in both countries are analogical in structure; however, it does not guarantee the same flows of income and expenditures. In both England and Scotland the maximizing of income generation efficiency is realized through three subsystems of FBS, which play different roles: (1) the main (top) league exclusively oriented to commerce, (2) second league, which is in the intermediary position between the commercially-based top league and public interest- oriented lower leagues, (3) football association whose primary task is the administration and development of the sports activities. Despite the parallel structures of football business systems, an assumption can be made that the economic efficiency of Scottish FBS is lower than that of English, and the latter can be considered as the best practice in the field.
3. The analysis of the developing Lithuanian FBS identified the main differences between the developing and developed football business systems: (1) in Lithuania, the second football league has no financial independence which is typical for the English and Scottish second leagues, and this is the reason why there are only two income accumulation subjects in the Lithuanian football business; (2) in Lithuania, the largest share of income in FBS is generated by the main managing organization what weakens the commercial interests of the entire system; (3) Lithuanian FBS is more dependent on the support of private sponsors what makes football business more risky; (4) the Lithuanian FBS faces the problem of insufficient investment into football infrastructure what leads to disproportions in income sources.

References

1. Baimbridge, M. Satellite Television and Demand for Football: a Whole New Ball Game? / M.Baimbridge, S.Cameron, P.Dawson // Scottish Journal of Political Economy, No 4), 1996, p. 317-333.
2. Deloitte. Annual Review of Football Finance. Deloitte & Touche LLP, June 2006.
3. Deloitte. Football Money League. The reign in Spain. Deloitte & Touche LLP, February 2007.
4. Football Association. The Organization. Internet link: <http://www.thefa.com/TheFA/TheOrganisation/>, visited in 2007-09-25.
5. Fort, R. Competitive Balance in Sports Leagues: An Introduction / R.Fort, J.Maxcy // Journal of Sport Economics, Vol. 4, No 2, May 2003, p. 154-160.
6. Garcia, J. The Determinants of Football Match Attendance Revisited: Empirical Evidence from the Spanish Football League / J.Garcia, P.Rodriguez // Journal of Sports Economics, No 3, February 2002, p. 18-38.
7. Gius, M. Race and Compensation in Professional Football / M.Gius, D.Johnson. Applied Economics Letters, No 7, 2000, p. 73-75.
8. Helland, K. The Medium is the Exposure: The Symbiosis Between Football and the Media // IAMCR, Media and Sport Section. Brasil, July 2004.
9. Hoehn, T. The Americanization of European Football / T.Hoehn, S.Szymanski // Economic Policy, No 28, April 1999, p. 41–55.
10. Humphreys, B.R. Alternative measures of competitive balance in sports leagues // Journal of Sports Economics, No 3, May 2002, p. 133-148.

11.   Karpavičius T., Jucevičius G. Football business system: concept and structure // International conference Economics and management, 2009.

12.   Karpavičius T., Jucevičius G. The application of the business system concept to the analysis of football business // ENGINEERING ECONOMY = INZINERINE EKONOMIKA, 2009 (accepted for publishing).

13.   Kesenne, S. League and Management in Professional Team Sports with Win Maximizing Clubs // European Journal of Sport Management, No 4, 1996, p. 54–69.

14.   Kesenne, S. Revenue sharing and competitive balance in professional team sports // Journal of Sports Economics, No 1, February 2000, p. 56-65.

15.   Lietuvos futbolo federacija. Futbolas Lietuvoje. Internet link: <http://www.futbolas.lt/news.php?ftype=1>, visited in 2007-09-21.

16.   Lietuvos futbolo federacija. LFF veiklos ataskaita 2002 – 2005 m. Vilnius: LFF, 2006.

17.   Lietuvos futbolo federacija. LFF veiklos programa – biudžetas 2006 metams. Kaunas, 2006.

18.   Lietuvos futbolo federacija. LFF veiklos vystymo strategijos gairės. Vilnius, 2005.

19.   Nacionalinė futbolo klubų asociacija. Apie mus: NFKA vizija. Internet link: <http://www.alyga.lt/index.php?Itemid=9&id=46&option=com_content&task=view>, visited in 2007 12 12.

20.   Noll, R.G. Sports, Jobs and Taxes: The Economic Impact of Sports Teams and Stadiums / R.G.Noll, A.Zimbalist. Washington: Brooking Institute, 1997.

21.   Noll, R.G. The Economics of Baseball Contraction // Journal of Sports Economics, Vol. 4, No 4, November 2003, p. 367–388.

22.   Quirk, J. Pay Dirt: The Business of Professional Team Sports // J.Quirk, R.Fort. Jew Jersey: Princeton University Press, 1992.

23.   Rapp, A.M. Explaining the Bankruptcy 'Crisis' in English Football. – Stanford: Department of Economics, Stanford University, May 2004.

24.   Scottish Football Association. The Scottish FA. Internet link: <http://www.scottishfa.co.uk/the_scottish_fa.cfm?curpageid=1351>, visited in 2007-09-25.

25.   Smith, A. Complexity Theory and Change Management in Sports Organizations // Emergence: Complexity & Organization , No 6, 2004, p. 70–79.

26.   Turner, P. Television and the Internet Convergence: Implications for Sports Broadcasting // Sports Marketing Quarterly, No 8(2), 1999, p. 43-51.

27.   Vrooman, J. A General Theory of Professional Sports Leagues // Southern Economic Journal, No 61, April 1995, p. 971-990.

28.   Zimbalist, A. Competitive balance in Major League Baseball // Milken Institute Review, No 1, 2001, p. 54-64.

Tomas Karpavičius, Giedrius Jucevičius

Palyginamoji futbolo verslo sistemų analizė: Lietuvos, Anglijos ir škotijos atvejai

Santrauka

Straipsnyje pateikiama futbolo verslo sistemų palyginamoji analizė, atlikta pagal verslo sistemos metodologijos bazėje sukonstruotą futbolo verslo sistemos modelį. Straipsnio tikslas – palyginti Lietuvos, Anglijos ir Škotijos futbolo verslo sistemas futbolo verslo sistemos modelio bazėje. Šių šalių futbolo verslo sistemų analizė atliekama trimis etapais: (1) detalizuojama futbolo verslo terpės struktūra, (2) atliekama futbolo verslo sistemos pajamų srautų ir jų paskirstymo mechanizmo analizė, (3) atliekama futbolo verslo sistemos išlaidų srautų ir jų paskirstymo mechanizmo analizė. Tyrimas atliktas naudojant dokumentų analizės ir giluminio interviu, kuriame dalyvavo 6 futbolo verslo ekspertai, metodus. Tyrim orezultatai išryškino šiuos pagrindinius besivystančios Lietuvos futbolo verslo sistemos skirtumus nuo išvystytų futbolo verslo sistemų: 1) Lietuvoje antrinė futbolo lyga neturi Anglijos ir Škotijos Futbolo lygoms būdingo savarankiškumo, dėl ko Lietuvos futbolo verslo terpėje išskirtini tik du pajamų kaupimo subjektai; 2) Lietuvoje didžioji futbolo verslo sistemos pajamų ir išlaidų dalis tenka valdančiajai organizacijai, o tai silpnina komercinius visos sistemos interesus; 3) Lietuvos futbolo verslo sistema gerokai labiau priklauso nuo korporacijų rėmimo, o tai sąlygoja papilomą futbolo verslo riziką; 4) Lietuvos futbolo verslo sistema susiduria su nepakankamomis investicijomis į futbolo rungtynių infrastruktūrą, o tai lemia pajamų šaltinių disproporciją.

About the authors

Tomas Karpavičius, PhD student of social sciences (business and administration), Kaunas University of Technology, Lithuania. Tel.:+370 615 10 555, e-mail t.karpavicius@futbolas.lt

Giedrius Jucevičius, Assoc. professor, Kaunas University of Technology, Business Strategy Institute, Lithuania. Tel: +370 37 300120, e-mail: giedrius.jucevicius@ktu.lt

HARMONIZATION OF STAKEHOLDER INTERESTS IN PUBLIC AND PRIVATE PARTNERSHIPS

Violeta Kavaliauskaitė, Robertas Jucevičius

Kaunas University of Technology, Lithuania.

Abstract

The article considers the problem of harmonization of public and private stakeholder interests in PPPs, which by their nature are usually different and even conflicting. Based on the stakeholder theory the article attempts to substantiate the main factors and circumstances contributing to the harmonization of public and private stakeholder interests in order to achieve partnership's success. The article identifies stakeholders and their groups in both public and private sectors, provides an overview of public and private stakeholder interests and discusses the means and ways for achieving harmonization of interests through consensual agreements rather than compromises among partners.

Keywords
Stakeholder interests, stakeholder theory, public and private partnership.

Introduction

The interest of such international organizations as World Bank, European Commission and the United Nations Organization in public-private partnerships (PPPs), monitoring of their activities and active participation influencing processes associated with PPP demonstrates the importance of such partnerships in the economic life of the country or region. The UN Economic and Social Council noted in its report of 2002 that PPP is not only one of political choices, but also a strategic necessity (UN ESC, 2002).

Despite the abundant support for PPPs so far, recently there are more and more scholars (e.g. M. Flinders (2005), J. Diamond (2006), J. Friend (2006), C. Jacobson and S. Ok Choi (2008)) pointing out certain partnership failures. It is discussed that PPPs may deliver efficiency gains and service improvements in some policy areas but these benefits may involve substantial political and democratic costs. There have been various objective factors indicated as influencing partnership success or failure, such as institutional environment, management and organizational aspects, qualities and competence of personnel, etc. (Kavaliauskaitė and Jucevičius, 2009). However, there has been little analysis of such underlying reason for partnership success as harmonization of partners' interests. This constitutes the **novelty** of the research problem in this article.

Any cooperation is realized through the harmonization and satisfaction of specific interests. Without understanding the structure and unity of these interests it might be difficult to seek for even higher level of cooperation, namely, partnership. One of the most important goals in any modern society is development of relations between public and private sectors. Decisions by public institutions influence business environment, state institutions applying special norms regulate many branches of business and in this way become like business partners in implementing various projects and programmes.

Entrepreneurs also understand that the political climate of the region determines the economic climate. Various state institutions regulate business on the local level as well, therefore, business world realizes the necessity of understand well government institutions function (Jasaitis, 2003).

Taking into consideration the fact that activities of the public and private sector stakeholders may influence each other as well as the fact that private sector is more oriented towards profit seeking, while public sector stakeholders are not always giving priority to financial indicators, great attention should be given to the harmonization of their interests in order to achieve the goals of PPPs.

Thus, the **research problem** in the article concerns the harmonization of public and private stakeholder interests in PPPs, which by their nature are usually different and even conflicting.

Aim of the article – based on the stakeholder theory to identify the main factors and circumstances contributing to the harmonization of public and private stakeholder interests in order to achieve partnership's success.

The following objectives are set to achieve the aim:
1. to identify stakeholders and their groups in public and private sectors;
2. to present the overview of public and private stakeholder interests;
3. to reveal the particular aspects associated with the harmonization of stakeholder interests within PPPs in order to ensure its success.

The **object** of the article is harmonization of stakeholder interests in PPPs.

The following **research methods are used in the article**: systemic analysis of the research literature, logical analysis and synthesis methods.

Identification of stakeholders in public and private sectors

Definition of "stakeholders"
The term "stakeholders" was first used in the United States of America in 1963 m. in the memorandum of Stanford research institute stating that stakeholders are certain groups, whose support is essential to the organization (Yau, Chow et. al., 2007).

Other authors provide different definitions. In Freeman's (1984) view, stakeholders are any group or person, who influences or may influence the implementation of the organization's goals (Collier, 2008). According to Welsh and McGinn (1999), stakeholders are persons or groups that have a common interest in any specific activity and its consequences, or whose interests may be affected by that. Susnienė (2007) argues that stakeholders are natural and legal persons, or their groups associated with the organization's environment, its activities and/or contributing to organization's activities and its capability to create profit. Therefore, those groups are potential recipients of profit and/or are accepting corresponding risk. Further, stakeholders may be defined as any person or group, who may cause harm or influence the actions, decisions, politics, practice and goals of the organization (Weiss, 2003). According to Sudnickas (2008), a stakeholder is a person or group, which has an interest in organization's results or success; it can also be institutions, companies and organizations as well as persons that are able and willing to make influence on the organization, and they themselves are impacted by the activities of the organization and its results. Finally, Donaldson and Preston describe stakeholders as a person or group of persons having valid interests, which are known and identified (Presqueux, Ayadi, 2005).

Since organizations are very different in terms of their goals, missions and activities, they have different sets of stakeholders. Thus, it would be very difficult to provide just one universal definition of stakeholders. The main idea of all the definitions is that such persons or groups have certain interests and, driven by those interests, influence decisions of the organization.

Stakeholders in private sector

Various authors classify stakeholders in private sector differently. According to Lepineux they can be classified into such categories as shareholders, internal stakeholders (employees, trade unions), operational partners (e.g. customers, suppliers, banks), and social communities (state institutions, NGO's, civil society) (Presqueux, Ayadi, 2005):

Stakeholders can also be grouped according to their interest (direct or indirect) in the organization and its results. Such stakeholders as investors, suppliers, consumers and employees are directly interested in the organization and its results, while the society and an individual community where the organization operates, especially a manufacturing company, which may have both positive and negative impact on the society and environment, are considered to be stakeholders with indirect interest. Various unions, especially trade unions, associations of organizations and other economic agents are also assigned to the group of stakeholders with indirect interest. (Žukauskas, Juodaitytė et al., 2008, Pruskus, 2003).

Thus, stakeholders in private sector are not only shareholders, seeking their share of profit, but also many other actors such as customers, employees, retailers, suppliers, whose needs and expectation the company has to take into consideration if it wants to operate its business successfully for a long time.

Stakeholders in public sector

Characteristics of stakeholders in public and private sectors are different. According to Beamo and, Balcik (2008) the stakeholder groups of the private company are clearly defined and homogeneous in terms of their interests. i.e. holders of interests often approve of the policies implemented by the company's top management. Public or non-profit organizations, on the other hand, may service many areas where goals and needs are heterogeneous; consequently, stakeholders in public sector may not be so easily defined.

There is a greater number of stakeholders in public sector. According to Riege and Lindsay (2006) stakeholders in public sector may be any person or organization whose interests may be positively or negatively affected. Stakeholders may be organizations from government sector, local government institutions, various community organizations, disadvantaged groups, local indigenous and non-native language speaking groups.

Further, it should be noted that society today is more and more often viewed as a variety of interrelationships and partnerships of various stakeholders. This means the formation of the multi-stakeholder management concept. There can be distinguished four groups of the main actors in the society, namely, political institutions, business, local government and the so called "third sector" basically involving non-governmental organizations and public entities (Augustinaitis, 2005).

Identification of public sector and private sector stakeholders' main interests

The most simple way to describe the interests of public and private sector stakeholders would be to say that profit (money) and power (political and economic) are the main interests of private sector stakeholders, while securing the public good is the main interest of the public sector stakeholders.

However, this is a very general and rather theoretical description of the public and private stakeholder interests. To be more precise, in the sense of management of company's finances, there should be mentioned such interests as maximization of investment, growth of share value, and value of dividends. Profit and turnover of the company are often considered to be the central interests when they determine economic wealth and high position in the society. Consumers often expect the provided service to correspond to their needs, they expect good price, and timely delivery; employees' expectations concentrate on good salary and job-satisfaction. The interests of the actors in public sector, on the other hand, are focused (at least on the conceptual level) on protecting of human interests, preserving natural conditions of existence, ensuring the right of survival both for an individual person and humanity in general (Čiutienė, 2006). If there is no doubt about profit and power seeking being the main interests of private sector stakeholders, then a more comprehensive discussion is needed about the main interest of the public sector stakeholders, i.e. securing of public good.

On the conceptual level public good has always been the main interest of public sector institutions. The ways and means of achieving it changed over time. The emergence of the New Public Management (NPM) theory at the end of the twentieth century and the formation of PPPs slightly changed the context the concept was associated with.

NPM means adopting of business and market principles and management techniques from the private into the public sector. NPM emphasizes that more market orientation in the public sector will lead to greater cost-efficiency for governments, with limited side effects for other undertakings. According to NPM, beneficiaries of public services are customers while citizens are the stakeholders. These characteristics demonstrate a lot of parallels with the private sector, especially competition and treatment of beneficiaries (Drechsler, 2005; Larbi, 1999; Lane, 2000; Lane, 2001).

Thus, the attitude from securing public good at any cost changed to securing public good in the most efficient way.

As a result of NPM reform not only business and market principles were transferred to public sector but also the public and private sectors were brought closer to each other. The new public sector management practices and arrangements necessarily prompted the formation of public-private partnerships (PPP). Securing public good no longer was entirely dependent on the efforts of public sector institutions. With the emergence of PPPs private sector became involved as well.

Thus, despite the variety of stakeholders in the public sector and despite the variety of interests they may have, the main interest of the public sector stakeholders remains public good, because it rests on the values that constitute the core for the maintenance of constitutional democracy (Rosenbloom, 1986).

Harmonization of stakeholder interests

Before starting the discussion about harmonization of stakeholder interests, first it is necessary to define the concept of harmonization. Mudėnaitė (2007) has a twofold definition of harmonization of stakeholder interests. It is based on legal acts and on real life experiences. Based on legal acts, according to this author harmonization means such as informing, consulting; announcing about the drafted document making available to get acquainted with, publicly displaying, publicly discussing and providing motivated response. Harmonization in real life means discussing alternatives, showing consideration, refraining from making existing conditions worse, obtaining approval and refraining from violation of legitimate expectations.

Susnienė and Vanagas (2007) suggest the concept of harmonization to be divided into three narrower categories associated with the satisfaction of needs, i.e. accommodation, alignment and balancing of interests.

Accommodation of interests means that available benefits correspond to or surpass the need for benefits. Accommodation of interests is done trough the development of long-term benefit. Since each group of stakeholders in the long run get certain benefit according

to the determined proportions, there is no conflict of stakeholder interests.

Alignment of interests is understood as the flow of interests in the same general direction. It demonstrates that the organization both has a strategic direction or plan and the interests of stakeholders are in alignment with that direction.

Balancing of interests suggests that there may be possibilities for competition among interests, which must be harmonized, even without having sufficient resources for that.

The above-mentioned integrated solutions for harmonization of stakeholder interests seem like a good alternative for domination and compromise. The compromise, particularly, is not considered to be a good solution in the long run as it prompts the stakeholders to be waiting for an opportunity to outrival and seek control over other stakeholders. Further, compromise is not an effective solution because it may lead to conflict due to the fact that not all stakeholders are getting what they initially expected. It is better when the agreement between stakeholders is consensual rather than compromised. By reaching a consensual agreement stakeholders become dependent on each other and achieve common benefit, but at the same time they retain their identity, which is one of the key factors for a successful relationship (Susnienė and Vanagas, 2007).

Harmonization of stakeholder interests from such different sectors is a very complicated process because there are huge cultural and institutional differences between the public and private sectors. Moreover, interests may change due to the influence from the surrounding environment. There may be the issue of variations in identifying interests. Also there may not always be a possibility to satisfy one or another interest. Moreover, interests may not just change; they may not match, may be different or even conflicting.

Speaking about the harmonization of stakeholder interests it is important to identify not only *what interests* should be harmonized, but also *how* they should be harmonized, i.e. the process of the negotiations.

Various authors present different opinions as to the best strategies of the negotiation process between stakeholders. According to Watson, et al. (2002) the negotiation process consists of five stages, namely, insight, inclusion, investigation, negotiation, progress and result. Understanding the organization's environment, influence of the people, their motivations, problems of the society are very important for creating the solid basis to start the negotiation process. Defining of the issues to be discussed and the investment into the analysis of stakeholder interests deepen insight, which helps effectively move on from merely information to dialogue. However, the main focus of the negotiation should always be finding common ground. That may be not so easy, but the above-mentioned authors suggest focusing on interests and not on the positions held by the negotiating parties, searching for interests that match and considering both short term and long-term interests. This strategy is good because it allows focusing on positive and common things instead of dwelling on differences and fear of failure. Parties should understand that there may be issues, on which they will never agree, but

focusing on positive and common things as well as trying to find effective solutions rather that holding on to their positions may help the organizations to be more competitive (Watson, et al., 2002).

Watson's et al. position is echoed by Colleen (2007). This author argues that stakeholders in private and public sectors should not announce before the negotiations what positions they will be taking, i.e. what they need to achieve on one or another issue that will be the object of the negotiation. That will allow focusing on the discussion itself, rather than sticking to the positions decided in advance. In the course of the discussion it may turn out that the other party may have quite different priorities or it may suggest a solution that allows achieving profit or other benefits in other ways.

There are many factors that may influence the results of the negotiations between public and private partners. That may be associated with negotiation strategy, stakeholder negotiation skills, advance convictions, impact of the taken positions on the other negotiating party, good communication, openness, effective planning and direction (Ahadzi and Bowles, 2004; Jacobson and Choi, 2008).

Training and selection of professional negotiators as well as their communication skills and experience are very important and even crucial factors in the negotiations of the public and private sector stakeholders. However, negotiation experience and training are considered as very important factors, influencing the success of negotiation, more by private sector stakeholders rather than public sector stakeholders (Ahadzi and Bowles, 2004; Kačinskas, 2005).

On the other hand, public sector emphasizes more open communication in the negotiations than public sector. This is due to public sector's suspicion or carefulness that the private sector stakeholders, who are more concerned with big profit, may turn the negotiation in a different direction. The public sector stakeholders may be afraid to be discriminated when decisions on important commercial issues are taken. Moreover, the public sector is regularly inspected and controlled through audit procedures and may be more inclined to openness due to this reason (Ahadzi and Bowles, 2003).

Further, implementation of public and private sector mutual projects is more successful when stakeholders have clear goals, values, leaders and communication structure, which helps to maintain balance between the demands of stakeholders and compensation to them (Susnienė and Vanagas, 2007).

Hamann and Acutti (2003) also analyzed what is necessary for the successful harmonization of interests between the private sector and civil society. Some aspects distinguished by them could be applied analyzing the harmonization of interests between the public and private sector stakeholders. First of all, the above-mentioned authors stress the importance of balancing power asymmetries. The balance is lacking because usually business sector is considered to have more power. In order to solve this issue stakeholders from public and private sectors should admit the fact that, although there will always be a situation when one party has more power than the other, the other party also will always be able to cause expenditures or generate benefits.

Hamann and Acutti (2003) also pointed out the significance of negotiating both matching and opposing interests. The goal of the interest-based negotiation is finding creative solutions that take into consideration the core interests, and ensuring that they are clear to the parties.

Most often the initiatives of the public and private partnerships fail due to the opposition from corresponding stakeholder groups. Such failures are determined by the ignorance of the concept of public private partnership, lack of training about the specific nature of partnership between the above-mentioned sectors and limited access to the comprehensive information allowing to get acquainted with the offers presented by the public and private sectors (Gohary et.al., 2006).

Both public and private sectors need to make some progress in order to make the harmonization of interests between public and private stakeholders more successful. However, public sector probably needs to put in more effort into this than private. Public sector needs to rely more on the multi-stakeholder approach to governance because this approach reveals how people and organizations, having different operational background and prerequisites, can function together under the circumstances of increasing social political and economic complexity (Augustinaitis, 2005).

Harmonization of interests among multi-stakeholders is achieved by searching for common ground in order to achieve a mutually satisfactory solution. This process is always associated with reaching consensus, which is based on the principles of equal participation and inclusion, covers different levels of representation and adheres to the democratic principles of transparency, tolerance and pluralism. (Augustinaitis, 2005).

Thus, the top management of any organization or partnership should not try to use stakeholders just as tools to achieve the organizational goals. On the contrary, they should be managed so that stakeholders may achieve their goals and satisfy their interests. In other words, by allowing the stakeholders to achieve their goals the organization will naturally implement its own goals. Desirable result will never be achieved by making compromises, because compromise means that one or both parties have to sacrifice something in order to achieve the agreement. A successful result can be achieved only by integrating interests. (Juščius, 2007).

Discussing partnership successes and failures Flinders (2005) also criticized compromises and portrayed them as *zero sum game* in which an increase in one variable (e.g. efficiency) will be off-set by a reduction of another (e.g. accountability). He concluded that PPPs are more likely to be successful if the public and private stakeholder interests are complementary and mutually self-supporting, rather than conflicting: *positive sum* rather than *zero sum game*.

Conclusions

The analysis of the research problem led to the following conclusions:

1. Since public and private sector organizations are very different in terms of their goals, missions and activities they have different sets of stakeholders, namely:

1.1. private sector stakeholders are shareholders, employees, trade unions, operational partners, suppliers and other actors having interest in the company's performance and results as well as being able and willing to influence them;

1.2. public sector stakeholders may be organizations from government sector, local government institutions, various community organizations, disadvantaged groups, local indigenous and non-native language speaking groups and society at large;

1.3. based on the multi-stakeholder management approach, if society at large is one of the public sector stakeholders, then it includes all the private sector stakeholders. On the other hand, society at large could be considered as one of the private sector stakeholders because it has indirect interest in the impact the private company's activities may have on the social, economic and environmental conditions of the country, region or community.

2. Concerning the interests of public and private stakeholders it was determined that:

2.1. profit (money) and power (political and economic) are the main interests in case of private sector stakeholders because satisfaction of these interests ensures economic wealth and high position in the society;

2.2. securing public good is the main interest in case of public sector stakeholders because it rests on the values that constitute the core for the maintenance of constitutional democracy;

2.3. the ways and means of securing public good changed over time. As a result of NPM reform, the attitude from securing public good at any cost changed to securing public good in the most efficient way. With the emergence of PPPs securing of public good no longer was entirely dependent on the efforts of public sector institutions – private sector became involved as well.

3. Analysis of the means and ways for achieving the harmonization of stakeholder interests within PPPs in order to ensure its success revealed the following specific aspects:

3.1. harmonization of stakeholder interests in PPPs is a complicated process because there are huge cultural and institutional differences between partners from public and private sectors;

3.2. in terms of the satisfaction of stakeholder needs the concept of harmonization may be divided into three narrower categories of accommodation of interests, alignment of interests and balancing of interests;

3.3. harmonization of interests is carried out through the process of negotiations where the success may be dependent on negotiation strategy, stakeholder negotiation skills and leaders, clarity of goals and values, effective planning and direction, communication skills and structure, openness and advance convictions of the parties, impact of the taken positions on the other negotiating party, balancing power asymmetries of the parties, etc.;

4. The most important factor associated with the harmonization of public and private stakeholder interests is searching for common ground and reaching consensus rather than making compromises. When public and private stakeholder interests are complementary and mutually self-supporting (or integrated) rather than conflicting (even when they are compromised) they are more likely to ensure partnership success.

Referentes

1. Ahadzi M., Bowles G. (2004). "Public-private partnerships and contract negotiations: an empirical study". *Construction Management and Economies,* 22, p. 967-978.
2. Augustinaitis A. (2005). "Valdymo kaitos kryptys žinių visuomenėje" – on line http://araugust.home.mruni.lt/?attachment_id=43.
3. Beamon B. M., Balcik B. (2008). "Performance measurement in humanitarian relief chains". *International Journal of Public Sector Management,* 1, p. 4 – 25.
4. Čiutienė R. (2006). "Darbuotojų ir organizacijos interesų derinimas formuojant karjerą" – on line http://submit.library.lt/ETD-afiles/ISM/etd-LABT20060424-10483090849/restricted/Interesuderinimas.pdf.
5. Colleen P. (2007). "Negotiation preparation = Negotiation success" – on line http://www.articlesbase.com/negotiation-articles/negotiation-preparation-negotiation-success-290478.html
6. Collier P. M. (2008). "Stakeholder accountability: A field study of the implementation of a governance improvement plan". *Accounting, Auditing & Accountability Journal*, 7, p. 933-954.
7. Diamond, John (2006). "*Au Revoir* to Partnerships: What's Next?" *International Journal of Public Sector Management,* Vol. 19, No. 3 (278-286).
8. Drechsler, Wolfgang (2005). "The Rise and Demise of the New Public Management" – on line http://www.paecon.net/PAEReview/issue33/Drechsler33.htm
9. Flinders, Matthew (2005). "The Politics of Public-private Partnerships". *The British Journal of Politics and International Relations.* Vol. 7, Issue 2.
10. Friend, John (2006) "Partnership Meets Politics: Managing Within the Maze". *International Journal of Public Sector Management,* Vol. 19, No. 3 (261-277).
11. Gohary N. M., Osman H., Diraby T. E. (2006). Stakeholder management for public private partnerships. *International Journal of Project Management,* 24, p. 595–604.
12. Hamann R., Acutti N. (2003). How should civil society (and the government) respond to „corporate social responsibility"? A critique of business motivations and the potential for partnerships". *Development Southern Africa*, 2, p. 255-270.
13. Jacobson C., Choi S. O. (2008). "Success factors: public works and public-private partnerships". *International Journal of Public Sector Management,* 6, p.637 – 657.
14. Jasaitis E, (red. Raipa A., 2003). *Įvadas į viešąjį administravimą.* Kaunas: Technologija.
15. Juščius V. (2007). "Verslo socialinės atsakomybės teorijų raida". *Ekonomika*, p. 48-64.
16. Kačinskas R. (2005). "Galia ir derybos". *Politologija*, 1, p.26-54.
17. Kavaliauskaitė V. and R. Jucevičius (2009). "Viešojo ir privataus sektorių partnerystės svarba realizuojant regiono konkurencinę strategiją". Proceedings of the 14th International Scientific Conference „Economics and Management – 2009".
18. Lane, Jan Erik (2000). *New Public Management.* London and New York: Routledge.
19. Lane, Jan Erik (2001). *Viešasis sektorius.* Vilnius: Margi Raštai.

20. Larbi, George A. (1999). "The New Public Management Approach and Crisis States" – on line http://www.unrisd.org/unrisd/website/document.nsf/0/5F280B19C6125F4380256B6600448FDB?OpenDocument
21. Mudėnaitė A. (2007). "Kaimynų ir bendruomenių interesai teritorijų planavime: ką realybėje reiškia viešojo ir privataus intereso derinimas?" – on line http://www.lrinka.lt/Pranesim/amud.ppt.
22. Presqueux Y. Ayadi S.D. (2005). "Stakeholder theory in perspective". *Corporate governance*, 5, p. 5-21.
23. Pruskus V. (2003). *Verslo etika: laiko iššūkiai ir atsako galimybės*. Vilnius: enciklopedija.
24. Riege A. Lindsay N. (2006). "Knowledge management in the public sector: stakeholder partnerships in the public policy development". *Journal of knowledge management*, 3, p. 24-39.
25. Rosenbloom, David H. (1986). *Public Administration: Understanding Management, Politics, and Law in the Public Sector*. New York.
26. Sudnickas T. (2008). "Šiuolaikinės veiklos matavimo sistemos. Integravimo su kokybės valdymo ir procesų tobulinimo sistemomis galimybės". *Viešoji politika ir administravimas*, 26, p.17-24.
27. Susnienė D. (2007). "Suinteresuotųjų šalių poreikių tenkinimo prielaidos organizacijų vadyboje (viešojo transporto įmonių pavyzdžiu)" Summary of Doctoral dissertation. Kaunas: Technologija.
28. Susnienė D., Vanagas P. (2007). "Means for Satisfaction of Stakeholders' Needs and Interests". *Engineering economics*, 5.
29. United Nations Economic and Social Council (UN ESC) (2002) *A Review of Public Private Partnerships for Infrastructure Development in Europe* – on line http://www.ppiaf.org/documents/toolkits/Cross-Border-Infrastructure-Toolkit/Cross-border%20Compilation%20ver%2029%20Jan%2007/Resources/UNECE %20-%20 Review%20of%20PPP%20for%20Infrastructure%20Devt%20in%20Europe.pdf
30. Watson T., Osborne-Brown S., Longhurst M. (2002). "Issues Negotiation – investing in stakeholders". *Corporate Communications: An International Journal,* 1, p. 51-61.
31. Weiss J. W (2003). Business ethics: A Stakeholder and Issues Management Approach. South-Western, Mason, OH.
32. Welsh T., McGinn N. (1999). "Suinteresuotieji asmenys ir decentralizacija" – on line http://www.sac.smm.lt/images/5%20Stakeholder%20TWelsh%20NMGinn(1).pdf.
33. Yau O.H. M, Chow R. P.M., et. al.(2007). "Developing a scale for stakeholder orientation". *European Journal of Marketing,* 11/12, p. 1306-1327.
34. Žukauskas P., Juodaitytė A. ir kt., (2008). *Kokybės vadybos sistemos*. Kaunas: VDU.

Violeta Kavaliauskaitė, Robertas Jucevičius

Suinteresuotųjų viešojo ir privataus sektoriaus partnerystėje interesų derinimo specifika

Santrauka

Straipsnyje nagrinėjama mokslinė problema yra susijusi su suinteresuotųjų viešojo ir privataus sektoriaus partnerystėje interesų, kurie savo prigimtimi yra dažnai labai skirtingi ir net priešingi vieni kitiems, derinimo specifika. Remiantis suinteresuotųjų teorija straipsnyje yra aptariami pagrindiniai veiksniai ir aplinkybės, turintys įtakos suinteresuotųjų viešojo ir privataus sektoriaus partnerystėje interesų derinimui siekiant partnerystės sėkmės. Pateikus suinteresuotųjų sampratos apibrėžimą, straipsnyje identifikuojami suinteresuotieji ir jų grupės viešajame ir privačiame sektoriuose. Toliau apžvelgiama suinteresuotųjų viešajame ir privačiame sektoriuose interesų įvairovė. Remiantis įvairių autorių tyrimais pagrindiniais privataus sektoriaus suinteresuotųjų interesais galima laikyti naudos ir galios siekimą, kai tuo tarpu viešojo sektoriaus suinteresuotųjų pagrindiniu interesu (bent jau konceptualiame lygmenyje) galima laikyti siekį užtikrinti visuomenės gerovę. Paskutinėje straipsnio dalyje aptariamos įvairios suinteresuotųjų viešojo ir privataus sektoriaus partnerystėje interesų derinimo priemonės ir būdai. Prieita išvada, jog viena pagrindinių partnerystės sėkmės sąlygų yra toks interesų valdymas, kai susitarimas tarp šalių pasiekiamas ne kompromiso būdu, o konsensuso pagrindu, t.y. vertybės ir interesai vienas kitą papildo, o ne konkuruoja.

About the authors

Violeta Kavaliauskaitė, PhD student, KAUNAS UNIVERSITY OF TECHNOLOGY, Lithuania. E-mail: violeta.kavaliauskaite@ktu.lt. Research interests: Management and administration, New Public Management, contractualism.
Robertas Jucevičius, prof. habil. dr., KAUNAS UNIVERSITY OF TECHNOLOGY, Lithuania. E-mail: robertas.jucevicius@ktu.lt, Research interests: Management and administration, Strategic management.

INTERNAL CONDITIONS FOR IMPLEMENTING A CONSTRUCTIVIST APPROACH TOWARDS A SCHOOL-LEVEL CURRICULUM BY THE ASPECT OF COOPERATION AND AIMING FOR THE LEARNING ORGANIZATION

Ričardas Kliminskas

Panevėžys County Governor's Administration., Lithuania

Abstract

The article addresses the following questions: what are the features of a constructivist school-level curriculum and what internal conditions are necessary for the implementation of such kind of curriculum in a comprehensive school; to what extent these internal conditions are favourable for the implementation of this kind of curriculum?
The above questions are analysed in tree parts of the article. The first part explains the mane features of a constructivist school-level curriculum and necessary conditions of it implementation. The second part presents the qualitative research methods, whereas the third part discusses the results of document content analysis about the internal conditions required for constructing this kind of curriculum at comprehensive school. The methods of research literature analysis and document analysis employed for research data collection; the data processed by content analysis and research literature analysis. The analysis addressed the following documents of comprehensive schools in Lithuania: teaching plans of particular schools, strategic, annual plans, annual activity programs, timetables.

Introduction

Comprehensive school's graduate should be able to learn independently, think critically and solve problems, communicate and cooperate, function responsibly and develop personal, social, cognitive and cultural competences that are important for personal and social life and career. The above context determines the paradigmatic change from teaching to learning and curriculum change.

In the paradigm of learning not only curriculum implementation but also its construction, organisation, evaluation should be related to learners' active, meaningful and constructive performance, which is influenced by the school-level, national curriculum, as well as the curriculum on the level of the school founder. It is problematic to implement a classroom-level curriculum if favourable conditions not provided on other levels. The school-level curriculum is of particular importance, because it defines the school's curriculum vision and aims, content, organization and evaluation (Glatthorns, 1997; Glatthorn, Jailall, 2008; Kliminskas, Janiūnaitė, 2007; Kliminskas, 2009).

A school-level curriculum (subsequently referred to as SC) which is subject to the constructivist approach, in this article referred to as a *constructivist school-level curriculum* (CSC). Construction and implementation of a constructivist school-level curriculum allows us aiming for consensus, which is the only criterion of knowledge objectification from the point of view of social constructivism (Jucevičienė, 2007). Application of the constructivist epistemology develops preconditions for the transition from teacher-oriented to pupil-oriented curriculum. Such curriculum is realised by considering the learners' needs, interests, context, by creating the environment for the development of individual understanding and personal, social, subject-based competences and understanding learning as important

personal activity, which is subject to personal responsibility (Balevičienė, Jucevičienė, 2005; Chrusciel, 2006; Glasersfeld, 1984; Jucevičienė, 2007; Kelly, 1955; Resnick, 1987; Rupainienė, 2008; Strauss, 2000; Sutinen, 2008).

Regarding to the school-level curriculum functions, it defines four essential structural elements: vision and aims, content, organisation, implementation, monitoring and evaluation (Glatthorn, 1997; Saugėnienė, 2004). Application of a constructivist approach towards developing and implementing a school-level curriculum not related to the change of its structural elements, but the nature and conditions of implementation these elements in school communities is different.

Referring to the research literature, the discourse on defining a constructivist school-level curriculum features and features of its structural elements and the ways of implementation this kind of curriculum is limited. Another issue, what conditions are necessary for implementing this kind of curriculum? Curriculum, which open's for learner with respect to their interests and skills as well as to foster not only the societal values based on the 'thin theory of the good' but also the personal values based on the 'thick theory of the good' and to develop autonomy of personal thinking and empathy to those whose values are different (McLaughlin, 1997).

External conditions for the realization of CSC were presented in another publication by the author of this article and professor Brigita Janiūnaitė[1]. This article

---

[1] Kliminskas, R; Janiūnaitė, B. External Conditions for Implementing a Constructivist Approach Toward's a School-Level Curriculum. In *Changes in Social and Busines Environment: Proceedings of the 2nd International Conference,* November 8-9. Kaunas Universitety of Technology, Panevežys Institute, Lithuania. Kaunas: Technologija, ISSN 1822-7090, 2007, p.111-119 [ISI Proceedings].

addresses the research results of internal conditions of realization CSC by the aspect of cooperation and aiming for the learning organization at Lithuanians' comprehensive schools. The actuality for developing learning organizations at schools in the learning paradigm are presented at Jucevienė (2007), Kontautienė (2006), Rupainienė (2008), Simonaitienė (2008) Voulalas & Sharpe (2005) and other researches' publications.

The aim of the article is to provide rationale for the internal preconditions for implementing a constructivist approach into the school-level curriculum by the aspect of cooperation and aiming for the learning organization.

The article employs the methods of research literature analysis and content analysis of relevant documents.

The first part explains the essential features of a constructivist school-level curriculum and necessary internal conditions of its implementation. The second part presents the research methods. The third part presents the research results of CSC realization conditions by the aspect of cooperation and aiming for the learning organization.

Features of a constructivist school-level curriculum and conditions of its implementation.

The essential features of CSC in details are presented in the publication of Kliminskas, Ričardas; Janiūnaitė, Brigita[1]. The realization of CSC based on the *vision of unified (connective) curriculum and differentiated aims* that are subjects for applying the principles of freedom degree-flexibility, openness and character education. CSC vision and aims determines the construction of compulsory and optional subjects of SC, constructed by applying a correlation-subject and wide-scale structures drawing on the features of coherence and consistency, flexibility, openness, integrity and context, meaningfulness and technological nature. The *content* should be relevant for differentiation and individualisation and reflect the development of common human values and high-level thinking skills typical for constructive teaching/learning. *Organisation* of a CSC is based on making a draft of integrated and coherent curriculum, learning-oriented timetables, apply strategies and methods of active teaching and learning and relate formal teaching and learning with non-formal education and self-study, to provide favourable conditions for implementing individual educational plans of students. CSC *is implemented* by the ways of mutual adaptation (open and applicable content), differentiated and individualised education, development of ICT-intensive and open for the external social environment and local community educational environment, which provides conditions for implementing the goals of the school and learners' educational aims as well as individual educational plans. Regulations or systems negotiated in the community and consistent with CSC aims, applied for

CSC monitoring and evaluation, the culture of continuing learning and cooperation is implemented.

Every structural element of a CSC has some specificity in terms of its implementation, but for all of them it is necessary cooperation of school community, consensus on CSC vision and aims, using pupils' experience and considering the local context, continuing cooperation and learning in action, non-formal and informal learning.

Internal conditions of creating a vision and aims are characterised by all community stakeholders' involvement in the working group on a school-level curriculum; assistance of external experts; aiming to become a learning organisation; giving teachers more freedom in the field of the curriculum; defining complex aims in terms of the desirable competences. Conditions of content construction characterised by exercising team work; using integrated programs; satisfying pupils' needs for self-expression; preparing a program for developing an ICT infrastructure, revealing the policy and strategy for ICT application in the curriculum. Conditions of organising the process are characterised by considering the characteristics of learning-oriented timetables; provisions for active learning strategies and methods; regulations on accreditation and assessment of pupils' prior informal and self-directed learning and self-study. Conditions of implementation, monitoring and evaluation are characterised by teachers' activity evaluation in terms of CSC implementation; application of a constructive approach towards monitoring and evaluation of a school-level curriculum (table 1).

Table 1

Themes, subthemes characterising the internal conditions of implementing a constructivist school-level curriculum

Analysis theme	Analysis subtheme
1. Conditions for constructing a CSC vision and aims	1.1. All community stakeholders are involved in the working group on a school-level curriculum. 1.2. Assistance of external experts is employed. 1.3. Aiming to become a learning organisation. 1.4. Teachers are given more freedom in the field of the curriculum. 1.5. Complex aims are defined in terms of the desirable competences.
2. Conditions for constructing a CSC content	2.1. Team work is exercised. 2.2. Integrated programs are used. 2.3. Pupils' needs for self-expression are satisfied. 2.4. Program for developing an ICT infrastructure has been prepared, policy and strategy for ICT application in the curriculum has been revealed.
3. Conditions for organising a CSC process	3.1. The characteristics of learning-oriented timetables have been considered. 3.2. Provisions for active learning strategies and methods have been made. 3.3. Regulations on accreditation and assessment of pupils' prior informal and self-directed learning and self-study have been made.
4. Conditions for CSC implementtation, monitoring and evaluation	4.1. Evaluation of teachers' activity in terms of CSC implementation (employment of constructive teaching and learning strategies and methods, cooperation, development of ICT-intensive educational environments, etc.) 4.2. Development and application of formative holistic system of monitoring and assessment.

---

[1] Kliminskas, Ričardas; Janiūnaitė, Brigita. The Construction of School Level Curriculum in the Context of Constructivist Approach//Social Sciences. ISBN 1392-0758, 2007, no. 1(55), p. 48-61 [CSA Social Science Collection (Sociological Abstracts) and EBSCO (SocINDEX with Full Text)].

This article addresses only internal conditions of CSC implementation in comprehensive schools in Lithuania (which faces rapid changes) by the aspect of cooperation and seeking of learning organization.

Methodology of research on the internal conditions of constructivist school-level curriculum implementation

The methodology of the research is based on the following theoretical statements:

• **The theory of social constructivism,** which highlights the importance of understanding acquired by the learner, competences, as a product of social interaction, acquired when learners are involved in performance based on their experience, in interaction with the external social, cultural, natural environment, in cooperation with the senior who provide assistance (Ahlberg, 1997; Austin, Harkins, 2008; Bruner, 1960; Piaget, 1958; Vygotsky, 1987).

• **The concept of the curriculum, oriented towards the child, society and educational process,** which integrates curriculum development, implementation and learners' experience and determines a holistic approach towards education (Dewey, 1902; Doll, 1993; March, 1997; March, Willis, 2007).

• **The concept of the unified curriculum,** which highlights children's personal and social development. The development and implementation of this kind of curriculum first of all considers learners' specific needs and aims that have emerged in the performance of a particular school and only then is concerned about finding the best ways to satisfy the requirements of the national curriculum (Young, 2000).

• **The model of pedagogical system and educational paradigm change,** which focuses on the transition from the traditional pedagogical system to the contemporary technology-based pedagogical system with extensive application of expert systems and internet databases (Branson, 1990).

• **The concept of educational environment, which** highlights its interaction with learners' individual learning environments in the context of paradigm change and is essential for constructive teaching/learning (Wilson, 1998).

The method of document analysis, drawing on the post-modern/critical approach to the material culture, which interprets all the products of the society as texts, was employed. The *internal documents* were teaching plans of particular schools, strategic, annual plans, annual activity programs, timetables. Groups of words, sentences, items and articles, which refer to particular analysis themes and sub themes describing these conditions, were treated as data for the analysis of CSC implementation conditions (table 1). The method of content analysis was employed to address the data on CSC implementation.

Ten comprehensive schools in Lithuania were selected for school-level curriculum analysis drawing on the criteria of territorial coverage, number of pupils, involvement in the national schools development program from 2002 to 2006 and selection of urban and rural schools.

The third part presents the most important results of the analysis of internal conditions of CSC implementation with reference to cooperation and aiming for the learning organization.

Manifestation of internal conditions for implementing a constructivist school-level curriculum with references to the cooperation and aiming for the learning organization

All community stakeholders' participation, teamwork exercising in construction of school-level curriculum. The culture of cooperation, characterised by the support, join work and consensus on values, stimulate teachers to work together, initiate changes. What means and features of its implementation are mentioned in particular schools teaching plans (TP), strategic (SP) and annual plans (AP), annual activity programs?

In four schools, TP were founded rewrote three items from the national General Teaching Plan 2005–2007 (2005). In two schools, ccommunities were acquainted with teachings plans. In four schools no information about that was founded, but cooperation and team work was mentioned in strategic and annual plans (table 2).

Table 2

Cooperation and team work in schools'

School	Cooperation and team work
A	School curriculum content constructing is based on school's community cooperation and democratic values (TP)
B	School teaching plan is prepared until June 29th. Community is acquainted with it (TP).
C	School curriculum content creating is based on school's community cooperation and democratic values (TP).
D	School curriculum content constructing is based on school's community cooperation and democratic values (TP). In school organized teams: School information system, Social help, Documents experts, Preventive work, Learning schools network, Learning environment, Professional orientation, Human recourses management, Special education, Attestation, Methodical Council, Directorate Council, Teacher inquiry. Students counseling, cooperation for special education (AP).
E	The essential principals are cooperation and democracy.
F	School's community – learning community, participating in creating school's vision, philosophy, aims and responsible of its implementation (AP).
G	One of the goals – to promote communication and cooperation with colleagues, students, parents (AP).
H	School teaching plan is prepared until June 20th. Community is acquainted with it (TP). Foreseen to prolong cooperation with X secondary school and X vocational school, after school activities to coordinate with X day center (AP).
I	School's curriculum content constructing is based on school's community cooperation and democratic values (TP).
J	To create active school's community and to provide attitude for continually learning and working together in teams.

In school (D) is enumerated 12 different teams, but in their list the team of teaching plan is not included. In AP of this school is mentioning about teacher's inquiry on parents' involvement in education activities, but in all schools the parents are not included in school's TP working group. In all schools, except two, in SP and AP unforeseen concrete measures for spreading a cooperation culture and teamwork. In schools D, H is mentioned cooperation with outside partners: other schools, centres, but a means for spreading cooperation inside schools is not foreseen.

Generalizing the research findings, cooperation in creating curriculum is declared in schools' documents, but concrete activities and teams, except TP working group, are not founded. From the other side, many questions in schools are solved none formally and not mentioned in written documents.

In schools under the research documents are founded such strengths: 'students, teachers, parents dialog' (C school), 'wide cooperation with country and municipality comprehensive schools' (E), etc., and such weaknesses: 'interdisciplinary connections and integration' (A), 'insufficient parents information, insufficient communication with other educational institutions' (D), 'insufficient parents participation in school's life and cooperation with school' (H), etc.

At SP and AP documents (means) of schools under the research written in different cooperation activities forms: meetings of parents; non-traditional lessons; virtual communication between teachers and students; parents' research; parent's days; lectures for parents; exhibitions; parents clubs; information booklets; school internet information, etc, but all of those activities are not connected with SC construction. Generally, the conditions for constructing school level curriculum by the aspect of cooperation are suitable partly – it is as a weakness in many schools.

Aiming for the learning organization. The internal conditions of constructing a CSC vision and aims are determined by the competence of teachers, managers, parents and other school community members, involvement in this activity and cooperation, aiming to become a learning organisation, using the external expertise, provision of more freedom for teachers in the field of the *curriculum*. That is to say, CSC construction and implementation can be organized as learning process with involvement of school community and aiming to become a learning organization.

In SWOT analysis of seven schools under research isn't mentioned the aiming to become the learning organization, but analyzing schools visions, it is founded at six schools. For example, 'Cooperating, partnership and working as team learning community' (D), 'Learning community, actively participating in construction of vision, philosophy, taking responsibility of it's implementation' (F), 'Learning, modern, open for changes comprehensive school with education mission' (G) (table 3).

Table 3

Schools' visions

School	Vision
A	Modern, lifelong learning, open for changers, upholding general society's attitudes.
B	Modern basic school – lifelong learning organization, open for changers, upholding native language, culture and healthy life stile.
D	Cooperating, partnership and working as team learning community.
E	Excellent material facilities, many students, competent teachers. Modernize teaching, using information communication technologies, teaching foreign languages regarding student's needs. School's orientation to novelties involving all community, becoming learning community.
F	Learning community, actively participating in construction of vision, philosophy, taking responsibility of it's implementation.
G	Learning, modern, open for changes comprehensive school with education mission.
J	Ten grades comprehensive schools, in which appreciate students efforts and work, teaching cultural and curious person, stimulate initiative and changes, gives computers literacy.

In all schools under research missions is proclaimed teaching of learning individuals, but in the strategic and annual aims, aiming to become a learning organization, except one school (B) isn't proclaimed (table 4).

Table 4

Strategic and annual aims of schools

School	Strategic and annual aims
A	The institution, which opens for changers and novelties, safe, meet's students, parents, teachers and society needs and encouraging improvement.
B	*Persistent strategic priority – school as learning organization.*
C	To improve education quality and efficiency and to make conditions for lifelong learning.
D	To improve student's results and learning motivation, modernize library.
E	To secure quality education at safe and healthy environment.
F	To create attractive school, which is based on attitudes of transparency, justice, equity, providing learning of natural potencies, initiatives, and enterprise, not only knowledge?
G	1. Improvement of learning process and teaching quality. 2. Creation of community member's self-analyses and evaluation system. 3. Raising teacher's qualification, as key component of teaching and learning quality. 4. Together with family overcome the child's learning and socialization difficulties. 5. To educate personality, able to prolong learning and get secondary education or marketable vocational qualification.
H	1. Development of teaching quality. 2. Development of Citizenship.
I	1. Improving attendance of students. 2. Raising the quality of teaching and learning. 3. Providing a psychological-pedagogical assistance for students. 4. Education of citizenship.
J	Over 3 years to become a modern, open school – educational, cultural, athletics center.

For example, 'To improve education quality and efficiency and to make conditions for lifelong learning' (C), 'To secure quality education at safe and healthy environment (E), '1. Improvement of teaching quality. 2. Development of Citizenship' (H). That's why aiming to

become a learning organization can be only vogue words at thus schools (table 4).

Internal conditions of CSC implementation with reference for the aiming to become a learning organization are suitable only to some extent, because this aim is not based on specific, concrete means.

Conclusions

Internal conditions of creating a vision and aims are characterised by all community stakeholders' involvement in the working group on a school-level curriculum; assistance of external experts; aiming to become a learning organisation; giving teachers more freedom in the field of the curriculum; defining complex aims in terms of the desirable competences. Conditions of content construction characterised by exercising team work; using integrated programs; satisfying pupils' needs for self-expression; preparing a program for developing an ICT infrastructure, revealing the policy and strategy for ICT application in the curriculum. Conditions of organising the process are characterised by considering the characteristics of learning-oriented timetables; provisions for active learning strategies and methods; regulations on accreditation and assessment of pupils' prior informal and self-directed learning and self-study. Conditions of implementation, monitoring and evaluation are characterised by teachers' activity evaluation in terms of CSC implementation; application of a constructive approach towards monitoring and evaluation of a school-level curriculum.

With reference to the conditions of constructing CSC content, cooperation normally manifests itself as activities of the workgroup on constructing a school-level teaching plan and other conventional forms – but it is indicated as a weakness in many schools. Internal conditions of CSC implementation with reference to cooperation and aiming to become learning organization is implemented only to some extent because parents isn't involved in workgroups on the curriculum construction; aiming to become a learning organisation isn't based on specific means.

References

1. Ahlberg, M. Continual quality improvement as high quality learning in Finnish. University of Joensuu. Research Reports of the Faculty of Education. 1997, No.68.
2. Austin, M.S, and Harkins, D.A. Assessing change: can organizational learning 'work' for schools? *The Learning Organization* [interactive], 2008, Vol. 15 No. 2, p. 105-125 [2008-12-06]. Prieiga per Emerald Group Publishing.
3. Balevičienė, S.; Jucevičienė, P. 'Constructivist Pedagogical System of Socially Significant Topic in Natural Sciences: Its impact on the Change in Students' Attitude Towards the Subject Thought'. *Social Sciences,* 2005, 3(49), p.116-128.
4. Bitinas, B. Edukologinių tyrimų metodologiniai vingiai. *Pedagogika.* 2005, nr.79, p. 97–103.
5. Bitinas, B., Rupšienė, L., Žydžiūnaitė, V. *Kokybinių tyrimų metodologija: vadovėlis vadybos ir administravimo studentams.* I dalis. Klaipėda, S. Jokužio leidykla-spaustuvė, 2008, 152 p.
6. Bitinas, B., Rupšienė, L., Žydžiūnaitė, V. *Kokybinių tyrimų metodologija: vadovėlis vadybos ir administravimo studentams.* II dalis. Klaipėda, S. Jokužio leidykla-spaustuvė, 2008, 156 p.
7. Branson, R.K. Issues in designing of schooling: changing the paradigm. *Education Technology,* 1990, vol. xxx, 4, p.7-10.
8. Bruner, J. *The Process of Education.* Cambridge, MA: Harvard University Press, 1960.
9. Bruzgelevičienė, R.; Žadeikaitė, L. Dokumentinis tyrimas kaip socialinio kokybinio tyrimo metodas. *Pedagogika,* 2007, T. 86, p. 82-89.
10. Chrusciel, D. The role of curriculum in organizational significant change planning. *The Learning Organization,* 2006, vol. 13, no. 3, p. 215-229.
11. Dewey, J. *The child and the curriculum.* Chicago, IL: University of Chicago Press, 1902.
12. Doll, W.E. *A Post-Modern Perspective on Curriculum.* New York. Columbia University. Teachers College Press, 1993, 215 p. ISBN 0-8077-3217-6.
13. Glasersfeld, E. *An introduction to radical constructivism.* New York: W.W. Norton & Company, 1984, p. 17-40.
14. Glatthorn, A.A. *The Principal as Curriculum Leader: Shaping What Is Taught and Tested.* Corwin Press, A SAGE Publications Company. Open University Press. Milton Keynes, Philadelphia, ISBN 0-8039-6427-7, 1997, p. 14-147.
15. Glatthorn, A.A., Jailall, J.M. *The Principal as Curriculum Leader: Shaping What Is Taught and Tested.* Corwin Press, 3rd edition, ISBN-10:1412960359, 2008, 216 p.
16. Young M.F.D. *The Curriculum of the Future. From the New Sociology of Education to a Critical Theory of Learning.* Great Britain: Biddles LTD, 2000, p. 27-31.
17. Jucevičienė, P. *Besimokantis miestas*: monografija. Kaunas: Technologija, 2007, 407 p.
18. Kelly, G.A. *The Psychology of Personal Constructs.* Vol. 1,2. New York: W.W. Norton, 1955.
19. Kliminskas, R.; Janiūnaitė, B. The Construction of School Level Curriculum in the Context of Constructivist Approach. *Social Sciences,* 2007, no. 1(55), p. 48-61.
20. Kliminskas, R.; Janiūnaitė, B. External Conditions for Implementing a Constructivist Approach Toward's a School-Level Curriculum. In *Changes in Social and Busines Environment: Proceedings of the 2nd International Conference,* November 8-9. Kaunas Universitety of Technology, Panevėžys Institute, Lithuania. Kaunas: Technologija, 2007, p. 111-119.
21. Kliminskas, R. (2009). Konstruktyvistinis požiūris į mokyklos lygmens *curriculum* realizavimo sąlygas. Daktaro disertacija, KTU, Kaunas.
22. Kontautienė, R. *Bendradarbiavimo sistema ir jos valdymas mokykloje*: studijų knyga. Klaipėda: Klaipėdos universiteto leidykla. 2006.
23. Lewy, A. *Valstybinės ir mokyklos lygmens ugdymo programos.* Vilnius: Margi raštai, 1998, 110 p. ISBN 9986-09-174-8.
24. Maaranen, K., Kynasläthi, H., Krokfors, L. Learning a teacher's work. *Journal of Workplace Learning* [interaktyvus], 2008, Vol. 20, No. 2, p. 133–145 [žiūrėta 2008-11-30]. Priega per Emerald Group Publishing.
25. March, C.J. *Planning, Management and Ideology: Key Concepts for Understanding Curriculum 2.* A Fully Revised and Extended Edition. London. The Falmer Press, 1997, 313 p.
26. March, C.J.; Willis, G. *Curriculum: alternative approaches, ongoing issues.* (4th Edition). Prentice Hall, 2007, 416 p.
27. Mason, J. *Qualitative Researching.* Sage Publications. London, Thousand Oaks, New Delhi, 1996, 180 p. ISBN 0 8039 8985 7.
28. McLaughlin, T.H. *Šiuolaikinė ugdymo filosofija: demokratiškumas, vertybės, įvairovė.* Kaunas: Technologija, 1997, 279 p. ISBN 9986-13-576-1.
29. Piaget, J. Science of education and the psychology of the child. New York: Grossman Publishers, 1969.
30. Resnick, L. *Constructing knowledge in school.* In L.S. Liben (Ed.), Development and learning: Conflict or congruence? Hillsdale, NJ: Erlbaum, 1987.
31. Rupainienė, V. *Pradinės mokyklos bendruomenės bendradarbiavimas diegiant curriculum inovacijas skirtingų edukacinių paradigmų aspektu*: daktaro disertacija, Kaunas, 2008, 181 p.

32. Saugėnienė, N. *Ugdymo programų planavimas ir realizavimas*: mokomoji knyga. 2-sis leidimas. Kaunas: Technologija, 2004, 49 p. ISBN 9955-09-490-7.
33. Simonaitienė, B. *Mokyklos – besimokančios organizacijos vystymas*: mokslo studija. Kaunas: Technologija, 2007, 100 p.
34. Strauss, S. *Theories of cognitive development and their implications for curriculum development and teaching*. In B. Moon, M. Ben-Peretz, and S. Brown (Eds.), Routledge international companion to education, London: Routledge, 2000, p. 33-50.
35. Sutinen, A. Constructivism and education: educations as an interpretive transformational process. *Studies in Philosophy of Education* [interactive]. 2008, Nr. 27, p. 1-14 [2008-12-16]. Prieiga per Springer.
36. Voulalas, Z.D., Sharpe, F.G. Creating schools as learning communities: obstacles and processes. *Journal of Education Administration*. Vol. 43 No. 2, 2005, pp. 187-208.
37. Vygotsky, L.S. *Collected works*. R.W. Rieber & A.S. Carton (eds.), N. Minick (trans.). New York: Plenum, 1987.
38. Wilson, B.G. (Ed.). *Constructivist Learning Environments*. Educational Technology Publications Englewood Cliffs, New Jersey, USA, 1998, p. 11-33.
39. *2005-2007 metų bendrieji ugdymo planai*. Švietimo ir mokslo ministerija. Švietimo aprūpinimo centras, 2005, p 76. ISBN 9986-03-566-X.

Ričardas Kliminskas

Konstruktyvistinis požiūris į mokyklos lygmens *curriculum* realizavimo vidines sąlygas bendradarbiavimo ir siekio tapti besimokančia organizacija aspektu

Santrauka

Konstruktyvizmo bruožų taikymas mokyklos lygmens *curriculum* (MC) sudaro prielaidas pereiti nuo orientuoto į mokytoją į orientuotą į mokinį *curriculum*, kurį realizuojant pirmiausia atsižvelgiama į besimokančiųjų reikmes, interesus, kontekstą, sudaromos sąlygos suprasti mokymąsi kaip svarbią asmeninę veiklą, už kurią kiekvienas yra atsakingas Atsižvelgiant į MC funkcijas, išskiriami keturi pagrindiniai mokyklos lygmens *curriculum* struktūriniai elementai*: vizija, tikslai; turinys; organizavimas; įgyvendinimas, stebėsena, vertinimas. Konstruktyvizmo bruožų taikymas mokyklos lygmens *curriculum* nesusijęs su jo struktūrinių elementų kaita, bet skiriasi šių elementų realizavimo mokyklos bendruomenėje pobūdis ir sąlygos. Mokymosi paradigmoje ne tik *curriculum* įgyvendinimas, bet ir jo konstravimas, organizavimas, vertinimas turi būti siejamas su besimokančiojo aktyvia, prasminga, konstruktyvia veikla, kurios realizavimui turi įtakos ne tik klasės, bet ir mokyklos, savivaldybės (steigėjo) ir nacionalinis *curriculum*. *Curriculum* yra vientisas, todėl problemiška realizuoti klasės lygmens *curriculum*, jeigu tam nesudaromos sąlygos kituose *curriculum* lygmenyse. Ypač svarbus mokyklos lygmens *curriculum*, kuriame apibrėžiama mokyklos *curriculum* vizija, tikslai, formuojamas turinys, numatomas *curriculum* organizavimas, įgyvendinimas, stebėsena ir vertinimas.

Šiame straipsnyje pateikiami vidinių KMC realizavimo sąlygų tyrimo Lietuvos bendrojo lavinimo mokyklose rezultatai bendradarbiavimo ir siekio tapti besimokančia organizacija aspektu.

Straipsnio tikslas – atskleisti konstruktyvistinio požiūrio realizavimo mokyklos lygmens *curriculum* vidines sąlygas bendradarbiavimo ir siekio tapti besimokančia organizacija aspektu.

Tyrimo metodai – mokslinės literatūros ir dokumentų turinio (content) analizė.

Straipsnį sudaro trys dalys. Pirmojoje dalyje atskleidžiami konstruktyvistinio mokyklos lygmens *curriculum* esminiai bruožai ir tokio *curriculum* realizavimo vidinės sąlygos. Antrojoje dalyje pristatoma KMC realizavimo sąlygų tyrimo metodologija. Trečiojoje dalyje pateikiami vidinių KMC realizavimo sąlygų tyrimo Lietuvos bendrojo lavinimo pagrindinėse mokyklose (10 mokyklų) rezultatai bendradarbiavimo ir siekio tapti besimokančia organizacija aspektu.

Ištyrus KMC realizavimo vidines sąlygas bendradarbiavimo ir siekio tapti besimokančia organizacija aspektu, nustatyta, kad mokyklų bendruomenės suvokia nuolatinio mokymosi, bendradarbiavimo ir siekio tapti besimokančia organizacija svarbą sėkmingam vaikų ugdymui(-si) ir tai deklaruoja vizijose, tačiau tai, kad dauguma mokyklų nekelia strateginių ir metinių tikslų šiuo aspektu, leidžia teigti, jog KMC realizavimo analizės potemė – siekis tapti besimokančia organizacija – tenkinama iš dalies.

About the author

Ričardas Kliminskas, PhD in Social Sciences (Educational Science); Head of Education Department at Panevezys County Governor's Administration.
Research interests: comprehensive school curriculum, constructivist theory, educational management.
E-mail: ricardas.kliminskas@panevezys.aps.gov.lt

ADAPTATION OF IMMIGRANTS FROM LITHUANIA IN IRELAND'S COMPANIES: PRACTICAL CASE

Vilmantė Kumpikaitė

Kaunas University of Technology, Lithuania

Abstract

The paper reports the findings of a study of 106 emigrants from Lithuania working in Ireland. Received results demonstrate quite fast and easy Lithuanians' adaptation in Ireland's companies. However some facts of discrimination and not equal rights according to the nationality and gender were found during this survey. Therefore these results as well as opinion of employers' about the process of adaptation in their companies are introduced in the paper.

Keywords

Migration, adaptation, socialization, Ireland, Lithuania.

Introduction

Ireland has experienced a remarkable change in its migratory patterns in recent years and has moved from experiencing large-scale emigration to receiving significant inflows (Barrett & Duffy, 2008). From May of 2004, acceleration in the inflow has been seen due to the ten New Member States of the EU being given full access to the Irish labor market. One of these 10 countries is Lithuania.

Looking at this situation we face the problem of immigrants' adaptation in Ireland's organizations. The main problems new-comers confront are such as foreign language, discrimination and not equal rights (Xu, Shim, Lotz and Almeida (2004), Darity ad Mason (1998), Filstad, Dean, Fahsing and Gottschalk (2007), Heath and Yi Cheung (2006), Fogarty and Dirsmith (2001)). Discrimination's and adaptation's questions in Ireland were investigated by Pilinger (2006), McGinnity, O'Connell, Quinn and Williams (2006), O'Connell, McNeely and Hall (2008), Barrett and Duffy (2008), Barrett, Callan, O'Neill, Russell, Sweetman and McBride, J. (2000).

Questions of emigration were analyzed by Matiušaitytė (2003), Sipavičienė (2006), Daugeliene (2007), Dapkus and Matuzevičiūtė (2008), Ciarniene and Kumpikaite (2008), Čekanavičius and Kasnauskienė (2009) and others recently in Lithuania but emigrants' adaptation at work stayed still not analyzed subject.

This paper pays on prior of immigrants' professional and social adaptation and discrimination's manifestations in companies in Ireland.

The purpose of this paper is to introduce the findings of a study about Lithuanians' adaptation in Irish companies of 106 emigrants from Lithuania working in Ireland.

The object of the paper is adaptation's process of Lithuanians in Ireland's companies.

Methods of the research are scientific literature analysis, empirical research, and correlation analysis.

The framework of the research

After entering the EU Ireland became for Lithuanians the second most popular country for migration after United Kingdom. The number of all emigrants going to Ireland from Lithuania grew up from 3.4 percent in 2003 to 7.8 percent in 2004 and reaching 11.7 percent (1 983

migrants) in 2008 (see Table 1). And these numbers show only official declared amount of emigrants. It means that real numbers should be bigger.

Table 1

Emigration from Lithuania in percent

Purpose country	2003	2004	2008
Great Britain	12,9	26,2	26,3
Ireland	**3,4**	**7,8**	**11,65**
Spain	5,4	5,5	5,4
Belorussia	4,3	3,2	..
Norway	2,2	1,6	..
Denmark	1,5	1,2	..
France	1,4	1,2	..

Source: Migration Annual 2004. Statistical Yearbook of Lithuania 2009

Figure 1 shows numbers of Lithuanian emigration according to purpose countries. As we can see United Kingdom stays the most popular country following by Ireland and the USA.
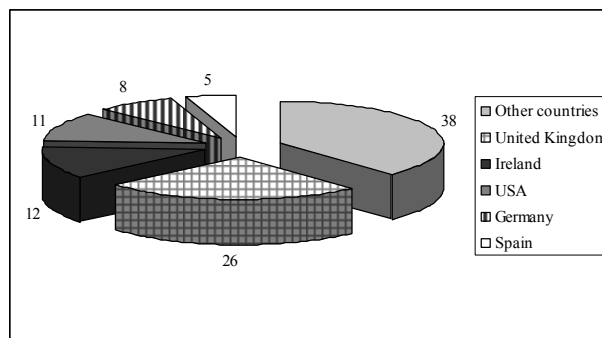
Source: www. statgov.lt

Figure 1. Countries where Lithuanians emigrated in 2008, in percent

While Lithuanians have the freedom to work, there is a notable level of uncertainty with regards to their work situations. A number of the Lithuanians who arrived prior to 2004 came through the work permit system. Those on work permits talked about their exploitation and feelings of vulnerability in the workplace (Immigrant Council of Ireland, 2008).

While many studies (McGinnity, O'Connell, Quinn and Williams (2006), Heath and Yi Cheung (2006), Darity and Mason (1998), FAQs Research (2001) and others) show immigrants experiencing labor market disadvantages relative to natives, this is unsurprising in the case of newly arrived immigrants. These new arrivals

may lack location-specific human capital such as language and knowledge of the local labor market. Some respondents, whether because of a lack of recognition of qualifications, racism, or migration status, had failed to secure a job, which sometimes led to depression and frustration (Immigrants Council of Ireland, 2008).

Hence, it would be expected that their earlier period in the host country would see them earning less or holding lower-level jobs. Concerns arise, however, for the immigrants themselves and for the host countries if immigrants are unable to overcome these initial disadvantages. A failure to integrate into the labor market, by which we mean that immigrants experience the same levels of labor market success as comparable natives, can result in immigrants becoming an excluded minority with implications for social cohesion. The persistence of immigrants in lower-paid and less skill-intensive occupations may also lead to a productivity loss for the host economy (Buret and Duffy, 2008).

For purpose to investigate ethnical and cultural differences in the work environment O'Connell and McGinnity (2008) provided a survey which found out that immigrants to Ireland are not as successful as native citizens of Ireland. They face with bigger possibility not to get job and with discrimination looking for job and already working twice more than Irishmen (see Table 2).

Table 2

Facts of discrimination

	Irish	Not Irish	Total
Did not feel discrimination	95,4%	89,9%	94,9%
Felt discrimination	**4,6%**	**10,1%**	5,1%
Number of respondents	13,001	971	13,972

Source: P.J. O'Connell, F.McGinnity, Immigrants at work ,p.36, 2008

In year 2008 Immigrant Council of Ireland provided a research among Chinese, Indians, Lithuanians and Nigerians. 78 percent of Indian and 55 percent of Lithuanian respondents did not inform about any problems at work. But these two groups of respondents faced with sneering from clients while Nigerians faced with racism.

Levels of satisfaction with the recognition of qualifications were significantly lower for Chinese and Lithuanian respondents. Around one-third of both groups felt their qualifications were fully recognized in their current job, while more than 40 per cent of both groups felt that recognition of qualifications was not forthcoming.

However, a number of interviewees highlighted the difficulties in getting recognition for qualifications, with comments such as 'our qualifications are not recognized here'. This leads to a waste of human capital with migrants not necessarily working in areas in which they have trained. For example, one interviewee commented that 'those who come here are all well-qualified, well-educated people so their potential is not being used' (Immigrant Council of Ireland, 2008).

Socialization has long been recognized as important in organizational functioning. Concerned with engendering the skills that members need to exercise judgment, socialization involves the long-term internalization of the values, norms, and culture of an organization (Inzerille and Rosen, 1983; Meek, 1988).

Based on analyzed literature and researches it was depicted so main fields of adaptation problems (see Table 3) and developed following assumptions:

1. Professional adaptation lasts shorter than social adaptation.
2. It is quite hard for emigrants to adapt at work.
3. Adaptation at work of emigrants continues around 6 months in average.
4. Emigrants face with discrimination at work.
5. The main problem starting to work is negative view for a new-comer.
6. Duration of emigrants' adaptation depends on their gender, age and education.
7. Adaptation process is the most complicated for older men with higher qualification.
8. It is care for adaptation in organizations.
9. The best work conditions and microclimate is provided for Irishmen.

Table 3

Analyzed questions

Parts of questionnaire	Source
Professional adaptation	Куприн, Денисова, 2001
Social adaptation	Inzerille and Rosen, 1983; Meek, 1988, Fogarty and Dirsmith, 2001
Duration of adaptation	O'Connell, McNeely and Hall, 2008
Microclimate	Koys and DeCotiis, 1991, Lindell and Brandt, 2000
Discrimination	Barrett *et al*, 2000; Darity and Mason, 1998, FAQs Research, 2001, Heath and Yi Cheung, 2006, McGinnity, O'Connell *et al*, 2006, Pillinger, 2006

Research results

The sample of the survey was 106 Lithuanian employees working in Ireland. The questionnaire out to Internet was used for this research.

Research results are given according to provided assumptions.

1st assumption. Professional adaptation lasts shorter than social adaptation.
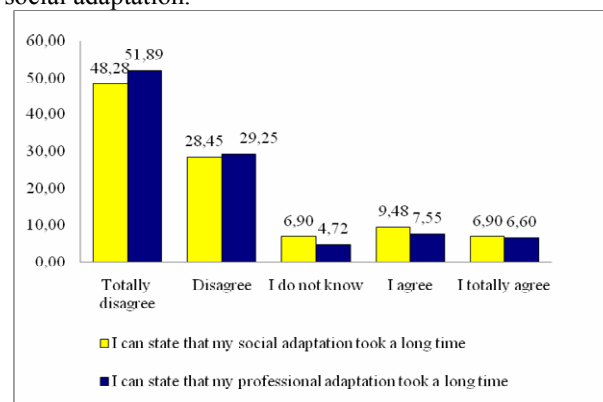

Figure 2. Time of professional and social adaptation in percent

Looking at time of adaptation (see Figure 2) we can see that more than 50 percent of respondents do not need much time for this. 16,38 percent of respondents agreed that their social adaptation and 14,15 percent agreed that

their professional adaptation took a long time. We see that difference is very small but still we can say that social adaptation takes a little bit more time than professional adaptation.

2ⁿᵈ assumption. It is quite hard for emigrants to adapt at work.

14 percent (see Figure 3) of respondents stated that it is not easy to adapt in their organization, 15 percent of respondents did not have opinion about this and 71 percent thought that it is quite easy to adapt in the organization. Therefore assumption that it is quite hard for emmigrants to adapt at work proved incorrect.
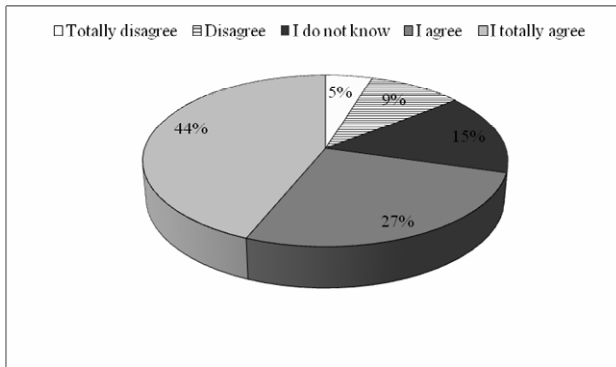

Figure 3. I can state that it is easy to adapt in my organization

3ʳᵈassumption. Adaptation at work of emigrants continues around 6 months in average.

Figure 4 gives us the information about adaptation's duration. Adaptation's period continued 1-3 months for 84 percent of respondents, 10 percent of respondents need 4-6 moths for adaptation and only 6 percent of respondents needed more than 6 months for adaptation. Consequently, 3ʳᵈ assumption was not verified too.
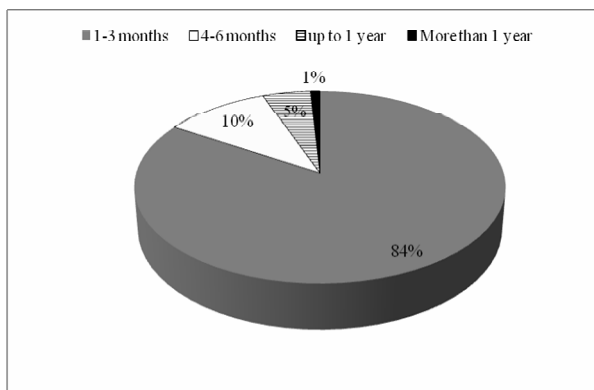

Figure 4. Duration of adaptation

4ᵗʰ assumption. Emigrants face with discrimination at work.

Respondents' speaking not native language was the biggest problem for adaptation in organizations (see Figure 5). 33 respondents stated that it was hard to adopt for this reason and 4 respondents had problems with discrimination.
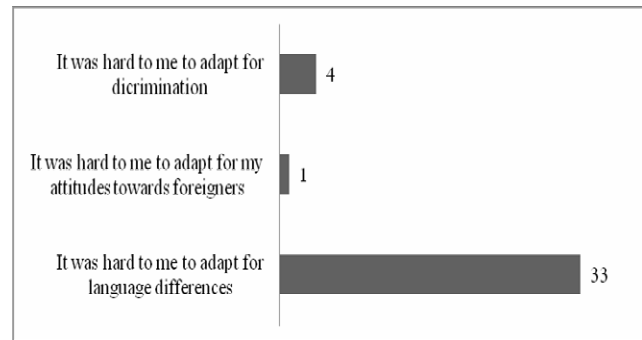

Figure 5. Problems for adaptation

Speaking more about discrimination it was found that 16 percent of respondents answered that it is stereotype opinion about foreign born persons in their organization. 4 percent mentioned that nationality can become the mock in their organization. 20 percent of all respondents felt sneering in their organizations and 4percent of them felt this for their nationality. 25 percent of employees' told that their organizations do not try to prevent discrimination among employees. 34 percent of respondents answered that it is sneering at employees for their not good English speaking and in 2 cases it was mentioned that this is done in cruel way. 8 percent of respondents told that better not to speak about their home land because their colleagues do not like this.

Finalizing we can state that 4ᵗʰ assumption was proved partly.

5ᵗʰ assumption. The main problem starting to work is negative view for a new-comer.

29 percent of respondents maintained that their fellows sometimes do not like other employees only because they are foreigners, 4 percent of them stated that this happens quite often. 44 percent of respondents mentioned that they needed more training and this is the biggest problem. 29 percent of respondents faced cover-up of information and knowledge, 17 percent faced unscrupulous competition, and 10 percent told that exist negative view for new-comer. Hence, the 5ᵗʰ assumption was incorrect also.

6ᵗʰ assumption. Duration of emigrants' adaptation depends on their gender, age and education.

No significant links were found between duration of adaptation and their gender, age, and education. Statistical significant Spearman's correlation was found between gender and education (r=0,415, p=0,01). This showed that Lithuanian women – emigrants have higher education that men. But 6ᵗʰ assumption became incorrect also.

7ᵗʰ assumption. Adaptation process is the most complicated for older men with higher qualification.

Results of this assumption are based on correlation analysis mentioned in 6ᵗʰ assumption. No statistical difference for duration of adaptation was found between gender and age.

8ᵗʰ assumption. It is care for adaptation in organizations.

Looking at these results (see Figure 6), 67 percent of respondents agreed with this statement and 29 percent more or less disagree. So this is quite big percent and situation should be improved. Therefore, following assumption was proved.
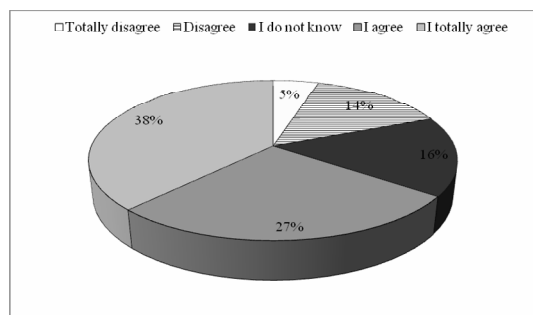
Figure 6. I can state that it is care of a new employer's adaptation in my organization

9th assumption. The best work conditions and microclimate is provided for Irishmen.

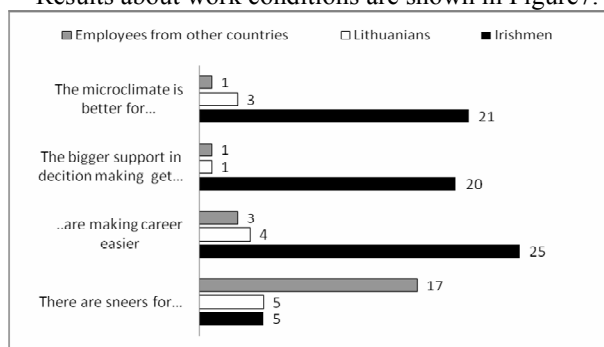Results about work conditions are shown in Figure7.

Figure 7. Work conditions, in percent

These results depicted that Irishmen (25 percent of positive answers) are making career easier than Lithuanians or people from other countries, microclimate is better for Irishmen (21 percent), the biggest support in decision making get Irishmen (20 percent), and only 5 percent of respondents told that Irishmen get sneers from other employees. Summarizing we can say that 9th assumption was proved.

Looking for links between different questions Spearman's correlation was used (see Table 4).

Questions of research are given bellow:

1. I can state that it is easy to adapt in my organization (VAR0001).
2. I can state that it is care of a new employer adaptation in my organization (VAR0002).
3. My professional adaptation took a very long time in this organization (VAR0003).
4. My social adaptation took a very long time in this organization (VAR0004).
5. It was hard to me to adapt for language differences (VAR0005).
6. It was hard to me to adapt for my attitudes towards foreigners (VAR0006).
7. It was hard to me to adapt for discrimination in a new organization (VAR0007).

Table 4

Spearman's correlations

		VAR0001	VAR0002	VAR0003	VAR0004	VAR0005	VAR0006	VAR0007
VAR0001	Correlation Coefficient	1,000	**,698(**)**	**-,441(**)**	**-,492(**)**	-,295(**)	-,024	-,245(*)
	Sig. (2-tailed)	.	,000	,000	,000	,002	,807	,013
	N	105	105	105	105	105	104	103
VAR0002	Correlation Coefficient	,698(**)	1,000	-,328(**)	**-,433(**)**	-,345(**)	-,003	-,240(*)
	Sig. (2-tailed)	,000	.	,001	,000	,000	,973	,014
	N	105	106	106	106	106	105	104
VAR0003	Correlation Coefficient	-,441(**)	-,328(**)	1,000	**,587(**)**	,260(**)	,058	,067
	Sig. (2-tailed)	,000	,001	.	,000	,007	,555	,498
	N	105	106	106	106	106	105	104
VAR0004	Correlation Coefficient	-,492(**)	-,433(**)	,587(**)	1,000	,362(**)	,109	,199(*)
	Sig. (2-tailed)	,000	,000	,000	.	,000	,268	,043
	N	105	106	106	106	106	105	104
VAR0005	Correlation Coefficient	-,295(**)	-,345(**)	,260(**)	,362(**)	1,000	,185	,047
	Sig. (2-tailed)	,002	,000	,007	,000	.	,059	,639
	N	105	106	106	106	106	105	104
VAR0006	Correlation Coefficient	-,024	-,003	,058	,109	,185	1,000	-,017
	Sig. (2-tailed)	,807	,973	,555	,268	,059	.	,863
	N	104	105	105	105	105	105	103
VAR0007	Correlation Coefficient	-,245(*)	-,240(*)	,067	,199(*)	,047	-,017	1,000
	Sig. (2-tailed)	,013	,014	,498	,043	,639	,863	.
	N	103	104	104	104	104	103	104

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Quite many statistical significant relations were found between different questions. The strongest links were found between duration of professional and social adaptation, care of adaptation is organization and its duration of social adaptation.

Four Irishmen employers participated in the described poll too. Their answers did not show any differences from employees' opinion. Employers maintained they themselves provide introduction for new employees; they take care about adaptation of employees, try to prevent possible discrimination, seek equal rights for employees and think that it is not hard to adapt in their organizations. Finalizing at all results; we can state that adaptation's process for surveyed Lithuanian emigrants in Ireland's organizations is not hard.

The research results let us to give such recommendations to improve and to make easier adaptation's process:

- To prepare a work place for a new employee; (Куприн, Денисова, 2001; Rosse, Miller, 2000),
- To make consistent introduction to a new position; (T.E.L.S.),
- To introduce a new employee with organization's activities, strategy, mission, possibilities for career etc. (T.E.L.S; Rosse, Miller, 2000);
- To train a new employee (Куприн, Денисова, 2001),
- To prepare action's and adaptation plans for a new employee (Куприн, Денисова, 2001; T.E.L.S.),
- Conversations with employees (Куприн, Денисова, 2001; T.E.L.S.),
- To provide a book of a newcomer (T.E.L.S.).

Conclusions

As the limitation of this research it could be mentioned too small sample of respondents that to speak and to conclude results for all Lithuanian emigrants in Ireland.

But summarizing received results, we can state that Lithuanians' adaptation at work in Ireland is not hard and long. Its duration continues basically 3-4 months similar as for non-immigrants. Moreover, it should be mentioned that the most number of assumptions were not proved. It shows that investigated respondents do not correspond to analyzed literature and researches. The reasons of this are not clear and could be analyzed in the future's surveys.

It is common practice that Irish companies do not have a developed human resources department and the work, which should be done by personnel managers, is done by the company's manager. Irish companies skip the introduction of the company and trainings when a new employee comes to work. Social adaptation takes a little bit longer than professional one, and because of that, Irish companies should pay more attention to psychological climate in the social environment.

After analyzing the results of questionnaires it was found that migrant women are more often to have higher qualification than men. This explains, why Lithuanian women's qualification is more rare recognizable than men's. But this does not have anything due to the length of adaptation period. The results show that there is no connection between the adaptation period and employee's gender, age or qualification. Some good findings should be mentioned too: assumptions, about emigrant's discrimination, hard and long adaptation process, were not proved.

Suggestions for the improvement of migrant adaptation in Irish companies were based on the research and academic papers.

As further research suggestions it could be mentioned cooperation and co working together with scientists from Ireland and other countries to analyze migrants' adaptation at work deeper. Similar research could be provided looking at adaptation at work of other nationalities migrants in Ireland or Lithuanian emigrants in other countries as well.

References

1. Barrett, A. & Duffy, D. (2008) Are Ireland's Immigrants Integrating into Its Labor Market? Economic and Social Research Institute, Dublin, Ireland, IMR, Vol. 42, No.3, 597–619.
2. Barrett, A., Callan, T., O'Neill, D., Russell, H., Sweetman, O. & McBride, J. (2000) How Unequal: Men and Women in the Irish Labour Market. General Research Series No. 176. Dublin: The Economic and Social Research Institute.
3. Čekanavičius, L. & Kasnauskienė, G. (2009). Too High or Just Right? Cost-Benefit Approach to Emigration Question. Inzinerine ekonomika – Engineering Economics, Vol. 61, No. 1, 28-36.
4. Ciarniene, R. & Kumpikaite, V. (2008). The impact of globalization on migration processes. Social Research. Šiauliai: Šiaulių universiteto leidykla. Vol. 13, No.3, 42-48.
5. Dapkus, M. ir Matuzevičiūtė, K. (2008), Lūkesčių įtaka emigracijai: Lietuvos atvejis. Ekonomika ir vadyba 2008. Tarptautinės mokslinės konferencijos pranešimų medžiaga, 343-349.
6. Darity, W. & Mason, P. (1998) Evidence on Discrimination in Employment: Codes of Color, Codes of Gender. The Journal of Economic Perspectives, Vol. 12, No.2, 63-90.
7. Daugeliene, R. (2007). The Peculiarities of Knowledge Workers Migration in Europe and the World. Inzinerine ekonomika – Engineering Economics, Vol. 53, No. 3, 57-64.
8. FAQs Research (2001). Racism in Ireland: The Views of Black and Ethnic Minorities. Dublin: Amnesty International (Irish Section).
9. Filstad, C., Dean, G., Fa hsing, I.A. & Gottschalk, P. (2007) Newcomers' Use of Colleagues as Role Models: Research Propositions for Investigative Thinking Styles of Law Enforcement Detectives, Knowledge and Process Management, Vol 14, No. 2, 71–80
10. Fogarty, T. J. & Dirsmith, M.W. (2001) Organizational Socialization as Instrument and Symbol: An Extended Institutional Theory Perspective, Human Resource Development Quarterly, Vol. 12, No.3, Fall.
11. Heath, A. & Yi Cheung, S. (2006). Ethnic Penalties in the Labour Market: Employers and Discrimination, Research Report No. 341, UK Department for Work and Pensions.
12. Immigrant Council of Ireland (2008). Getting on: From Migration to Integration Chinese, Indian, Lithuanian, And Nigerian Migrants' Experiences In Ireland.
13. Inzerille, G., & Rosen, M. (1983). Culture and organizational control. Business Research, 17, 281–292.
14. Koys D.J., DeCotiis T.A. (1991). Inductive Measures of Psychological Climate, Human Relations, 44, 3.

15. Lithuanian Statistics. www.statgov.lt
16. Lindell M.K., Brandt C.J. (2000). Climate quality and climate consensus as mediators of the relationship between organizational antecedents and outcomes, Journal of Applied Psychology, 85.
17. Matiušaitytė, R. (2003). Darbo jėgos migracija Europos Sąjungoje ir Lietuvoje. Vilnius: Politinės visuomenės institutas.
18. McGinnity, F., O'Connell, P., Quinn, E. & Williams, J. (2006). Migrants' Experience of Racism and Discrimination in Ireland. Dublin: The Economic and Social Research Institute.
19. Meek, V. (1988). Organizational culture: Origins and weaknesses. Organization Studies, 9, 453–473.
20. O'Connell, D., McNeely, A. & Hall, T. D. (2008) Unpacking Personal Adaptability at Work, Journal of Leadership and Organizational Studies, Vol. 14, No. 248, 2007-12-13.
21. Pillinger, J. (2006). An Introduction to the Situation and Experience of Women Migrant Workers in Ireland. Dublin: The Equality Authority.
22. Rosse, J. G.; Miller, H.E. Toward a comprehensive model of the employee adaptation decision process. Iš: Leeds Scool of Bussiness. 2000. [2009-04-17]: http://leeds-faculty.colorado.edu/Rosse/Research/WDSI-Adaptation.pdf / .
23. Sipavičienė, A. (2006). Tarptautinė gyventojų migracija Lietuvoje: modelio kaita ir situacijos analizė. Vilnius.
24. T.E.L.S.[interaktyvus]. Adaptation of new employees. Iš: Transeuropean Logistic Service. [2009-04-17]" http://eng.telsgroup.com/hr/vacancies/adaptaziya/?print=1
25. Xu, J., Shim, S., Lotz, S. & Almeida, D. (2004). Ethnic Identity, Socialization Factors, and Culture-Specific Consumption Behavior, Psychology & Marketing, Vol. 21, No. 2, 93–112.
26. Куприн, В. ; Денисова, Э. Профессиональная адаптация работников. Иш: ANT-Management, 2001. [2009-04-17]: http://www.ant-management.spb.ru/view_article?id=17/ .

Vilmantė Kumpikaitė

Lietuvių migrantų adaptacija Airijos organizacijose: praktinė studija

Santrauka

Šiandien Airija yra vertinama kaip viena atviriausių imigrantams šalių, besilaikanti iš ne Airijos piliečių darbo. Nuo 2004 metų gegužės mėnesio, kai 10 naujų narių įstojo į Europos Sąjungą, imigracijos mastai Airijoje išaugo. Viena iš minėtųjų 10 šalių yra Lietuva. Mūsų šalies piliečiai labai pamėgo Airiją migracijai ir paskutiniaisiais metais ji yra antroje po Didžiosios Britanijos pagal populiarumą migruoti. Tokia situacija kelia klausimus kaip migrantams pavyksta adaptuotis darbinėje veikloje ir su kokiomis problemomis jie ten susiduria. Straipsnyje analizuojama migrantų profesinė ir socialinė adaptacija bei diskriminacijos apraiškos Airijos organizacijose.

Šio straipsnio tikslas – pristatyti empirinio tyrimo apie lietuvių migrantų adaptaciją Airijos organizacijose rezultatus. Tyrimas atliktas 2009 metų kovo-balandžio mėnesiais. Jame dalyvavo 106 repondentai lietuviai, tuo metu dirbę Airijoje.

Tyrimo objektas – lietuvių migrantų adaptacijos procesas Airijos organizacijose.

Pastebėtina, kad dauguma, remiantis analizuota literatūra ir atliktais tyrimais, iškeltųjų hipotezių, nebuvo patvirtintos. To priežastys nėra aiškios ir galėtų būti įvardintos kaip tolimesnių tyrimų kryptys. Apibendrinant gautuosius rezultatus galima teigti, kad lietuvių adaptacija Airijos organizacijose nėra sunki ir ilga. Ji trunka vidutiniškai panašiai kaip ir ne imigrantų - 3-4 mėnesius. Be to, dauguma emigrantų nepatiria jokios diskriminacijos darbe.

Išanalizavus tyrimo rezultatus, nustatyta, kad lietuvės emigrantės moterys paprastai turi aukštesnį išsilavinimą nei emigrantai vyrai. Tai paaiškina, kodėl jų kvalifikacija pripažįstama mažiau nei vyrų. Tačiau išsilavinimas neturi jokios įtakos adaptacijos trukmei. Taip pat nenustatyti statistiškai reikšmingi ryšiai tarp adaptacijos trukmės ir respondentų lyties, amžiaus ir kvalifikacijos.

Pastebėtina, kad analizuotose Airijos įmonėse kolkas nėra labai stipriai išvystyta personalo skyriaus veikla, nes daugumą šio skyriaus darbų atlieka įmonės vadovas. Socialinė adaptacija trunka truputį ilgiau nei profesinė, todėl Airijos darbdaviai turėtų didesnį dėmesį skirti psichologinio klimato organizacijoje, gerinimui.

About the author

Vilmantė Kumpikaitė is Associated Professor at the Department of Management of Faculty of Economics and Management at Kaunas University of Technology, e-mail: vilmante.kumpikaite@ktu.lt, telephone: +37037323683. The major fields of scientific research are: human resource management; human resource development evaluation; cross-national human resource development; distance education and organizational learning.

TRADE UNIONS, SOCIAL AND ECONOMICAL HUMAN RIGHTS

Asta Krašenkienė, Asta Valackienė
Kaunas University of Technology, Lithuania

Abstract

The article reveals the activity relations between protection of social economical human rights and trade unions, as an interested group. It also presents a brief review of human rights with an accent on social economical ones, catalogue and problems, trade unions as necessary constituents of democracy, civil society, welfare, their origin and activity approach, and functions. On the basis of preliminary secondary resources analysis it evaluates protection of social and economical rights in Lithuania. Finally it deals with manifestation of trade unions in Lithuania, their opportunities to protect the above mentioned rights within the country's labour market.

Keywords
Human rights, social economical rights, an interested group, trade union.

Introduction

In the contemporary world the respect of human rights, their implementation and protection are inseperable part of any developing country, as well as common daily practice, and universal value. Human rights is quite a special institute, by its content definitely outstanding among other existing rights, characterized by diverse theoretical approaches among researchers and by protection, practical implementation particularity, superiority of certain rights against other human rights in the catalogue rights, degree of relevance in different societies (Donnelly, 2003; Freeman, 2002; Saiz, 2009; Dunne, Wheeler 1999; Brown, 1999; Cohen, Arato, 2008). After democratic countries learnt the lessons of World War II in postwar period then a great interest was shown to human rights, their protection, versatility, and respect on international level. A series of various documents was created (conventions, declarations, convenants, charters) connected with human rights, such as The Universal Declaration of Human Rights (1948), The European Convention on Human Rights (1950), The International Covenant on Civil and Political Rights (1966), The International Covenant on Economic, Social and Cultural Rights (1966), European Social Charter (1996), and other documents related to special human rights. Lithuania either joined or ratified or acknowledged the above mentioned acts. All their provisions are one way or another adapted in national acts of rights (laws): Constitution of the Republic of Lithuania (1992), Labor Code of the Republic of Lithuania (2002), Law of Equal Treatment (2005), etc.

Therefore formally legitimate protection of human rights both in international and national laws seems to be secured and satisfactory in Lithuania.. However, *despite quite a large number of international and national, public or nonpublic sector institutions , organizations, interested groups working in the field of protection of human rights, efforts (ambitions, real activity, declarations or sometimes imitations), at present due to the world-wide economic resession, which started in 2008, the greatest problems of human rights in Lithuania are noticed in social, and economic areas.*

Trade unions are historically named as one of the party ensuring such laws in labor market relations. The literature widely overviews the history of professional unions in general (Hyman, 2001; Fairbrother, Yates, 2003; Kamen, 2005) as well as that of Lithuania (Glovackas, 2007; Krupavičius, Lukošaitis, 2004, Kasiliauskas, 2008), their upspringing, activities, theoretical considerations regarding their growth (Poole, 1981; Hyman, 2001), their functions are being identified (Ewing, 2005; Moore, 2006), and finally problem aspects and union behaviour are analysed (Gennard, 2009, Fairbrother, Yates, 2003; Roozendaal, 2002; Levi and others, 2009; Howard, 2005).

Trade unions in general are related to protection of social and economic rights and situation in two ways. On the one hand the establishment of trade unions, their existence, opportunity of adequate activity is seen as expression of political rights and freedoms, as well as expression of social and economic rights (Žmogaus teisių klasifikacija, 2008), on the other hand all trade unions, even if they are treated as interest groups (Kaminskas, 2001; Krupavičius, Lukošaitis, 2004; Watts, 2007), express as their main function and goal the protection of both social and economic rights.

However, the expression of trade unions in Lithuania in the area of protection of social and economic rights is moderately analysed. Because of exceptional historic background, complicated economic, social and political context, limited number of members in such-like organizations, world-wide crisis in movement of trade unions, as well as experienced challenges of globalization and labour market, trade unions of Lithuania draw special attention and interest of scientific research.

Subject-matter of the article: Trade unions and social, economic human rights.

Goal is to reveal peculiarities of development of trade unions in Lithuania while evaluating their possibilities of human rights protection in social and economic areas.

In order to achieve the goal the following **objectives** have been identified:

1. To discuss the catalogue of human rights with emphasis on social and economic aspects, and position of Lithuania in regard to their security.
2. To evaluate the expression of trade unions in Lithuania protecting social and economic human rights in labour market

The **following methods** have been applied: literature analysis, secondary data analysis.

Social and Economic Human Rights. Situation Overview in Lithuania

The concept of human rights, despite its long history is still an object of scientific discussions. Various theoretic approaches tried to present the origin of human rights, the contents of catalogue. The most important problem, according to M. Freeman (2002) rises a kind of a conflict of rights. Such significant factors as diverse cultures (cultural relativism), value-differenciation of individuals, groups and society, existing other then western concepts of rights raise plenty of questions regarding universatility of human rights, superiority of certain rights above others and so on (Brown, 1999).

It is being stated that four metatheoretical positions are distinguished (figure 1.) in the discourse of human rights (Dunne, Wheeler 1999):

		Ontology	
		Cultural relativism	Universalism
Epistemology	Anti-foundationalism	Communitarian pragmatism	Cosmopolitan pragmatism
	Foundationalism	Traditional communitarianism	Liberal natural rights

Figure 1. Background social theories of human rights (Dunne, Wheeler, 1999, 4 pg.)

Namely Liberal natural rights market square includes all theoreticians of liberal direction, who think that human rights are universal rights. In their opinion individuals, as members of certain community have certain specific rights but human rights belong to the humanity and do not depend on different legal and moral practices within a community. However, universatility critics question the problem of "universal moral standards" (Brown, 1999). According to J. L. Cohen and A. Arato (2008), democracy principles and rights match such a model of society, where diverse society institutionalizes democratic communication, and where individual autonomy is being protected by all kinds of traditional or modern inequality or nonliberty forms. Here the question is raised: if individual's rights are ensured, does that mean that well-being of all society is ensured too? Can individual's rights be treated as universal ones? Despite theoretic differences of opinions in the present world, human rights are acknowledged as general or universal, acc. to J. Donnelly (2003), because they are universally acknowledged as standarts of ideals; most countries regularly claim their support and loyalty to these norms; internationally any violations of human rights are treated negatively as most countries accepted the responsibility to implement human rights.

In general all human rights are divided into three blocks (Žmogaus teisių klasifikacija, 2008): civil, political and social, and economical cultural (the paper emphasizes social and economical ones, connected with labour relations). There is such a viewpoint that only civil and political rights are "true" human rights; the rest of them depend on specific, such as country's well-being, institutions, which are not universal. Moreover, some of the countries consider it is too expensive to implement them (Freeman, 2002). However, H. Shue (1996) and J. Donnelly (2003) deflect such arguments stating that too little attention towards social, economical rights may negalively influence the position of civil as well as political rights, which are quite expensive to implement anyway.

Though the idea itself is not a discovery of 20th century namely The Universal Declaration of Human Rights (1948) is claimed to be innovative in this respect, compared to earlier ones (Freeman, 2002). Here first time are mentioned (Declaration articles 22 -26) such rights, as the right to work, to free work choice, right and appropriate working conditions and prevention against unemplyment; the right to receive the same salary for the same job, the right to receive fair and adequate wages, ensuring person's life worthy of his dignity; the right to establish trade unions and join them in order to defend particular interests; the right to rest and freetime, paid vacation, rights connected with health care and education.

While evaluating the position of social and economical human rights in Lithuania, it is necessary to notice that in spite of presented citizen polls on human rights, researches conducted by foreigners, rights implementation monitoring, a number of articles on certain human rights, at present there is a lack of complex and permanent studies and researches, regarding social as well as economical rights. This could only confirm the above mentioned statements to be of secondary importance.

A sociological research of 2004, introduced to the public, can be treated as an exception. The research was conducted under the title "Human Rights in Lithuania" within the frame of the progamme "Support To The Implementation Of The National Human Rights Action Plan" (Human Rights in Lithuania, 2005). This is almost unique thorough complex research covering all the cataloque of human rights. Researches on human rights within the programme frame were conducted in 2001, 2002 and 2004, analyses regarding specific rights and population polls were also conducted; they showed that during the sociological polls in 2001 and 2004 respondents evaluated the prevention of social and economic rights in the country as the worst (Table 1).

Table 1

Evaluation of Social and Economical Rights Protection 2001, 2004 (percent). (Human rights in Lithuania, 2005)

Year Rights	2001	2004 .
Right to fair salary	Very badly/badly	
	77	61
	Very well/well	
	3	7
Right to have and choose a job	Very badly/badly	
	85	59
	Very well/well	
	4	11
Right to have adequate level of life	Very badly/badly	
	79	52
	Very well/well	
	3	11

Though the results in the table reflect improvement of protection of social, economical rights, compared to the results of 2001 and 2004, these rights are leading ones in evaluating their protection as very bad or bad among other 23 presented rights

Analogical situation is noticed while evaluating their answers regarding violation of rights against them. Out of 14 respondents, who mentioned violation cases, most frequent were the ones in Table 1, i.e. social, economical and labor-connected human rights (Table 2).

Table 2

Social, Economical Rights Violation Cases against Respondents in 2001, 2004 (percent). (Human rights in Lithuania, 2005)

Rights \ Year	2001	2004
Right to fair salary	23,1	18,5
Right to have and choose job	20,3	10,3
Right to adequate life level	20,8	11,1

Interesting as it is that in the following orders of Human Rights Observation Institute given in 2006 and 2008 to Public Opinion and Market Research Centre Vilmorus to conduct researches of presented polls of Lithuanian citizens on human rights situation , the questions about the situation of social and economic rights were missing. Only civil and political rights were emphasized (Žmogaus teisės, 2006; Kaip visuomenė vertina žmogaus teisių padėtį Lietuvoje, 2008). It would be naive to believe that in 2–4 years these rights lost their significance. The same idea and evaluation is stated by foreign observers. In 2007 overview of human rights in Lithuania „Žmogaus teisės Lietuvoje 2007 metais" presented by Swedish Ministry for Foreign Affairs states that despite certain progress labor relations are still weak, so the ensurance of social economical rights needs special attention (Žmogaus teisės Lietuvoje 2007 metais - bendroji ataskaita, 2007). In the USA 2008 Country Reports on Human Rights Practices (2008 Human Rights Report: Lithuania, 2009) certain social, economic problems are also emphasized. The report states that the right to adequate life level is not ensured. So it is obvious that the protection of social, economical rights in Lithuania is significant and requires constant attention.

Trade Unions as expression of social economic rights and their protection factor

Trade unions as one of the agents in industrial relations quite a few years ago became the object of interest to researchers of social as well as other fields of science. In the United Kingdom the interest in trade unions took dominating position for quite a long time in sociological analysis of all industrial relations. Classical trade union definition after M. Poole (1981) says that within work theory frame there are five theoretic schools of thought, which explain the origin of trade unions, their activities and behaviour:

1. "Ethical" or "moral" school, emphasizing significance, character and role of cultural variables.

2. Revolutionary attitude, emphasizes trade union's as organization's activity consequences for the benefit of radical economical movement.
3. Conservative concept, treats trade unions as agents for interest protection of their members. Here the greatest attention is paid to work management and check ups.
4. Economic school. Basic idea states that economic forces are the factor to constitute and develop trade unions. Causal and instrumental goals are emphasized.
5. Political perspective, where in its paradigma the role of trade unions is treated as the struggle of power among unions, administration and state in the broad meaning.

In R. Hyman' (2001) opinion there are three different traditions to approach trade unions, certain "ideal types":
1. Trade unions as members of market;
2. Trade unions as a means of anti-capitalistic mobilazation;
3. Trade unions as agents of social integration.

Acc. to R. Hyman (2001), trade unions first of all are organizations, representing professional interests. A. Krupavičius and A. Lukošaitis (2004) claim that interest groups are inseperable part in any democratic system; it is primary structure of political system. Moreover, D. Watts (2007) claims that various interest groups (trade unions are among them) are significant component of any civil society. All trade unions are related to three important areas: 1. Market. Trade unions focus on salaries and labor relations, so they cannot disregard market. 2. Class. As employees' organizations trade unions present collective interests and sameness, in this regard they differ from employers, so in a way they express class interests. 3) Environment. All unions manifest themselves and perform their functions in certain, earlier formed frames or areas, which they strive to change, but the frames do influence their choices. So unions have to deal with other institutions and a variety of different interests, they are part of environment (Hyman, 2001).

Historically trade unions have performed at least five essential functions (Ewing, 2005): 1) supply union members with service or and priviliges; 2) representation: group or individual representation of employees at work place; 3) maintenance: participate in establishing rules, 4) management and (5) public administration function, i.e. cooperate with authorities and ensure the performance of other functions, such as retraining, education, etc.

It is widely known that for the last few decades most of trade unions of democratic countries are under crisis. Among most important reasons are: flexible work forms, great changes in labor market, social and cultural changes, economic rise having lasted too long, globalization of economy, unions' image modelling as an obstacle of growth. Due to these reasons there has been a reduction in membership, and interest groups, as well as decrease of trade union power and influence on society in general (Fairbrother, Yates, 2003; Roozendaal, 2002).

The situation in Lithuania, as a former part of the Soviet Union is unconventional or characteristic of the old democratic countries. Here there are no historically established traditions, stable working practices if compare to trade unions in their originating countries. The

weakness of civil society , unclear place of trade unions in distribution of public power and relations and sameness problems in present society, as M. M. Howard (2005) states, are proper to all post-communist European countries. However, developing economies, poor country status, neoliberalism often times in market relations acknowledged even on the state level and stating that basic goal is economic growth at any cost; its adequate consequencies, such as poverty, petty middle class layer, ignored economic rights for a part of the society, social, political apathy, tremendous migration, these are only a few factors to illustrate the abundance of problems. It seems that under such conditions the expression of trade unions, their social power, and support in Lithuania should be more pronounced.

Discussing historical peripeteia noteworthy that first trade union was started at the end of 19c. and at the beginning of the 20c. They started uniting according to territorial principal, national, religious, and political commonalities. Until the year 1926 and the takeover of "tautininkai" in Lithuania, trade unions were functioning quite smoothly but after that their activities were restricted, and finally banned. In 1940 communist party started checking them (Kasiliauskas, 2008; Glovackas, 2007; Krupavičius, Lukošaitis, 2004). During soviet period trade unions were practically implementing role of communist party satellite, offering services to "ideologically right" employees, and they were far from being serious, power distributing, realistically defending the interests of members or interest groups.

Evaluating present-day trade unions in Lithuania as an expression of human rights to form associations and join them, we can say that there are no major problems in this area. The USA Bureau of Democracy, Human Rights, and Labor claims in its 2008 Country Reports on Human Rights Practices, (2008 Human Rights Report: Lithuania, 2009) that Lithuania legal system ensures activity, expression and establishment rights of associations (in this case trade unions) and in practice the government respect the expression of these rights. In Lithuania three major national trade union centres are active at present: Lithuanian Labor Federation, Lithuanian Trade Union "Solidarumas" and Lithuanian Trade Union Confederation. These centres unite various branch-based trade unions (Žmogaus teisės Lietuvoje 2007 metais - bendroji ataskaita, 2007).
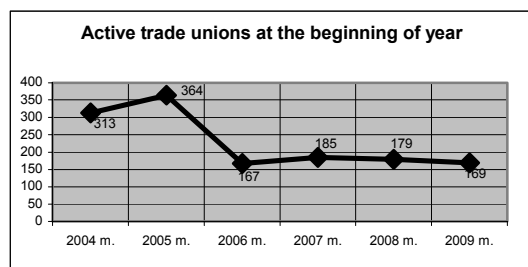

Figure 2. Quantity change of active trade unions 2004-2009 (Statistikos departamentas. Rodiklių duomenų bazė, 2009)

Generally speaking Lithuania is marked for the great number of trade unions, however, their number has reduced since 2006 (figure. 2).

As A. Krupavičius and A. Lukošaitis (2004) confirm, membership in trade unions is a significant indicator illustrating the spread of interests in the society and success of trade unions' movement as such.
It is interesting to analyze the data given by Department of Statistics (Statistikos departamentas. Rodiklių duomenų bazė, 2009): number of hired employees (no private firms) and members of trade unions in 2006 and 2007 (Table 3).

Table 3

Members of Trade Unions and Hired Employees (Department of Statistics.
Data basis, 2009)

	2006 .	2007m.
Trade union members	115,7	115
Hired employees (no private firms)	1146,895	1199,770

It is quite simple to calculate and see that trade unions united (though methodology used for calculating can be different in 2004 and other printed matters) in 2006 slightly over 10 percent, in 2007 less than 10 percent of all hired employees in Lithuania. Acc. to A. Krupavičius ir A. Lukošaitis (2004), in 2004 Lithuania's trade unions united approximately 20 – 25 percent of employees, while in some other West European countries they united as many as 80-90 percent of all employees.

It is believable that the data during the last two years might have fluctuated, but in general membership remains an obvious problem. Besides, in the above mentioned report by Swedish Ministry for Foreign Affairs in 2007 (Žmogaus teisės Lietuvoje 2007 metais - bendroji ataskaita, 2007) it was emphasized that general questions, connected with work relations are being discussed and the solutions, such as the lowest minimal salary are made in Triangular board (the Board is highest-level institution of social dialogue, which upon agreement solves social, economical and work problems). All the three parties to participate in discussions, are: employers, trade unions (already mentioned national trade unions centres) and government representatives, but in reality the position of employees is quite weak, so this Board (Lietuvos Respublikos Trišalė Taryba, 2009) is formal and ineffective.

Openly publisized kinds of activities of big trade unions centres may also be of interest to analyze: e.g. in the list of activities of Lithuanian Labour Federation one can see such a unique activity as "computer games"(Lietuvos darbo federacijos statutas, 2007). Having analysed Lithuanian Trade Union "Solidarumas" list of activities it is possible to find such activities as "computer games", "restaurants","bars" (Lietuvos profesinės sąjungos „Solidarumas" įstatai, 2006) . A question arises: How is it (directly or indirectly) connected with essential protective function of social and economic rights? In the meantime in the page of Lithuanian Trade Union Confederation such a list is impossible to find (Apie LPSK, 2006). An activity as such has quite a thorough definition; it is being defined as functions of trade unions. Also there is a lack of open responsibility of trade unions, because acc. to A. Krupavičius and A. Lukošaitis (2004), Lithuanian trade unions have inherited a strong material basis from the soviet times, thus having in mind very obscure

privatization process in Lithuania they does not earn any trust among the citizens.

Thus evaluation of trade unions in the context of preliminary secondary data analysis is a complicated matter, requiring additional complex research.

Conclusions

1. Most likely that despite formally sufficient legal basis and Lithuanian legal system coordinated together with international acts of rights, social and economical human rights are the most vulnerable. It is obvious that publicly dominate problems connected with protection of political and civil rights; while social and economical rights are being treated as secondary ones and are conditioned by economic environment of Lithuania.

2. Trade unions due to limited membership, historical heritage and unclear sameness in the social relations in Lithuania have no real possibilities in the system of social relations to considerably influence the situation of social and political human rights. Consequently there remains the disbalance of power division in the society. It could be stated that comprehensive research is necessary in the fields of social and economical protection, trade union evaluation, their responsibilities, and sameness in the society.

References

1. Apie LPSK [interaktyvus]. Lietuvos profesinių sąjungų konfederacija, 2006- [žiūrėta 2009-07-01]. Prieiga per internetą:< http://www.lpsk.lt/?lang=lt&mID=1>.
2. Apie Trišalę Tarybą [interaktyvus]. Lietuvos Respublikos Trišalė Taryba, 2009- [žiūrėta 2009-08-10]. Prieiga per internetą:< http://www.lrtt.lt/lt/apie-taryba.html>.
3. Brown, C. Universal human rights: a critique // Human rights in global politics. Edit by Tim Dunne and Nicholas Wheeler. Cambridge University Press, 1999. p. 103-127.
4. Cohen, J. L., Arato, A. The utopia of civil society // The new social theory reader. Edit. by Steven Seidman, Jeffrey C. Alexander. Routledge, 2008. p. 244-251.
5. Constitution of the Republic of Lithuania = Lietuvos Respublikos Konstitucija [interaktyvus]. LR Seimas, 1992- [žiūrėta 2009-08-10]. Prieiga per internetą:<http://www3.lrs.lt/home/Konstitucija/Konstitucija.htm>.
6. Donnelly, J. Universal human rights in theory and practice. 2nd Editon. Ithaca, NY: Cornell University Press, 2003. 290 p.
7. Dunne, T., Wheeler, N. Introducion: human rights and fifty years' crisis // Human rights in global politics. Edited by Tim Dunne and Nicholas Wheeler. Cambridge University Press, 1999. p. 1-28.
8. European Social Charter = Europos socialinė chartija, 1996 // Valstybės žinios. 2001, Nr. 49-1704.
9. Ewing, K. D. The function of trade unions [online]. Industrial Law Journal (UK), Vol. 34, No 1. 2005- [cited 2009-08-16]. Database: Emerald Management Reviews. Available from Internet:< http://ilj.oxfordjournals.org/cgi/content/abstract/34/1/1>.
10. Fairbrother, P., Yates, A. B. Union in crisis, union in renewal? //Trade unions in renewal. A comparative study. Edited by Peter Fairbrother and Charlotte A. B. Yates. Routledge, 2003. p 1-32.
11. Freeman, M. Human rights: An Interdisciplinary Approach. Polity Press, 2002. 216 p.
12. Gennard, J. Trade union merger strategies: good or bad? [online]. Journal: Employee Relations, Vol. 31, Issue: 2, p. 116 – 120. 2009- [cited 2009-08-19]. Emerald Group Publishing Limited. Available from Internet:< www.emeraldinsight.com/10.1108/01425450910925274>.
13. Glovackas, S. Profesinių sąjungų istorija ir struktūra [interaktyvus]. Socialinių ekonominių tyrimų institutas, 2007 [žiūrėta 2009-08-14]. Prieiga per internetą:< http://www.seti.lt/?_nm_mid=TXl3eExEQXNNQ3d3&_nm_lid=0&session=no>.
14. Hyman, R. Understanding european trade unionism. Between market, class & society. Sage Publications, 2001. 208 p.
15. Howard, M. M. The weakness of civil society in post-communist Europe. Cambrige University Press, 2005. 206 p.
16. Human rights in Lithuania [online]. Seimas of the Republic of Lithuania, United Nations Development Programme, Law institute. Vilnius, 2005- [cited 2009-08-19]. Available from Internet:< http://www3.lrs.lt/docs2/CSFIAIZY.PDF>.
17. Kamen, V. "Change and continuity" – the experience of trade unions in the cultural sector of the former Soviet Union. [online]. Journal: Employee Relations. Vol. 27, Issue: 6, p. 613 – 623. 2005- [cited 2009-08-19]. Emerald Group Publishing Limited. Available from Internet: <www.emeraldinsight.com/10.1108/01425450510626144>.
18. Kaip visuomenė vertina žmogaus teisių padėtį Lietuvoje [interaktyvus]. Žmogaus teisių stebėjimo institutas, Visuomenės nuomonės ir rinkos tyrimų centras Vilmorus. Vilnius, 2008- [žiūrėta 2009-07-14]. Prieiga per internetą:<http://www.hrmi.lt/images/img/Zmogaus_teisiu_padetis_Vilmorus_2008.pdf>.
19. Kaminskas, R. Interesų grupių ir valstybės santykiai: politikos tinklų analizės problemos // Filosofija. Sociologija. 2001, nr. 3, p. 20.
20. Kasiliauskas, N. Profesinės sąjungos Lietuvoje: Teisinio statuso problemos. Vilnius, 2008. 259 p.
21. Krupavičius, A., Luošaitis, A. Lietuvos politinė sistema: sąranga ir raida. Poligrafija ir informatika. Kaunas, 2004. 560 p.
22. Labor Code of the Republic of Lithuania = Lietuvos Respublikos darbo kodeksas // Valstybės žinios. 2002, Nr. 64-2569.
23. Law of Equal Treatment = Lietuvos Respublikos lygių galimybių įstatymas, 2005 [interaktyvus]. 2003 m. lapkričio 18 d. Nr. IX-1826, Vilnius [žiūrėta 2009-07-10]. Prieiga per internetą:< http://www.litlex.lt/scripts/sarasas2.dll?Tekstas=1&Id=68846>.
24. Levi, M. Union Democracy Reexamined/ M. Levi, D. Olson, J. Agnone, D. Kelly [online]. Politics & Society, Vol. 37, p. 203 - 228. 2009- [cited 2009-08-19]. Available from Internet:< http://pas.sagepub.com/cgi/reprint/37/2/203>.
25. Lietuvos darbo federacijos statutas [interaktyvus]. Lietuvos darbo federacija, 2007- [žiūrėta 2009-07-01]. Prieiga per internetą:< http://www.ldf.lt/index.php?cid=999>.
26. Lietuvos profesinės sąjungos „Solidarumas" įstatai [interaktyvus]. LPS „Solidarumas", 2006- [žiūrėta 2009-07-11]. Prieiga per internetą:< http://www.lps.lt/index.php?m=txt&table=2>.
27. Moore, S. The relationship between legislation and industrial practice: A study of the outcome of trade union recognition [online]. Journal: Employee Relations. Vol. 28, Issue: 4, p. 363 – 373. 2006- [cited 2009-08-19]. Emerald Group Publishing Limited. Available from Internet:< www.emeraldinsight.com/10.1108/01425450610673411>.
28. Poole, M. Theories of trade unionism: A sociology of industrial relations. London: Routledge & Kegan Paul, 1981. 265 p.
29. Roozendaal, G. Trade unions and global governance. The debate on a social clause. Continuum- London, New York, 2002. 260 p.
30. Saiz, I. Rights in Recession? Challenges for Economic and Social Rights Enforcement in Times of Crisis [online]. Oxford Journals Social Sciences Journal of Human Rights Practice Volume 1, Number 2, p. 277-293, 2009- [cited 2009-08-19]. Available from Internet:<http://jhrp.oxfordjournals.org/cgi/reprint/1/2/277>.
31. Shue, H. Basic Rights: Subsistence, Affluence, and U.S. Foreign Policy (Second edition). Princeton University Press, 1996. 248 p.
32. Statistikos departamentas. Rodiklių duomenų bazė [interaktyvus]. Statistikos departementas prie Lietuvos Respublikos Vyriausybės, 2009- [žiūrėta 2009-07-14]. Prieiga per internetą:< http://www.stat.gov.lt/lt/pages/view/?id=1126&PHPSESSID=43b2055db42d3598d2e990bc0ff1ca88>.

33. The European Convention on Human Rights = Europos žmogaus teisių ir pagrindinių laisvių apsaugos konvencija, 1950 [interaktyvus]. LR Seimas. [žiūrėta 2009-07-10]. Prieiga per internetą: <http://www3.lrs.lt/cgi-bin/preps2?Condition1=19841&Condition2=>.
34. The International Covenant on Civil and Political Rights = Tarptautinis pilietinių ir politinių teisių paktas, 1966 // Valstybės žinios. 2002, Nr. 77-3288.
35. The International Covenant on Economic, Social and Cultural Rights = Tarptautinis ekonominių, socialinių ir kultūrinių teisių paktas, 1966 // Valstybės žinios. 2002, Nr. 77-3290.
36. The Universal Declaration of Human Rights = Visuotinė žmogaus teisių deklaracija, 1948 [interaktyvus]. Lithuanian Version. Source: United Nations Department of Public Information. [žiūrėta 2009-07-10]. Prieiga per internetą:<http://www.unhchr.ch/udhr/lang/lit.htm>.
37. Žmogaus teisės [interaktyvus]. Žmogaus teisių stebėjimo institutas, Visuomenės nuomonės ir rinkos tyrimų centras Vilmorus. Vilnius, 2006- [žiūrėta 2009-07-14]. Prieiga per internetą:< http://www.hrmi.lt/admin/Editor/assets/ZT_menuo_2006_Vilmorus_lenteles.pdf.>.
38. Žmogaus teisės Lietuvoje 2007 metais - bendroji ataskaita [interaktyvus]. Švedijos Užsienio reikalų ministerija. 2007- [žiūrėta 2009-07-05]. Prieiga per internetą:< http://www.swedenabroad.com/Page____59888.aspx>.
39. Žmogaus teisių klasifikacija [interaktyvus]. 2006 - 2008 Lietuvos žmogaus teisių centras, 2008 [žiūrėta 2009-08-14]. Prieiga per internetą:< http://manoteises.lt/index.php?lang=1&sid=464>.
40. Watts, D. Pressure groups. Edinburg University Press, 2007. 239 p.
41. 2008 Human Rights Report: Lithuania [online]. Bureau of Democracy, Human Rights, and Labor, 2008 Country Reports on Human Rights Practices, U.S. Department of State, 2009- [cited 2009-08-18]. Available from Internet:< http://www.state.gov/g/drl/rls/hrrpt/2008/eur/119089.htm>.

Asta Krašenkienė, Asta Valackienė

Profesinės sąjungos ir socialinės, ekonominės žmogaus teisės

Santrauka

Šiame straipsnyje išryškinamas socialinių ekonominių žmogaus teisių užtikrinimo ir profesinių sąjungų, kaip vienos iš interesų grupių, veiklos sąryšis. Aptariama žmogaus teisių, akcentuojant socialines ekonomines žmogaus teises, katalogas bei problematika, profesinių sąjungų, kaip būtinos demokratijos, pilietinės visuomenės, gerovės valstybės dedamosios, atsiradimo ir veiklos teorinės prieigos, funkcijos. Remiantis preliminaria antrinių šaltinių analize, vertinamas socialinių, ekonominių, teisių užtikrinimas Lietuvoje Lietuvos profesinių sąjungų raiška, jų galimybės, užtikrinant minėtas teises šalies darbo rinkoje.

About the authors

Asta Krašenkienė, PhD student of Sociology Department of Kaunas University of Technology. Asistant of Kaunas University of Technology Panevėžys Institute Management and Administration Faculty Economics Department. E-mail: asta.krasenkiene@ktu.lt; mob. phone: +370 69948176. Areas of scientific interests: human rights, non-government sector, trade-unions.
Asta Valackienė, assoc.prof.doctor of social sciences, Kaunas University of Technology Panevėžys Institute Management and Administration Faculty. Economics Department. E-mail: asta.valackiene@ktu.lt; mob. phone: +370 68694121. Areas of scientific interests: sociology of labour, sociology of gender, crisis management.

REINFORCEMENT OF CONCEPT OF ORGANIZATIONAL TRUST

Kęstutis Kriščiūnas, Rita Marcinkevičienė
Kaunas University of Technology, Lithuania

Abstract

The existing research stresses on the importance of *trust* in intra-organizational and inter-organizational interactions. However, trust is more often analyzed as a sociological rather than management related phenomenon, and insufficient attention is paid to the managerial actions that could lead to greater organizational trust. This paper aims to suggest the managerial actions that could be undertaken in order to strengthen the organizational trust between and among business enterprises. This paper analyzes the peculiarities of culture of trust within and among organizations, as well as the expression of trust, when highlighting managerial guidelines, which could help to stimulate the expression of culture of trust *inside* (i.e. among the members of enterprises) and *outside* (i.e. with suppliers, customers and other stakeholders) the enterprise. This paper provides the structured list of possible managerial actions in building trust on both levels of organizational relationships.

Keywords
Trust, inter-organizational trust, intra-organizational trust, (managerial actions of) trust building.

Introduction

In a globalization era, when the main driving force is knowledge, firms should communicate with each other if they want to compete in the market. Therefore, for the successful communication and business development there is a great need for a trust. Trust is one of the most important issues when trying to build partnerships among business enterprises hereby improving the welfare of business partners. However, it should be highlighted, that in order to stimulate trust between business organizations, at first, it is necessary to build trust within organization. Moreover, trust is based on people, because whether the communication takes place within or among business enterprises it is always people who trust.

Many scientists analyse the phenomenon of trust (Tyler, Kramer, 1996; Mishra, 1996; Pussa, Tolvanen, 2006; Mayer et al. 1995; Blomqvist, Stahle, 2000; Zaheer, Harris, 2006; Kramer, 1996; Knack, Zak, 2001; Voelpel, Kearney, 2008; Lewicki, Bunker, 1996; Six, 2007; Sako, 1997; Wakabayashi, 2003; Rousseau et al., 1998; Schoorman et al. 2007; Creed, Miles, 1996; Rindfleish, 2000). They highlight that trust is the vital phenomenon for business development, because it improves business performance, reduces the transaction cost, increases sales etc. Therefore, business enterprises seek to build trust both within organization and with partners. However, they recognize that in order to build trust there is necessary to put many efforts, and at the same time highlight, that the creation of culture of trust can be very beneficial for the economic actors.

Considering above mentioned aspects the **research problem** being solved in this article should be constructed: how to highlight the main theoretical features of trust phenomenon in order to present the managerial guidelines for the stimulation of trust within and among business enterprises.

The **object** of the research is trust phenomenon.

The aim of this article: to highlight the theoretical features of the phenomenon of trust within and among business enterprises and to suggest possible managerial guidelines to stimulate trust at both levels.

To achieve this aim there are three **tasks** to be solved:

- to identify the theoretical features of the culture of trust within and among business enterprises;
- to highlight the peculiarities of expression of trust within and among business enterprises;
- to suggest possible managerial guidelines for the development of culture of trust within and among business enterprises.

Scientific originality and **practical significance** of the article is:

- identified theoretical features of trust phenomenon within and among business enterprises.
- highlighted the importance of trust for the economy actors.
- summarized the main peculiarities of trust expression within and among business enterprises.
- Highlighted the managerial aspects towards stimulating culture of trust and suggested the guidelines for the stimulation of this phenomenon expression within and among business enterprises.

The peculiarities of interpretation of culture of trust within and among organizations

The importance of trust arises in many areas of life. Trust has a great influence both at organizational and inter-organizational level. However, it is necessary to highlight, that when trust within organization is more developed, it is easier to build trust across organizations. Similarly Zaheer & Harris (2006) maintains this idea and stress that trust within organization appears to be important in the development of inter-organizational trust. Therefore, in this paper there will be explored both the development of trust in organization and between organizations, in order to highlight the differences of culture of trust in these fields.

The phenomenon of trust has been widely and extensively analysed by a variety of disciplines across social sciences. Trust is a concept that has received attention in such different social sciences literatures as psychology, sociology, political science, economics,

anthropology, history and socio-biology. As Lewicki and Bunker (1996) pointed out, each literature has approached the problem with its own disciplinary lens and filters. These authors maintain that little effort has been made to integrate these different perspectives or articulate the key role that trust plays in critical social progress (e.g. cooperation, coordination, performance).

Therefore, trust itself can be seen as a very complex and multidimensional construct and there have been numerous attempts to define and conceptualize it, trust's antecedents and outcomes (Wehmeyer, Riemer, Schneider, 2001). However, it could be stated, that the central disciplines which could define the peculiarities of trust are economy, management, psychology and sociology (Table 1).

Table 1

Trust across disciplines

Economic	view trust as either calculative (Williamson, 1993) or institutional (North, 1990; Lewicki, Bunker, 1996).
Psychology	commonly frame the assessments of trust in terms of attributes of trustors and trustees and focus upon a host of internal cognitions that personal attributes yield (Tyler, 1990); trust is an element that make work in organization possible through its effect on cooperation, interpersonal and group solidarity and facilitating social infrastructure (Sitkin, Stickel, 1996)
Sociology	find trust in socially embedded properties of relationships among people or institutions (Zucker, 1986; Lewicki, Bunker, 1996); trust is an element that make work in organization possible through its effect on cooperation, interpersonal and group solidarity and facilitating social infrastructure (Sitkin, Stickel, 1996)
Management	find the link between trust and organizational features, such as structure, formal role relations, or task characteristics; trust takes a central role in organizational affairs as well as successful and effective cooperative relationships (Sitkin, Stickel, 1996); find the linkage between decentralization of decision making and trust, particularly trust between managers and employees (Mishra, 1996).

As the scientists exploring trust demonstrate, trust is related to dispositions, decisions, behaviours, social networks and institutions (Rousseau, Sitkin, Burt, Camerer, 1998). Claybrook (2004) maintains the above mentioned idea and holds that trust, although intangible is related to understanding interpersonal and groups behaviour, managerial effectiveness, economic exchange and social and political stability.

According to Hardin (2001), a natural and common account of trust is that certain people are trustworthy and can therefore be trusted (Mollering, 2000). This observation expresses three important ideas:

- *First,* trust is selective: we can only trust certain people, not everybody;
- *Second,* trust is reasonable: we look for good reasons and, in particular, we assess the other's trustworthiness before we trust;
- *Third,* trust is decisive: we trust by taking a step in one direction, not the other, thereby reaching a certain state of expectation, performing corresponding actions, if required, and facing consequences. Altogether, in this approach, trust represents a choice made "within reasons" (Mollering, 2000).

The phenomenon of trust has been defined in many different ways, highlighting the various aspects. However, it should be stressed, that most of them reveal the very same factors. One commonly accepted definition in the research literature is proposed by Mayer, Davis, Schoorman (1995) – *trust* is a willingness of a party (trustor) to be vulnerable to the actions of another party (trustee) based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party. Consequently, these authors predicate that being vulnerable implies that there is something of importance

to be lost and making itself vulnerable is taking risk. Moreover, it is emphasized that trust is not taking risk *per se*, but rather it is a *willingness* to take risk. Equally Mishra (1996) highlights the importance of one party's willingness to be vulnerable to the other, and holds that the latter party must have four basic features in order to stimulate relationships (Figure 1). The scientist stresses that trust is a set of distinct beliefs or expectations that nevertheless combine in some fashion to represent overall trust.
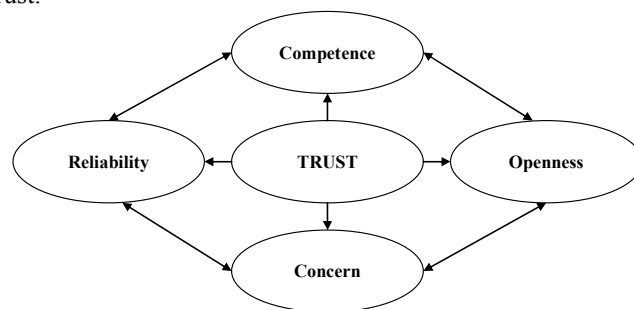

Figure 1. The dimensions of trust (according to Mishra, 1996)

- Competence rests on the belief that managers will make correct decisions (e.g. companies may not check the reliability of shipments from companies they trust);
- Openness and honesty reflect the belief that managers will give straightforward accounts of events.
- Concern indicates the belief that a manager acts in ways designed to benefit employees (i.e. not taking advantage of others and involves acting in employees' interests as well as one's own);
- Reliability reflects the degree to which people's statements and their actions are consistent (e.g., preaching concern for the company but acting to

serve one's own interests). (Tyler, Kramer, 1996)

Trust within and among business enterprises have many similar aspects, because it is always people in the organization that trust. The analysis of scientific literature on trust enable to state, that trust reduces transactions cost in and between organizations. Cummings & Bromiley (1996) analyse the phenomenon of trust and maintain that optimal expenditures on control and monitoring, and other kinds of transactions cost are a function of opportunism. It should be highlighted that trust is vital both for innovative work within the organization in e.g. project teams and between organizations e.g. strategic alliances and R&D development. In addition, that interplay between interpersonal trust and inter-organizational trust is a dynamic e.g. if either one deteriorates, this will have a negative impact on the other (Blomqvist, Stahle, 2000). However, these two levels of trust still reveal particular positions. Thus, there is a necessity to highlight the fundamental features of both levels of trust.

Voelpel & Kearney (2008) claim that high level of *trust within organization* is the prerequisite for an organization's ability to be perceived as trustworthy by customers, shareholders, and the general public. Working together often involves interdependence, and people must therefore depend on others in various ways to accomplish their personal and organizational goals. It could be stated, that the first stage of creation of trust within organizations refers to interpersonal trust.

Among the early trust theorist was Rotter (1967), who defined interpersonal trust "as an expectancy held by an individual or a group that the word, promise or written statement of another individual or group can be relied upon (Mayer, Davis, Schoorman, 1995). Claybrook (2004) maintains and supplements the above mentioned idea when highlighting that personal trust is the basic tool for promoting organizational trust and enhancing its performance.

When analysing scientific literature on trust among business enterprises it reveals that *trust* emerges endogenously *among economic actors* in order to reduce transactions costs driven by asymmetric and costly information. Consequently, Wakabayashi (2003), Blomqvist, Stahle (2000) hold that trust is considered to be an important relational condition and antecedent for the continuity and development of cooperation between organizations, as it socially decreases transaction costs through the control of opportunism, encourages buyers and suppliers to invest in relation-specific assets and facilitates learning between them. Equally, scholars hold that as an ultimate goal that wants parties to see whether the other party would risk their well being (i.e. act opportunistically or in a way which is not in mutual interest) or whether they can trust the other party's integrity in promoting mutual good (Blomqvist, Stahle, 2000).

Wakabayashi (2003) defines inter-organizational trust as an expectation held by one trading partner about another, in which the other behaves or responds in a predictable and mutually acceptable manner. Inter-organizational trust means that organizations in cooperate share such

mutual expectations. Zaheer and Harris (2005) see the expression of inter-organizational trust from different point of view. These scientists hold that inter-organizational trust is the extent to which members of one organization hold a collective trust orientation toward another organization. It is necessary to stress, that although the development of interpersonal trust drives the development of inter-organizational trust, inter-organizational trust has a collective nature that necessitates major members' sharing and legitimizing of trust in organization (Wakabayashi, 2003).

Trust is a fragile phenomenon; especially this is a typical characteristic of an early trust, which could be named as a testing period. During this period, even small signals of distrust may suppress the interests and may raise the doubts if it is possible to develop relationship.

As the conclusion of the analyses made above there could be done a generalisation, that the phenomenon of trust is multidimensional, analysed in a variety of scientific disciplines, from different points of view. The need for trust arises in many fields of life, as well as in the life of economic actors. Trust is an important factor when talking about organizations competitiveness, development and welfare. Moreover, trust emerges both in intra-organizational and inter-organizational level. However, the essential resource at both levels of culture of trust is people, because they are those who communicate and feel the need of trust.

The expression of trust among and within business enterprises

The phenomenon of trust can be observed in many fields of life. People communicate with each other both in personal and work matters. Thus, there always arises a dilemma "is this person or organization trustworthiness?" However, it is widely recognized, that trust is a phenomenon requiring significant efforts, time and resources. It could be indicated, that there are two main areas where the manifestation of trust is observed:

- public institutions;
- business enterprises.

Mishra (1996) maintains this statement and highlights that trust is assumed to exist at multiple levels of analysis. It exist within an individual, as in a subordinate's trust for his or her manager, it also exist within groups or organizations and between organizations. Even at the institutional level trust exists – for example, the public's trust in the political system or the professions. In this paper the focus is made on trust concerning business enterprises. Therefore, it is important to comprehend the expression of trust among and within business enterprises, in order to highlight the differences in these two levels of trust.

Business enterprises give more and more attention to the successful expression and development of trust both within organization and in communication with other organizations. They recognize that this is one of the biggest guarantees for company's prosperity, competitiveness and welfare.

Puusa & Tolvanen (2006), claim that *trust within organization* refers to a collective commitment and

cooperation in order to achieve organizational goals. Thus, trust in organization could be described as the "social glue" that can hold different kind of organizational structures together.

These authors point out, that trust within organization expresses through three levels:

- individual level: trust is based on interpersonal interaction. Here the willingness to be vulnerable, in other words to take risk implies that there is something of importance to be lost. Moreover, at individual level arise positive expectations that another party will not act opportunistically;
- group level: trust is a collective phenomenon. Teams represent collective values and identities. As values are commonly believed to guide behaviour, sharing common values helps team members to predict each other's and leaders behaviour in the future;
- system level: trust is institutional and based on roles, systems or reputation, from which inferences are drawn about trustworthiness of an individual. Trust is tied to formal structures, depending on individual or firm-specific attributes, e.g. certification as an accountant, doctor or engineer (Puusa & Tolvanen (2006).

Therefore it could be done a generalisation that foremost, the need of trust appears in the communication of individuals, when trust affects willingness to co-operate and to commit to organizational changes. Further, it moves to the group level. Here the need of trust expresses, when different groups within business enterprise communicate in order to implement company's goals. After all, trust is essential at the system level, when in organization, all employees are unified by common approaches, standards etc. Thus, the maintenance of reputation here takes the first place, because at this level of trust any inadequacy to firm's vision leads to distrust.

Tan & Tan (2000) claim that trust in organizations refers to the global evaluation of an organization's trustworthiness as perceived by the employee. Employees continually observe the organizational environment when consider whether or not to trust their organization. It should be noted, that working together often involves interdependence, and people must therefore depend on others in various ways to accomplish their personal and organizational goals (Mayer, Havis, Schoorman, 1995).

As mentioned above, when the culture of trust is highly developed it is easier to stimulate the cooperation and trust among business enterprises. Many researchers argue that *trust between organizations* is a key condition or facilitator of collaboration between organizations. Mollering (2006) devoted much attention to inter-organizational trust and claims that when organizations cooperate, trust between persons, (e.g. managers) plays a very important role in enabling, sometimes even preventing, successful exchanges between organizations. Moreover, the author states that inter-organizational relationship is more than the aggregate of interpersonal relationships. Therefore, this statement confirms the idea, that interpersonal trust is an integral part of inter-organizational trust.

According to Mishra (1996), trust at the inter-organizational level may be important with respect to several different types of organizations, i.e. buyer-supplier organizations. It is necessary to highlight that effective relationship between customer and supplier firms often depends on trust, even when formal contracts are used extensively. Sheppard and Tuchinsky (1996) claim that business enterprises can trust those with whom they have a business relationship when three conditions hold:

1. they risk losing too much if they cheat;
2. you can predict your partners well and thus can protect against cheating;
3. your partners have adopted your preferences.

Consequently, scientific literature holds three stages model of inter-organizational trust:

- calculus – based trust: based on consistency of behaviour that people will do what they say they are going to do. Behavioural consistency is sustained by the threat of punishment (e.g., loss of relationship) that will occur if consistency is not maintained (i.e. people don't do what they say they will do);
- knowledge – based trust: occurs when one has enough information about others to understand them and accurately predict their behaviour;
- identification – based trust: each party effectively understands, agrees with, emphasizes with, and takes on the other's values because of the emotional connection between them and thus act for the other (Lewicki, Bunker, 1996).

In business relationships, trust develops gradually as the parties move from one stage to another. Moreover, the expression of trust evolves and changes. Lewicki and Bunker (1996) claim, that if a relationship goes through its full development into maturation, the movement is from calculus-based, to knowledge-based, to identification-based.

As it is mentioned above, buyer-supplier relations represent one of the most common types of inter-organizational relationships. These are indeed the relationships that require more or less close cooperation from the parties involved and trust plays an important part because the threat of opportunism and vulnerability is acute even there is a mutual interest in continuing the relationships (Mollering, 2006).

As it is mentioned in this paper, trust is a factor which helps to reduce the transaction cost. Thus, business enterprises recognise the importance of development of culture of trust with their partners. Moreover, the greater need for trust arises when a high interdependence between business enterprises occurs. Certainly, it could be stated, that the highest level of trust occurs between branch companies. The statement could be justified by the fact, that these companies seek a common goal, their activities are focused on one direction – to create and develop the welfare to each other. It is necessary to recognize that similar features of trust occur in alliances, networks and cluster. Firms create such forms of collaboration with those partners who managed to build trust in relation to each other.

The establishment of inter-organizational trust can require time, efforts, and resource allocations that

represent real and significant economic costs to the organizations involved (Zaheer, Harris, 2005). However, if major members of all organizations share mutual expectations and willingness concerning the cooperation, then inter-organizational trust develops (Wakabayashi, 2003).

Within organization (intra-organizational)	ORGANIZATIONAL TRUST	Between organizations (inter-organizational)
• *Individual level:* interpersonal interaction; • *Group level:* collective values and identities; • *System level:* roles, systems or reputation inferences of an individual.	**Human capital**	• *Calculus-based:* consistency of behaviour; • *Knowledge-based:* behavioural predictability; • *Identification-based:* complete emphaty with the other party's desires and intentions.

Figure 2. The expression of organizational trust within and among business enterprises

Inter-organizational trust, as well as intra-organizational trust evolves with time and the most important part in this process is taken by human capital. It should be highlighted that business enterprises gain trust of each other through intensive and successful cooperation. Therefore, at the sight of economic crisis the importance of trust is great as never before. Organizations should pay more attention in order to stimulate trust both within and among organizations because the increasing trust leads to greater organization welfare and to advanced and progressive economic as well.

Managerial aspects towards stimulating culture of trust

Every economic process requires managerial actions to be taken, including trust. Although this phenomenon is multiplier, there is a great need to stimulate culture of trust because of its usefulness both for economic actors and for countries economy in general. Researches unanimously recognize that managers are the central core when trying to manage and to stimulate the culture of trust both within and among business enterprises.

Creed & Miles (1996) maintain the above mentioned idea and state that within organizations managers obviously play a central role in determining both the overall level of trust and the specific expectations within given units. Managers design reward and control systems that are visible displays of base levels of trust or mistrust within departments or the organization as a whole. In addition, Pfeffer (1992) highlights, that managers control the flow of certain types of information and the opportunities to share or not to share key information in ways that influence the level of trust between or across organizational levels or units (Creed, Miles, 1996).

According to Mishra (1996), managers within organizations, develop relationships with their subordinates and with other managers largely on the basis

As the conclusion of analyses above, the possible interlacement of trust expression within and among business enterprises is presented in Figure 2.
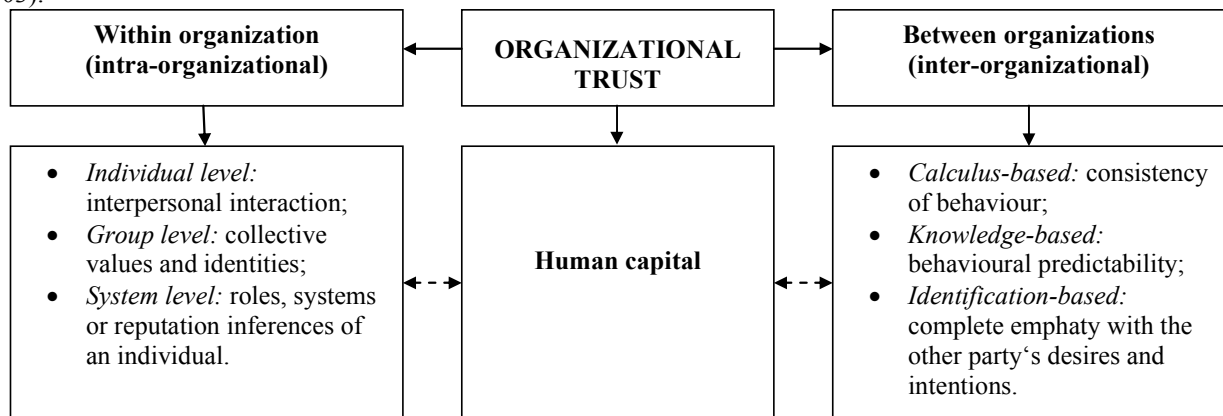
of trust, where trust in defined in part in terms of competence. Moreover, trust tends to be conceptualised as a substitute for various governance mechanisms.

Creed, Miles (1996) claim, that the most organizational members shared not only managers' needs to belong and to be recognized but also their desires for achievement – the opportunity to develop and use their skills and creativity in the service of organizational and personal goals. It could be done a presumption, that if an employee feels his contribution to organizations' development, at the same time he feels comfortable. Therefore, his trustworthiness will be higher in relation with those employees who do not implement these conditions in their work.

The factors that contribute to the development on inter-organizational trust have become significant issues in studies of cooperative strategy and inter-firm networks. Many researchers argue that social networks of managers across organizations can facilitate the development of trust among organizations. Moreover, it should be highlighted that the process of inter-organizational trust creation and commitment is likely to be a sequential and gradual one, with each following the other to higher and higher levels (Zaheer, Harris, 2006).

As the conclusion of the analysis above the possible managerial actions which could help to stimulate trust both at intra-organizational and inter-organizational level is suggested. Table 2 summarises the possible measures, guidelines which should be taken by organization's manager, in order to build and strengthen both levels of culture of trust.

It is necessary to highlight, that the more competent the manager's own organization, the more facile and effective the network linkages that can be made. Moreover, the trust is a very fragile phenomenon and the supply of trust increases, rather than decreases with the use.

Feasible managerial actions towards stimulating organizational trust

Building trust within business enterprises	Building trust among business enterprises

- To build unanimous company's vision;   - To show confidence in people's abilities;   - To establish familiarity and dialogue;   - To create an environment in which all members may contribute to the limits of their ability;   - To make each worker useful and important;   - To inform workers and listen to their objections, plans.   - To prepare the organization's human and technical resources to respond effectively and efficiently to current and future demands within the organization's scope of operation;   - To make both current and long-term investments in technical-skill upgrading and general business and self-management knowledge for every organization member, i.e. to create a learning organization;   - To give for subordinates every opportunity to practice new skills and exercise new knowledge (i.e. the manager must view human capabilities entrepreneurially – as the assets to be invested);   - Investing in capabilities and trust at:
   - individual level;
   - team level;
   - enterprise level.
	- To make investments in both technical and governance skills across organizational units within other network member firms. - To invest in capabilities and trust at the network level; - To introduce a higher formalization of rules and procedures; - To foster coordination; - To promote technical assistance by customers (this enhances suppliers' goodwill and competence trust in customers); - To ensure the flexibility and (sensitive) information exchange; - The provision of timely of feedback and co-location; - To create of trustworthiness or vulnerability; - To ensure the stability of personnel; - To stimulate interpersonal and competence-based trust; - To stimulate "win-win" negotiates style; - To share common goals and visions; - To stimulate informal meetings, inter-firm visits; - To ensure the possibility to identify decision-maker and key persons (visibility); - To share future plans related to partner; - To organize informal social events; - To promote face-to-face meetings.

Conclusions

- The phenomenon of organizational trust is a vital pillar for business and thus for countries economy development, progress. Trust is a multidimensional phenomenon analysed in many scientific fields such as economy, management, sociology, psychology. Various aspects of trust are highlighted when exploring the phenomenon of trust in different points of view. The conceptual understanding of trust is interpreted as the willingness to communicate in order to meet the mutual needs, as well as to avoid opportunism. The need of trust occurs both within and between business enterprises.

- The phenomenon of trust differently expresses at intra-organizational and inter-organizational level, however the principle axis of trust is based on human resources, because it is people that trust. Economy's actors recognise the importance of trust. Prosperous trust within organization leads to higher inter-organizational trust. The result of such expression of trust is lowered transaction costs, increased sales, increased return on investment, etc. Trust within

and among business enterprises evolves with the time. There is a need of intensive, straight and honest communication in order to develop the culture of trust at both levels of trust.

- Feasible managerial actions towards stimulating intra-organizational and inter-organizational trust are necessary. The expression of both levels of trust could be promoted, when various types of actions of organization's managers would be implement (e.g. building of one vision and one company, showing confidence in people's abilities, stimulating "win-win" negotiates style, investing in capabilities and trust at the network level). Feasible managerial actions towards stimulating organizational trust were suggested. In such way the phenomenon of organizational trust would manifest with greater power, thus contributing to the higher performance and welfare of business enterprises, and on the other hand, contributing to countries economy progress.

References

1. Blomqvist, K., Stahle, P. Building Organizational Trust. 2000. A paper submitted for the 16th Annual IMP Conference. On-line: http://www.impgroup.org/uploads/papers/37.pdf
2. Claybrook, C. Viewing Organizational Trust and Internal Auditing. The Institute of Internal Auditors Research Foundation. 2004. On-line: www.theiia.org/iia/download.cfm?file=1764
3. Creed, W. E. D., Miles, R. E. A Conceptual Framework Linking Organizational Forms, Managerial Philosophies, and the Opportunity Costs of controls. In Kramer, R. M. & Tyler T. R. (Eds.), *Trust in Organizations. Frontiers of theory and research*, Sage publications, Thousand Oaks, 1996. p. 16 – 38
4. Cummings, L. L., Bromiley, P. The Organizational Trust Inventory (OTI): Development and Validation. In Kramer, R. M. & Tyler T. R. (Eds.), *Trust in Organizations. Frontiers of theory and research*, Sage publications, Thousand Oaks, 1996. p. 302 – 330
5. Ganesan, S. Determinants of Long-Term Orientation in Buyer-Seller Relationships. *Journal of Marketing,* Vol. 58, No. 2. 1994. p. 1 – 19

6. Gulati, R., Gargiulo, M. Where Do Interorganizational Networks Come From? *American Journal of Sociology*, Vol. 104 No.5. 1998. p. 1439 – 1493

7. Hajidimitriou, Y. A., Sklavounos, N. S. The Trust Dimension in International Business Systems. 2008. On-line: http://mibes.teilar.gr/e-books/2008/Hajidimitriou-Sklavounos%2043-57.pdf

8. Kasper-Fuehrer, E. C., Ashkanasy N. M. Communicating Trustworthiness and Building Trust in Inter-organizational Virtual Organizations. *Journal of Management,* Vol. 27, No. 3. 2001. p. 235 – 254

9. Knack, S., Zak, P. J. Building Trust: Public Policy, Interpersonal Trust, and Economic Development. *Supreme Court Economic Review.* 2001. p. 91 – 107

10. Kramer, R. M. Divergent Realities and Convergent Disappointments in the Hierarchic Relationship: Trust and Intuitive Auditor and Work. In Kramer, R. M. & Tyler T.R. (Eds.), *Trust in Organizations. Frontiers of theory and research*, Sage publications, Thousand Oaks. 1996. p. 216 – 245

11. Lewick R. J., Bunker B. B. Developing and Maintaining Trust in Work Relationships. In Kramer, R. M. & Tyler T.R. (Eds.), *Trust in Organizations. Frontiers of theory and research*, Sage publications, Thousand Oaks. 1996. p. 114 – 139

12. Luhmann, N. Familiarity, Confidence, Trust: Problems and Alternatives. In Gambetta, Diego (ed.) *Trust: Making and Breaking Cooperative Relations*, electronic edition, Department of Sociology, University of Oxford. 2000. p. 94 – 107

13. Mayer, R. C., Davis, J. H., Schoorman F. D. An Integrative Model of Organizational Trust. *Academy of Management Review*, Vol. 20, No.3. 1995. p. 709 – 734

14. Mellewigt, T., Madhok, A., Weibel A. 2004. Trust and Formal Contracts in Interorganizational Relationships – Substitutes and Sumplements! Paper presented at the Brigham Young University/ University of Utah 2004 Winter Strategy Conference, Park City, UT.

15. Mishra, A. K. Organiziational Responses to Crisis. In Kramer, R. M. & Tyler T. R. (Eds.), *Trust in Organizations. Frontiers of theory and research*, Sage publications, Thousand Oaks. 1996. p. 261 – 287

16. Mollering, G. Trust: Reason, Routine, Reflexivity. Oxford: Elsevier, 2006. p. 13 – 50; 155 – 190

17. North, D. C. Insitutions, Institutional Change, and Economic Performance. New York. Cambridge University Press. 1990

18. Puusa, A., Tolvanen, U. Organizational Identity and Trust. *Electronic Journal of Business Ethics and Organization Studies.* Vol. 11, No. 2. 2006. p. 29 – 33

19. Rindfleish, A. Organizational Trust and Interfirm Cooperation: An Examination of Horizontal versus Vertical Alliances. *Marketing Letters.* Vol. 11, No. 1. 2000. p. 81 – 95

20. Rousseau, D. M., Sitkin, S. B., Burt, R. S., Camerer, C. Not So Different After All: A Cross-Discipline View of Trust. *Academy of Management Review*, Vol. 23, No.3. 1998. p. 393 – 404

21. Sako, M. Does Trust Improve Business Performance? In Lane, Ch. & Backman R. (Eds.), Trust Within and Between Organizations, Oxford University Press. 1997. p. 88 – 117

22. Schoorman, F. D., Mayer, R., Davis, J. H. An Integrative Model of Organizational Trust: Past, Present, and Future. *Academy of Management Review*, Vol. 32, No. 2. 2007. p. 344 – 354

23. Sitkin, S.B, Stickel, D. The road to hell: The dynamics of distrust in an era of quality. In Kramer, R. M. & Tyler T.R. (Eds.), *Trust in Organizations. Frontiers of theory and research*, Sage publications, Thousand Oaks. 1996. p. 196 – 215

24. Six, F. Building Interpersonal Trust within Organizations: a Relational Signalling Perspective. *Journal of Management and Governance,* Vol. 11, No. 3. 2007. p. 285 – 309

25. Sydow, J. Understanding the Constitution of Interorganizational Trust. in Lane, C., Bachmann, R. (Eds), *Trust Within and Between Organizations: Conceptual Issues and Empirical Applications*, Oxford University Press, Oxford. 1998. p. 31 – 63

26. Tan, H.H. and Tan, C.S.F. Toward the Differentiation of Trust in Supervisor and Trust in Organization, *Genetic, Social, and General Psychology Monographs*, Vol. 126, No.2. 2000. p. 241 – 260.

27. Tyler, T. R. Why people obey the Law. New Haven, CT: Yale University Press

28. Tyler, T. R., Kramer, R. M. Whiter Trust? In Kramer, R. M. & Tyler T. R. (Eds.), *Trust in Organizations. Frontiers of theory and research*, Sage publications, Thousand Oaks. 1996. p. 1–15

29. Van de Bunt, G. G., Wittek, R. P. M., Klepper, M. C. The Evolution of Intra-organizational Trust Networks. *International Sociology,* Vol. 20, No. 3. 2005. p. 339 – 369

30. Voelpel, S., Kearney, E. Trust within Organizations – Benefiting from Demographic Changes by Fostering Intra-Organizational Trust. *Forum on Public Policy: the Journal of the Oxford Round Table*, 4(3). 2008.

31. Wakabayashi, N. Relational Trust and Embeddedness in Interorganizational Networks: An Analysis of Quality Control Manager Networks in Japanese Buyer-Supplier Relations. 2003. On-line: http://repository.kulib.kyoto-u.ac.jp/dspace/bitstream/2433/37949/1/71.pdf

32. Wehmeyer, K., Riemer, K., Schneider B. Roles of Trust in Interorganizational Systems. 2001. Proceedings of the Eighth Research Symposium on Emerging Electronic Markets (RSEEM 01), Maastricht, the Netherlands.

33. Williamson, O.E. Calculativeness, trust and economic organization. *Journal of Law and Economics,* Vol. 30, 1993. p. 131 – 145

34. Zaheer, A., Harris, J. Interorganizational Trust. In Shenkar, O., & Rueur J. (Eds.), *Handbook of Strategic Alliances*, Sage publications, Thousand Oaks. 2006. p. 169 – 196

35. Zucker, L. G. Production of trust: Institutional sources of economic structure 1840 – 1930. In Staw, B. M. & Cummings L. L. (Eds.). *Research in organizational behaviour,* Vol. 8. Greenwich, CT: JAI Press. 1986. p. 53 – 111

Kęstutis Kriščiūnas, Rita Marcinkevičienė

Organizacijų vidinio ir išorinio pasitikėjimo sampratos išplėtimas

Santrauka

Moksliniuose darbuose pabrėžiama pasitikėjimo svarba įmonės viduje, o taip pat ir sąveikoje su kitomis verslo organizacijomis. Vis dėlto, pasitikėjimas dažniausiai yra analizuojamas kaip sociologinis, o ne vadybinis reiškinys. Be to, nepakankamai dėmesio yra skiriama vadybiniems šio reiškinio skatinimo aspektams.
Šiuo traipsniu siekiama pasiūlyti vadybinius veiksmus, kurie padėtų stiprinti pasitikėjimo raišką tiek įmonės viduje, tiek ir tarp įmonių.
Straipsnyje analizuojama pasitikėjimo raiška, išryškinant vadybines gaires, kurių pagalba būtų galima stiprinti paitikėjimo kultūrą tiek įmonės viduje (t.y. tarp organizacijos narių), tiek ir bendradarbiaujant su kitomis įmonėmis (t.y. su tiekėjais, klientais, bei kitomis suinteresuotomis šalimis). Pateikiamas struktūrizuotas galimų pasitikėjimo stiprinimo veiksmų, abejuose organizacijos santykių lygmenyse sąrašas.
Raktažodžiai: pasitikėjimas, pasitikėjimas įmonėje, pasitikėjimas tarp įmonių, pasitikėjimo stiprinimo vadybiniai aspektai.

About the authors

Kęstutis Kriščiūnas **,**Prof. habl. Dr. of technical sciences, Kaunas University of Technology, director of Institute of Europe. E-mail: kestutis.krisciunas@ktu.lt , tel. +370 37 30 01 39.
Rita Marcinkevičienė, Master degree in management and administration (European Studies), Kaunas University of Technology, Institute of Europe; E-mail.: rita.marcideviciene@yahoo.com, tel. +370 686 54 973.

MEASURING THE ABSORPTIVE CAPACITY OF INNOVATIONS IN THE CITY

Saulius Kromalcas, Giedrius Jucevičius

Kaunas University of Technology, Lithuania

Abstract

The aim of this paper is to provide the general methodology for assessing the absorptive capacity of innovation in the city. The ability to draw on new ideas and knowledge from outside has become of fundamental importance for the competitiveness of the cities, regions and nations. This ability, termed "innovative capacity", largely depends on the presence of the internationally-linked universities and multinational firms in the region. The paper structures the main factors that contribute to accessing, exploiting, anchoring and diffusing the knowledge in the city / region. It selects the basic evaluation parameters that could be used for measuring the absorptive capacity on the city level (based on the case of Kaunas city).

Keywords
Knowledge, innovation, absorptive capacity, development capacity.

Introduction

In 1965, P. Drucker proposed that knowledge would replace equipment, capital, materials, and labour, to become the key element in production. Two decades later, in 1997, he maintained that competitive advantage in the future will be determined by knowledge resources (P. Drucker, and P. Ferdinand, 1993). The analysis of the processes of 'knowledge' concentration and the geographical distribution of innovative activities as determinants of regional differences of economic performance has blossomed in the last few decades. (Breschi, 2000; Breschi and Lissoni, 2001; Martin and Sunley, 2006) Knowledge became one of the priorities in all the performance levels – individual, company, city / town, region and even country. These levels allow analyzing the importance of knowledge in different ways, to use different models and methods, but the main idea remains the same – knowledge becomes the priority of the entire things people do all over the world. Moreover, knowledge to any of the levels comes from both inside and outside. With new technologies and the growth of migration, new knowledge and ideas can be spread more quickly than ever before. Technology has also made novelty and innovation increasingly important to economic growth and development. It should be mentioned that any level that is being analyzed can be both an 'innovation leader' and an 'innovation absorber'. Many places are better at adapting the ideas of others than generating new ideas of their own. The ability to draw in new ideas from elsewhere and build on them at home is a more powerful stimulus than ever in today's economy. (Sami Mahroum et al., 2008)

The ***aim of this paper*** is to provide the general methodology for assessing the absorptive capacity of innovation in the city. The analysis of research literature allows determining the importance and peculiarities of absorptive capacity in different levels, starting with individual level and finishing with country level. The idea of the analysis of different levels lies on adoption of absorptive capacity model and choosing different indicators to measure it. Our analysis is focused on the city level.

Methodology of this paper relies on the concept and model of absorptive / development capacity (AC/DC) proposed by Sami Mahroum, Rob Huggins, Naomi Clayton, Kathy Pain and Peter Taylor (2008), and applied in the research of regions in the UK.
Method used – the analysis of research literature.

The Concept of absorptive capacity

Places need to collaborate and be an integral part of cross-border networks if they are to capture external knowledge and new ideas. However, the ability of participants to benefit from external knowledge can vary significantly from one place to another depending on the number and quality of their universities and other knowledge assets. This creates an imbalance between places. The capacity to absorb external knowledge was identified as early as the 1950s as playing a major role in bridging economic development gaps between places. The new ideas and innovations brought by migration, trade and foreign investment networks cannot be fully captured and exploited if a place lacks the internal ability to absorb external knowledge.

Absorptive capacity refers to the ability to assimilate and manage knowledge in order to improve innovation performance and competitive advantage. (Iammarino, 2005). The concept of absorptive capacity has been used recently to explain a diversity of phenomena, ranging from technology transfer among nations (Mowery D.C., Oxley J.E., 1995) to the efficiency of strategic international alliances. (Lane P.J., Lubatkin M., 1998; Lane P.J., Salk J.E., Lyles M.A., 2001)

The work of Cohen and Levinthal (1989; 1990) on the concept of absorptive capacity has gained immense importance and has spread widely across the research community. Traditionally R&D was regarded as the generator of new information, yet the authors argue that R&D in addition enhances the company's ability to assimilate and exploit the existing information. Absorptive capacity is considered as a filter to knowledge access and utilisation or the ease with which learning can take place. The dual role of R&D suggests that factors that affect the character and ease of learning will affect

firms' incentives to conduct the R&D (Cohen and Levinthal, 1989: 593).

As mentioned above, the concept of absorptive capacity first emerged in the field of organizational learning. Studies at that time highlighted the fundamental role that the acquisition and application of new knowledge played in business competitiveness. Cohen and Levinthal (1990) offered a broad definition of the concept and built a general theoretical framework around its characteristics in business applications. They defined absorptive capacity as: "the ability of a firm to recognize the value of new external information, assimilate it and apply it to commercial ends".

Their definition encompasses a number of important aspects. First, the multidimensional nature of the concept, which involves three basic capacities in relation to new knowledge:

- recognition of its value;
- its assimilation;
- its application for the commercial ends.

Second, the relationship between a company's absorptive capacity and its prior related with knowledge, which includes both basic skills and a common language. This means that absorptive capacity has a cumulative character in the sense that its current development will permit its more efficient accumulation in the future. These aspects of absorptive capacity imply that its development is path or history-dependent.

Cohen and Levinthal (1989) focus specifically on the firm level, which is closely related to issues of knowledge types (Mangematin and Nesta, 1999) and internal knowledge transfer, e.g. in multinational corporations. Pedersen et. al. (2001: 8) investigate the knowledge flows in multinational organizations, where absorptive capacity is seen as a facilitator of knowledge transfer, and argue that a larger gap between the accumulated knowledge in the transferring and the recipient firm leads to a more difficult and less effective knowledge transfer.

This is in line with Van den Bosch et. al (1999: 566), who suggest that absorptive capacity should be explored in an intra-organizational context, that is to discern the absorptive capacity of different organization parts within a firm. But extensive analysis has also been done at the level of the industry. Becker and Peters (2000) investigate the extent to which absorptive capacities affect the input and output levels of innovative firms in manufacturing industries, the relation between industry and university and not least the national level. Keller (1996) analysis the role of absorptive capacity for less-developed countries to catch-up through growth, and Navaretti and Carraro (1999) on determinants of inter-firm R&D agreements between advanced and developing countries. The focus on the relationship between industry and university was also mentioned by Cohen and Levinthal (1989: 572). They argue that universities produce less targeted knowledge, but it may yield a positive effect on the absorptive capacity since approach to complex knowledge fields is enabled using this knowledge. Spencer (2001) uses this proposition as departing point for a discussion on the usage of university research for commercial applications as compared to research that takes place in the private laboratories of firms.

The AC/DC model

The capacity of places to innovate depends on internal and external sources of knowledge, which complement each other. Traditional innovation policy has ignored the importance of external knowledge in developing local innovation capacity. But a place needs both to be able to draw in good ideas from elsewhere – an innovation-absorptive capacity (AC) – and to use them to create new products and services an innovation development capacity (DC). Absorptive capacity allows a place to identify value and assimilate new knowledge, while the development capacity of a place allows it to exploit that knowledge.

If the model of absorptive capacity in company's level includes three main determinants of internal environment – organizational knowledge, formalization and social integration mechanism – and external knowledge influencing potential and realized capacities, Sami Mahroum et al. (2008), measuring absorptive capacity in a region, proposed the model that includes five main components. These authors noticed that these components are essential to any innovation system. Three of these elements form the 'absorptive capacity' components: (1) the capacity to access the international networks of knowledge and innovation; (2) the capacity to anchor external knowledge from people, institutions and companies; and (3) the capacity to diffuse new innovation and knowledge in the wider economy. The last two components belong to the 'development capacities' and they are (1) knowledge creation and (2) knowledge exploitation.

Other researchers have identified other aspects of the knowledge management process: capture, transfer and use (D. De Long , 1997); acquire, collaborate, integrate and experiment (D. Leonard-Barton , 1995). It should be mentioned that these aspects are similar to the ones analyzed by Sami Mahroum et al. (2008). The difference lies in the level that absorptive capacity is analyzed. If it is analyzed on the company's level, it is emphasized that knowledge acquisition and creation are the first steps in the process of developing knowledge (J. Yang, M. Rui, and J. Wang , 2006). However, acquiring knowledge is the first activity of accepting knowledge from the external environment and transforming it into a representation that can be internalized, and/or used within a city. Sub-activities include extracting knowledge from external sources, interpreting the extracted knowledge, and transferring the interpreted knowledge. Hence, knowledge, once acquired, must be quickly and effectively disseminated to all fields of any level being analysed. (J. Yang, M. Rui, and J. Wang, 2001)

Improved use of existing knowledge and more effective acquisition of new knowledge is also a key aspect of acquisition (A.Gold , 2001). It includes the mechanisms and procedures for collecting information inside and outside or creating knowledge (A. Jantunen , 2005). Of course, the procedure of acquiring and identifying knowledge through the experience and reconciliation will assist administrative and technological innovation. (P. Drucker, and P. Ferdinand, 1993)

Reference (Zahra, and G. George, 2002) highlights four distinct but complementary capabilities that compose

absorptive capacity: knowledge acquisition, knowledge assimilation, knowledge transformation, and knowledge exploitation.

Coming back to city level, absorptive capacity allows knowledge to flow in different and reverse directions. Accordingly, the innovation capacity of places combines two broad sets of capacities: their absorptive and development capacity, as mentioned earlier. The conceptual framework by Sami Mahroum et al. (2008) is presented in Figure 1 and combines both the absorptive capacity (AC) of city to identify, value, and assimilate potentially profitable external knowledge and the development capacity (DC) of city to develop and exploit such knowledge.

External knowledge that flows into a city is being transformed into one or more outputs: (1) the creation of new innovation; (2) the creation of new knowledge; or (3) new economic and social value.

Adopting new knowledge from external sources is a process that lasts for a very long period of time. Figure 2 illustrates the conceptual process of innovation through the adoption of external knowledge.
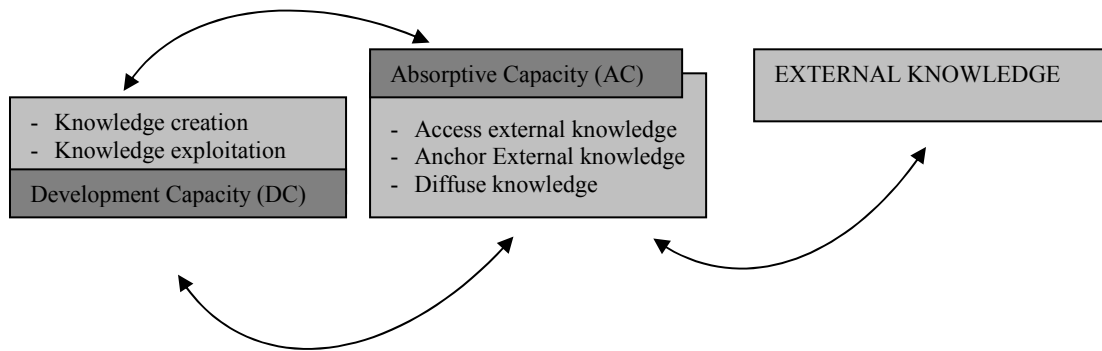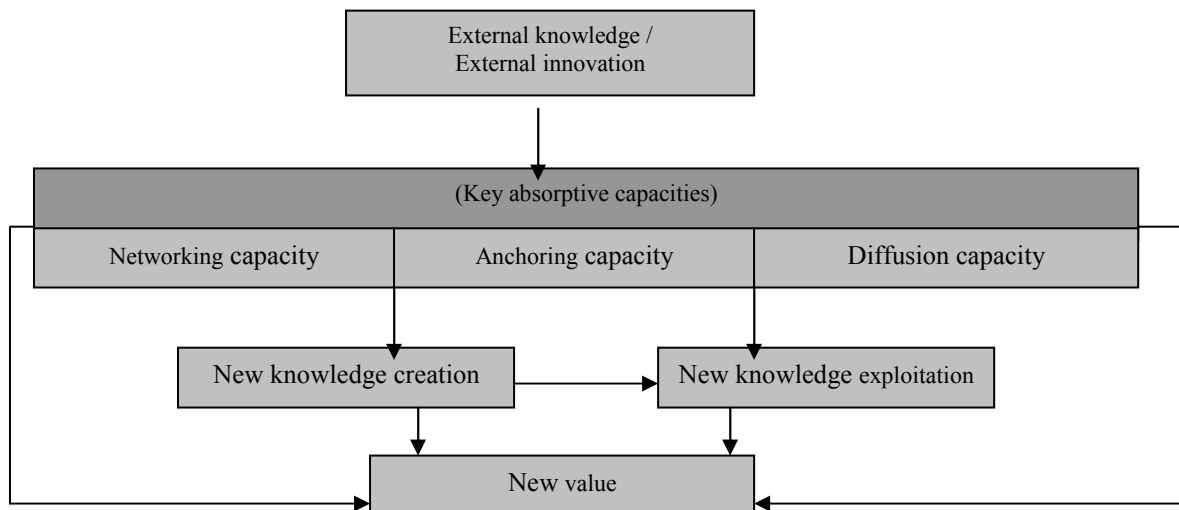

Figure 1. AC/DC innovation model

Figure 2. Innovation through adoption model

In the process showed above, external knowledge flows into a city through one or more of the following channels: (1) business, academic, and social networks; (2) established (anchored) companies in the city; and (3) through active and passive learning and take-up (diffusion). Of itself, absorptive capacity does not add value. Knowledge needs to be exploited first. (Tether, B.S. and Tajar, A. , 2008) Thus, some capacity to create new knowledge and to exploit it remains essential if a city is to innovate through adoption The five components in the figure above are the essential elements of a 'knowledge adoption' innovation system.

The **'access capacity'** is the ability to connect and link to international networks of knowledge and innovation. This capacity requires agents, resources and culture. Agents can identify sources of knowledge elsewhere; they can be individuals or teams of practitioners, working at a university relevant global player. They will require a combination of intellectual, organizational and financial resources to make contacts and diffuse new ideas. A culture of openness and learning is particularly important. Indifference to innovation and isolation from competition is unlikely to lead to the development of external partnerships.

The **'anchor capacity'** is about the ability to identify and domesticate external knowledge from people, institutions and companies. While external knowledge flows contribute to local learning, it is the ability to 'anchor' these external flows that matters most (Crevoisier, O. and Hugues, J., 2008). Anchoring is the capacity to attract international people, investment and companies to set up in a city. It is also defined as a process of identifying, attracting and articulating the context between externally mobile knowledge and immobile local context needs. (Crevoisier, O. and Hugues, J., 2008)

The capacity to **'diffuse knowledge'** is the collective ability of a city to adapt and assimilate new innovations, practices and technologies and spread them in the economy. Diffusion can happen through either 'active' or 'passive' emulation. The former takes place through activities such as purchases and imports of new patents, technologies or systems (Cole, D.T. and Helpman, E., 1995). The latter happens through applied learning, reverse engineering or efforts to catch up with the competition (Nishimura, K., Nakajima,T. and Kiyota, K., 2005).

The capacity to **'create knowledge'** is the ability of a place to generate new ideas, discoveries, designs and inventions. This capacity is often expressed in the production of scientific papers, patents, registered designs and graduates. This capacity can extend horizontally across a broad range of fields and sectors and vertically through specialization and concentration in specific knowledge domains. A horizontally broad knowledge creation capacity facilitates knowledge absorption from wider fields of knowledge, while a vertically specialized knowledge development capacity gives a city a stronger absorptive capacity in complex domains of knowledge.

The ability to **'exploit' knowledge** is the general capacity to utilize knowledge for commercial use and to extract value from it. This capacity is about the application of knowledge for practical use. In innovation policy literature, this ability is sometimes referred as the 'innovation capacity'.

Each element should be measured using special indicators. The selection of indicators depends on the level absorptive capacity is measured. In the next section, having distinguished the indicators that can be measured in different levels, the author of this paper will concentrate on Sami Mahroum et al. (2008) methodology and will analyze the indicators these authors offer to use. This analysis will allow determining the indicators suitable for measuring absorptive capacity on the city level.

Indicator selection

Three different types of absorptive capacity are identified:

- Absorptive capacity for intra-industry knowledge (necessary to capture knowledge from sources within the firm's industry);
- Absorptive capacity for inter-industry knowledge (for knowledge originating in other industries);
- Absorptive capacity for scientific knowledge (for knowledge related to cooperation with universities and public research institutes).

The distinction between the three types of absorptive capacity is a useful categorisation, since different types of knowledge sources require different types of absorptive capacity for the knowledge to be successfully assimilated. Following much of the firm-level empirical literature on the role of absorptive capacity as a determinants of innovation and economic performance (Zahra and George, 2002; Schmidt, 2005), the analysis can use a range of absorptive capacity indicators that might affect the innovation performance of firms, and assess whether the relationships are influenced by the location of firms

and the sectors in which they operate. In addition to indicators of R&D, the analysis can look at the impact of other factors such as human capital, management practices and the use of networks. Different organisational structures and management practices allow an organisation to stimulate and organize the transfer of knowledge across functions and between individuals, and from external sources (Aghion and Tirole, 1994; Cosh et al., 2004, Lam, 2005). Human resource management can also stimulate learning through reward systems and training which increase absorptive capacities (Daghfous, 2004). Williamson (1967) has argued that information can be lost or distorted as it is transferred through different hierarchal structures. Human resource management systems should lead to a more efficient transfer of knowledge and, therefore, higher absorptive capacity. The use of networks, external partners and collaboration with others (for example, Nonaka and Takeuchi, 1995 and Pittaway et al, 2004) can be used to access a wider range of skills, inputs and competences (Kitson and Wilkinson, 2003). Porter (1998) has stressed that proximity improves the effectiveness of collaboration and there may also be cities variations in the effectiveness of networks and intermediary organisations (Baxter et al, 2005).

It is difficult to capture the wider 'hidden' innovation in cities using statistical data. Taking into account that the indicators of absorptive capacity are being analysed in higher level, it should be mentioned, that each city choose those indicators that mostly suit the situation and depending on which data can be accessed. Analysing different research, it was noticed, that very different indicators are being selected. For example, analysing absorptive capacity in Serbia, the following areas were taken into account:

- collaboration in R&D (joint R&D activities, contract research, R&D consulting, cooperation in innovation, informal and personal networks),
- personnel mobility (temporary or permanent movement of researchers from industry to science and vice versa),
- co-operation in training and education (further professional education, curricula planning, graduate education, PhD programmes),
- commercialisation of R&D results in science through spin-offs (disclosures of inventions, licensing patents, start-ups of new enterprises) (Djuro Kutlaca)

Many researchers, measuring the absorptive capacity take four groups of indicators into account. They are the following:

Indicators that measure absorptive capacity are:

- Expenditures in education in % of GDP[1],
- S&E graduates (% 20–29 population),
- Population with 3rd level education,
- Participation in life-long learning,
- Employment in medium/high-tech industries,
- Employment in high-tech services industries;

R&D capability is important not only to generate new knowledge but also as a mechanism to absorb it. *Indicators that measure R&D capability are*:

---

[1] GDP – Gross Domestic Product

- Public R&D expenditures (% GDP),
- Business R&D expenditures (% GDP),
- R&D personnel per labour force,
- high-tech patents (per million population),
- Resident patents per capita;

Diffusion is the key mechanism for reaping economic benefits from investment in R&D and for increasing absorptive capacities. *Indicators that measure diffusion are*:

- Training enterprises as % of all enterprises,
- CVT (continuous vocational training) in % of labor costs of all enterprises,
- ISO 9000 certifications per capita,
- Internet users per 10,000 inhabitants,
- PC per 100 inhabitants,
- ICT expenditures (% GDP);

Demand for R&D and innovation is the key economic mechanism that initiates wealth generation processes in R&D, absorption and diffusion activities. *Indicators that measure demand for R&D and innovation are*:

- Stock market capitalization in % GDP,
- Domestic credit provided by banking sector,
- Share of FDI in GDP,
- Share of trade in GDP,
- Index of patent rights,
- Registered unemployment,
- Consumer price index.

All these indicators of national innovation capacity are used to calculate a summary innovation capacity index and its components (absorptive capacity, R&D supply, diffusion capacity, and strength of demand for innovation): data are standardized, multiplied by assigned weights and added together all the resulting products. In this way are constructed aggregate values for each of the four components of national innovation capacity. By summing the values of four components the aggregate national innovation capacity index can be calculated. (Radosevic, 2004).

Preparing the article, the author was looking for the researches in absorptive capacity field carried out in Lithuania. But the researches included only the R&D analysis and measurement. (Kriaučionienė M., 2008). This show that absorptive capacity is quite a new field to be analyzed in Lithuania and its cities, while it is widely researched abroad.

Taking into account AC/DC model by Sami Mahroum et al. (2008), there are five groups of determinants chosen. Sami Mahroum et al. (2008) noticed that *'knowledge creation'* can be understood as new ideas, concepts, skills and competencies, or technical and organisational advances. Knowledge on its own is a resource that may or may not be employed and it can be used in many different ways. The central process of knowledge creation is not the design but the redesign of scientific knowledge, building innovatively on existing knowledge and insights. (Freeman, C., 2001)

The most common measures of 'knowledge creation' or 'knowledge capital' are R&D expenditure and patent counts. Sami Mahroum et al. (2008) propose there main themes of measurements for measuring knowledge creation in a city:

- The human capital base.

- Public and private investment in new knowledge.
- New knowledge creation outputs.

To measure these, the following indicators can be used:

- University degrees and other higher education qualifications obtained by city as a proportion of total population – an indication of human capital development and flow of human capital into the labour market.
- R&D performed with Higher Education Institutions (million) as a percentage of city's GVA[1] – an indication of knowledge creation taking place through the higher education sector.
- R&D performed with Government Establishments (million) as a percentage of city's GVA – an indication of knowledge generating activity taking place within government.
- R&D performed with businesses (million) as a percentage of city's GVA – an indication of the amount of resources being channelled into increasing the knowledge base within businesses.
- Number of patent applications granted by city – an output measure of knowledge created in regions and indication of the increase in knowledge stock in the economy.

Almost all of these indicators could be used to measure knowledge creation on the city level. Most of the data needed for the measuring could be gained for the city's statistical sources. But it should be mentioned that the main obstacle for gaining the data could be the lack of statistical information as not all the cities gather and process entire statistical information. The practice has showed that most of the Lithuanian cities and towns gather and operate only the main statistical data (GVA, employment, unemployment, etc.). The needs of special information are not rated and this could cause problems for the objective measurement.

Knowledge exploitation is the process of transforming, combining and reshaping knowledge in the form of research, science and technology into a tradable commodity. It is the general capacity to use knowledge commercially and extract value from it. This is often the most visible form of innovation, particularly at a policy level, and is a more direct form of value extraction often linked to the process of knowledge creation. As knowledge-based competition becomes globalized, firms cannot afford to remain stationary with their existing products and processes; they must acquire knowledge, create new ideas and translate them into commercial products. Although knowledge production and learning is undertaken by many organisations, such as universities, the onus to exploit this knowledge still largely falls on the business sector. Therefore, it is critical that cities understand the capacity of their business communities to exploit knowledge.

Sami Mahroum et al. (2008) offer the following indicators to use to measure knowledge exploitation capacity:

---

[1] GVA – Gross Value Added

- Innovation active enterprises – this indicates the potential propensity of businesses to exploit their knowledge.
- Process innovations new to industry – this indicates the exploitation of knowledge to create novel innovation.
- Product innovations new to market – this indicates the exploitation of knowledge to commercialise new or improved products.
- Early-stage private equity investment – this indicates a demand for finance to exploit and commercialise knowledge.
- Exports of knowledge services – this indicates the output of the commercialization of knowledge

All these indicators could also be measured on the city level. The statistic sources will not present the information needed in this field or can present generally for the country, not specifying the cities and towns. So far there is Kaunas regional innovation centre or Lithuanian innovation centre that should obtain the information needed to measure knowledge exploitation. Some of the indicators could be missed in measurement, but in the author's opinion, the measurement will not be entire and objective as in this way not all the possible fields will be measured.

The ability to '*access knowledge*' sources is the capacity to link and connect to international networks of knowledge and innovation. Quantifying territorial stocks of knowledge capital is not possible because knowledge flows are dynamic. The complexity of the contemporary geography of knowledge flows means that their measurement is also far from simple. Proxies are needed especially to estimate tacit knowledge transfer. The indicators Sami Mahroum et al. (2008) use to measure knowledge access capacity are as follows:

- Advanced Producer Service (APS) network connectivity – this indicates access to inward flows of knowledge through firms' global networks in the advanced service economy.
- Co-authorships between cities – this indicates access to inward flows of knowledge through research networks.
- Communications and international transport networks - flights – this indicates the international knowledge flow capacity of cities/regions through airline infrastructure and coverage by Broadband Cable and Fixed Wireless Access (FWA) technologies – this indicates the international flow capacity of cities/ regions through broadband infrastructure.
- Advanced Producer Service (APS) network connectivity – this indicates access to inward flows of knowledge through firms' global networks in the advanced service economy

Measuring access knowledge in Kaunas city, not all of the Sami Mahroum et al. (2008) indicators could be used in Kaunas city case. Taking into account international flights to Kaunas city, this indicator is really very useful, but it is too complicated to determine the international knowledge flow capacity through the flights. In this case, research must be carried out to calculate this indicator, however, it is a time consuming effort. Broadband evaluation is an important indicator and will show

international flow capacity of city through broadband infrastructure.

So taking into account these indicators, only the following could be used for measuring "access knowledge" in Kaunas city: Advanced Producer Service (APS) network connectivity, coverage by Broadband Cable and Fixed Wireless Access (FWA) technologies, Advanced Producer Service (APS) network connectivity.

Knowledge anchoring refers to the capacity to attract overseas people, investments and firms to establish and embed themselves in a region. It requires an ability to nurture and attract skills and talent that will improve and sustain competitiveness. In effect, highly skilled workers are crucial to regional innovation systems, since without them innovation cannot take place (Crevoisier, O. and Jeannerat, H., 2008). As knowledge circulates, it is continuously mobilised and combined within interacting firms and cities, with development and growth dependent on the capacity to anchor knowledge within regional production systems. (Crevoisier, O. and Jeannerat, H., 2008)

As a means of measuring knowledge anchoring capacity it is important to focus on two units of analysis - the anchoring of businesses and people. Sami Mahroum et al. (2008) use to measure knowledge anchoring capacity using the following indicators:

- Density of international firms – this indicates the stock of international investment and knowledge.
- Foreign direct investment project successes – this indicates new inward flows of international investment and knowledge.
- Service sector investment by foreign owned companies – this indicates the depth of anchoring of foreign investment.
- Net within region migration (to city from periphery) of people in higher managerial and professional occupations – this indicates the attraction of new talent and skills.
- Retention of graduates – this indicates the anchoring of new talent and skills.

All these indicators could be measured in Kaunas city as well obtaining data from statistical sources and university data bases.

'*Knowledge diffusion*' is identified as one of the three core measures of urban absorptive capacity. It is defined as the movement of ideas, information and knowledge between people, firms and institutions, and the capacity of a city to absorb this knowledge, which may be embodied in new innovations, practices or technologies. The capacity to diffuse in the local economy knowledge absorbed from external sources is vital for the "creative imitation and the exploitation of existing stocks of knowledge which account for most innovation and economic development". (Arnold, E. and Bell, M., 2001)

A useful way to understand knowledge diffusion in places and how to measure it is by defining it as consisting of four elements:

    1. Populations learning capacity.
    2. Workforce learning capacity.
    3. Knowledge sharing capacity.
    4. Knowledge diffused in firms.

These indicators can't capture every element of knowledge diffusion; rather they aim to reflect, insofar as

the data allows, city capacity to absorb diffused knowledge. The indicators Sami Mahroum et al. (2008) use to measure knowledge diffusion capacity are as follows:

- Human capital index (a weighted average of National Vocational Qualifications – NVQs) – an indication of the capacity of the resident population to diffuse and absorb knowledge effectively.
- Proportion employed in the city with certain NVQ levels – an indication of city firms' access to skilled labour.
- Number of knowledge-intensive enterprises per thousand population – an indication of the opportunities for the exchange of knowledge between firms.
- Proportion of businesses with cooperation agreements – an indication of the potential for knowledge diffusion between firms.
- Total funding for business-university research and consultancy (per academic staff) – an indication of the transfer of knowledge taking place between universities and businesses.
- Innovation new to firms (innovation active firms only) – an indication of the take-up of existing innovations by individual firms.

All of these indicators could be measured in Kaunas city as well. But as mentioned above, it can be difficult to obtain certain information in these fields. In this way the indicators could be changed in regards of the information accessible. Forming the methodology of measurement of absorptive capacity of Kaunas city, the indicators are mapped depending on the aim of the research and of the information that can be gained.

The main problems measuring all the indicators in five elements of AC/DC model in Kaunas city can be the following:

- Majority of data, necessary for measuring these indicators, can be missing for Kaunas city – simply, there could be the case that there is no statistical system for collection and analysis of such data;
- Data which are available, mostly are collected by the national statistical office, using national classification systems and methodologies, in number of cases different compared to international statistical practice;
- Some data are of minor or difficult-to-use level, such as number of patent applications and patent grants.

The composite indices provided for each of the five components presented in Sami Mahroum et al. (2008) AC/DC model should be based on a mean average of the normalized values to remove the effects of unequal variables and ensure that data is comparable to facilitate the combination of data. The mean and standard deviation should be calculated for each metric (s), then for each metric (s) the mean (m) should be subtracted and divided by the standard deviation (sd):

$$C = \frac{s - m}{sd}$$

An average should be then taken for each of the metrics to create the overall composite score (C).

If different cities are compared correlation can be calculated. Correlations then should run between each of the city 'Capacity' composites and tested for significance. Sensitivity analysis can also be used to determine how 'sensitive' these scores are to changes in the scores for the individual metrics constituting these composites.

Conclusions

Generalizing the analysis of measurement of absorptive capacity in city, it should first of all be noticed that absorptive capacity is mostly analyzed, researched and measured on the organizational level. Some studies and research were also carried out on the level of the individual, industry, city, region and country. The level of analysis calls for different models, methods and indicators for measurement.

The AC/DC model and its five key elements call for a list of specific indicators, which can be accessed in a particular situation. Analysing the city of Kaunas and its absorptive capacity the following key indicators could be measured:

- the element of knowledge creation - University degrees and other higher education qualifications obtained by city as a proportion of total population; R&D performed with Higher Education Institutions (million) as a percentage of city's GVA; R&D performed with businesses (million) as a percentage of city's GVA; Number of patent applications granted by city;
- the element of knowledge exploitation - Innovation active enterprises, Process innovations new to industry, Product innovations new to market, Early-stage private equity investment, Exports of knowledge services;
- the element of 'access knowledge' - Advanced Producer Service (APS) network connectivity, coverage by Broadband Cable and Fixed Wireless Access (FWA) technologies, Advanced Producer Service (APS) network connectivity;
- the element of knowledge anchoring - Density of international firms, Foreign direct investment project successes, Service sector investment by foreign owned companies, Net within region migration (to city from periphery) of people in higher managerial and professional occupations, Retention of graduates – this indicates the anchoring of new talent and skills,
- the element of 'knowledge diffusion' - Human capital index (a weighted average of National Vocational Qualifications), Proportion employed in the city with certain NVQ levels, Number of knowledge-intensive enterprises per thousand population, Proportion of businesses with cooperation agreements, Total funding for business-university research and consultancy (per academic staff), Innovation new to firms (innovation active firms only).

It should be noticed as well that the usage of the indicators foreseen in this methodology depends a lot on the access to the needed information in the statistical databases, which, on the other hand, could be developed in accordance with the desired system of indicators.

References

1. Arnold, E. and Thuriaux, B. Developing Firms Technological Capabilities. Report to OECD. Brighton: Technoplis. 1997.
2. Arnold, E. and Bell, M. Some New Ideas about Research and Development. Report to Hernes Commission, Ministry of Foreign Affairs, Denmark. 2001.
3. Aghion, P. and Tirole, J. 'The Management of Innovation', The Quarterly Journal of Economics. 1994. p.1185-1209.
4. Baxter, Tyler, P, Moore, B, Morrison, N, McGaffin, R, Otero-García, M and Poteete, J. Policy and Encouraging Places: Encouraging Technology Based Development, The Cambridge-MIT Institute, Programme on Regional Innovation Competitiveness Reports. 2005.
5. Becker, W. and J. Peters, Technological Opportunities, Absorptive Capacities and Innovation. Presented at: Schumpeter Conference, Manchester. 2000.
6. Breschi, S. The Geography of Innovation: A Cross-sector Analysis, Regional Studies, 34 (3). 2000. p. 213–229.
7. Breschi, S. and Lissoni, F. Knowledge Spillovers and Local Innovation Systems: A Critical Survey, Industrial and Corporate Change, 10(4). 2001. p. 975–1005.
8. Cohen, and Levinthal. Absorptive capacity: A new perspective on learning and innovation, Administrative Science Quarterly, Volume 35, Issue 1. 1990. p. 128-152.
9. Cole, D.T. and Helpman, E. International R&D Spillovers. 'European Economic Review.' 39. 1995. p. 859-887.
10. Cooke, P., Heidenreich, M. and Braczyk, H. (Eds) Regional innovation systems: the role of governance in a globalized world. London: Routledge. 2004.
11. Cosh, A., Fu, X. and Hughes, A. Innovatability of small and medium enterprises and its determinants: evidence from UK survey data. Centre for Business Research, University of Cambridge, mimeo. 2004.
12. Crevoisier, O. and Hugues, J. The Territorial Knowledge Dynamics: from the proximity paradigm to multi-location milieus. Working Paper 2008/1. 2008.
13. Crevoisier, O. and Jeannerat, H. The Territorial Knowledge Dynamics: From the proximity paradigm to multi-location milieus. Working Paper 1/2008-E. Neuchâtel: Groupe de recherche en économie territoriale (GRET), Université de Neuchâtel. 2008.
14. Daghfous, A. Absorptive Capacity and the Implementation of Knowledge-Intensive Best Practices, SAM Advanced Management Journal, 69 (2). 2004. p. 21-27.
15. De Long, D. Building the Knowledge-Based Organization: How Culture Drives Knowledge Behaviors. Center for Business Innovation, Ernst & Young, May. 1997.
16. Djuro Kutlaca Measurement of National Innovation Capacity: indicators for Serbia. http://www.enid-europe.org/conference/abstracts/Kutlaca.pdf
17. Drucker, P. and Ferdinand, P. Post-capitalist society: Butterworth-Heinemann Oxford. 1993.
18. Freeman, C. The National System of Innovation in historical perspective. In Archibugi, D. and Lundvall, B. A. (Eds) The Globalising Learning Economy. Oxford: Oxford University Press. 2001.
19. Gold, A. Knowledge Management: An Organizational Capabilities Perspective. Journal of Management Information Systems, Vol. 18, No. 1. 2001. p. 185-214.
20. Iammarino, S. An Evolutionary Integrated View of Regional Systems of Innovation: Concepts, Measures and Historical Perspective, European Planning Studies, 13(4). 2005. p. 495-517.
21. Jantunen, A. Knowledge-processing capabilities and innovative performance: an empirical study, European Journal of Innovation Management, Vol. 8, No. 3. 2005. p. 336.
22. Kitson, M. and Wilkinson, F. The State of Competitiveness, in Cosh, A and Hughes, A. (eds), Enterprise Challenged: Policy and Performance in the British SME Sector, 1999-2002, Centre for Business Research, University of Cambridge. 2003.
23. Kriaučionienė M. An assessment of research system and policies. Lithuania. Erawatch Country Report 2008.- Joint Research Centre Directorate-General for Research. 2008.
24. Lam, L. Organisational innovation', in Jan Fagerberg, David C. Mowery and Richard R. Nelson, (eds), Lane P. J., Lubatkin M. (1998) Relative absorptive capacity and inter-organizational learning. Strategic Management Journal, 19. 2005. p. 461-477.
25. Lane, P. J., Salk, J. E., Lyles, M.A. Absorptive capacity, learning and performance in international joint ventures. Strategic Management Journal, 22. 2001. p. 1139-1161.
26. Leonard-Barton, D. Wellsprings of Knowledge: Building and Sustaining the Sources of Innovation: Harvard Business School Press. 1995.
27. Mangematin, V. and Nesta, L. What Kind of Knowledge can a Firm Absorb? In: International Journal of Technology Management 18(3/4). 1999. p. 149-172.
28. Martin, R. and Sunley, P. Path Dependency and Regional Economic Evolution, Discussion paper, Papers in Evolutionary Economic Geography, Utrecht University. 2006.
29. Mowery, D.C., Oxley, J.E. Inward technology transfer and competitiveness: the role of national innovation systems. Cambridge Journal of Economics, 19. 1995. p. 67-93.
30. Navaretti, G. B. and Carraro, C. From Learning to Partnership: Multinational R&D Coorporation in Developing Countries. In: Economic of Innovation and New Technology 8. 1999. p. 137-173.
31. Nishimura, K., Nakajima, T. and Kiyota, K. Productivity Convergence at the Firm Level. (March 12, 2005). Available at: http://www.ssrn.com/
32. Nonaka, I. And Takeuchi, H. The Knowledge-Creating Company, New York. 1995.
33. Pittaway, L., Robertson, M., Munir, K., Denyer, D., and Neely, A. Networking and Innovation in the UK: A Sytematic Review of the Literature, Advanced Institute of Management, London. 2004.
34. Porter, M. On Competition, Boston Mass, Harvard Business School. 1998.
35. Radosevic, Slavo A Two-Tier or Multi-Tier Europe? Assessing the Innovation Capacities of Central and East European Countries in the Enlarged EU, JCMS Volume 42, Number 3. 2004. p. 641–66.
36. Sami Mahroum, Rob Huggins, Naomi Clayton, Kathy Pain, and Peter Taylor Innovation by Adoption. Measuring and mapping absorptive capacity in UK nations and regions.-NESTA, October. 2008.
37. Schmidt, T. What Determines Absorptive Capacity, Paper presented at the DRUID Tenth Anniversary Summer Conference on 'Dynamics of Industry and Innovation: Organisations, Networks and Systems. 2005.
38. Spencer, J. W. How Relevant is University-Based Scientific Research to Private High-Technology. 2001.
39. Tether, B.S. and Tajar, A. Beyond industry–university links: Sourcing knowledge for innovation from consultants, private research organisations and the public science-base. 'Research Policy. 37. 2008. p. 1079–1095.
40. Van den Bosch, F. A. J., H. V. Volberda, et al. Co-evolution of Firm Absorptive Capacity and Knowledge Environment: Organizational Forms and Combinative Capabilities. In: Organization Science 10(5). 1999. p. 551-568.
41. Zahra, S. and George, G. Absorptive Capacity: A Review, Reconceptualization, and Extension, Academy of Management Review, Vol. 27, No. 2. 2002. p. 185-203.
42. Williamson, O.E. Hierarchical Control and the Optimum Firm Size, Journal of Political Economy, 75 (2). 1967. pp.123-138.

Saulius Kromalcas, Giedrius Jucevičius

Inovacijų absorbcijos lygio įvertinimas pasirinktame mieste

Santrauka

Straipsnyje pateikiama bendra metodologija, skirta įvertinti inovacijų absorbcijos lygį pasirinkto miesto pavyzdžiu. Galimybė pritraukti naujas idėjas bei žinias iš išorės, didina miesto ar regiono konkurencinį pranašumą. Galimybė pritraukti inovacijas, kitaip dar vadinama "innovative capacity", priklauso nuo tarptautinių įmonių kiekio regione bei tarptautinių universitetinių ryšių. Straipsnyje pateikiami veiksniai, kurie palengvina žinių įsisavinimą bei jų panaudojimą mieste ar regione. Pateikti vertinimo kriterijai, kurie gali būti naudojami apskaičiuoti inovacijų įsisavinimą mieste.

About the authors

Saulius Kromalcas**,** PG, Faculty of Social Sciences, Department of Strategical Managment, Kaunas University of Technology, Lithuania. E-mail.: Saulius.kromalcas@kaunas.lt, tel. Nr. (+370) 37 425340**.**
Giedrius Jucevičius**,** assoc. dr. , Faculty of Social Sciences, Department of Strategical Managment, Kaunas University of Technology, Lithuania. E-mail.: giedrius.jucevicius@ktu.lt
Tel. Nr. (+370) 37 225162

LEARNING ORGANIZATION: WHAT ENVIRONMENT FOSTERS LEARNING?

Diana Lipinskienė
Kaunas University of Technology, Lithuania

Abstract

In the paper issues of successful learning and elements of learning environment that fosters learning in the learning organization are analyzed. In order to create such environment main features of the learning in learning organization have to be highlighted. Therefore, in the first part of the paper the understanding of the concept "learning organization" is presented. Then factors for successful learning are revealed and the features of empowering environment as the environment that enhances motivation and deep approach are described. At the end of the paper model of the learning environment in the learning organization is presented.

Introduction

In the complex and unpredictable business world of today, constant changes, rapid growth of information, demographic changes of workforce, globalization, and increased competition are the factors which *require organizations to change their values in order to assure* its continued existence. Nowadays organizations have to enable themselves to change and continue to function effectively in any turbulent environment. As knowledge rapidly gets out-of-date organizations' competitiveness in this changeable world relies upon the competencies the employees possess and their intrinsic motivation to involve into the continuous competence development.

Different researches that were carried out by many scientists have shown that workplace learning and competence development become essential condition for increasing efficiency, level of productivity, innovation and competitiveness. In this context the ideas about learning in working life that have transformed away from viewing educational institutions as the primary places for learning, towards the recognition of the workplace as a substantial learning environment, are highlighted in the works of scientists (Ellström, 2005; Paloniemi, 2006; Stanikūnienė, Lipinskienė, 2006; Stanikūnienė, Jucevičienė, 2007; Svensson, 2004 and others).

Since learning and competence development become more important than ever, the need of new shapes of organizations emerges. Here significance of becoming a learning organization which enables learning of all levels of organization becomes obvious. The issues of the learning organization have been investigated by many scientists in various aspects: definition and features of a learning organization (Pedler, Burgoyne, Boydell, 1991; Fullan, 1998, Senge, Kleiner, Roberts et. al., 2000; Simonaitienė, 2001, et. al.), school as learning organization (Simonaitienė, 2001; Kudokienė et.al., 2007), leaders' competencies and roles in the learning organization (Kudokienė et.al., 2007; Lipinskienė, Daraškevičiūtė-Raginienė, 2007, et. al.). Analysis of scientific literature allows us to maintain that in the learning organization the importance of competence development, learning, especially learning from experience, tolerance of mistakes and creating the learning environment is emphasized.

According to Mumford (2000) the learning organization depends absolutely on the skills, approaches and commitment of employees of their own learning. However, the employees can be helped to learn or hindered from learning by the organization in which they work and are supposed to actively involve into learning process. The environment maybe is not absolutely critical or vital factor but it can have a substantial contribution to employee's approach to learning and his/her willingness to learn. When studying research literature the lack of scientific works in which the features of environment that enhances motivation to learn, fosters and facilitates learning are analyzed was observed. Therefore in this paper the scientific **problem** which can be formulated as a question "What environment should be created in order to foster learning in the learning organization?" will be analyzed.

The object of the paper is learning environment.

The aim of the paper is to reveal the environment that fosters learning in the learning organization.

In this paper the theoretical framework of my future research will be presented. Consequently, for fulfilling the task, the literature study and meta-analysis were carried out. In the first part of the paper the understanding of the concept of learning organization is presented and in the second one, theoretical substantiation of the learning environment that should be created in the learning organization in order to foster learning is carried out.

Understanding the concept "learning organization"

Kam Hou Vat (2004) states that the concept of the learning organization took seed several decades ago and gained major recognition with the incredible success of Peter Senge's 1990 book *The Fifth Discipline* in which Senge describes a learning organization as a place where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together. At the core of Senge's formulation are five essential learning disciplines: personal mastery, mental models, shared vision, team learning, and systems thinking. Personal mastery is the commitment by an individual to the process of learning.

It can be seen as the basic building block through the actualization of which the learning organization is typically constructed. Research has shown that most learning in the organization and workplace is incidental, therefore it is important to develop culture where personal mastery is practised in daily life. (Senge, Kleiner, Roberts, et. al., 2000). Mental models are about how individuals reflect on their own knowledge, using such models to improve the internal understanding of the organization's functions, and processes. Shared vision implies a sense of group commitment to a matrix of organizational goals, while team learning describes a sharing and utilization of knowledge involving collective thinking skills. The development of a shared vision is important in encouraging the employees to learn as it creates a common identity that can provide focus and energy for learning. Team learning is the accumulation of individual learning. It has such features as boundary crossing and openness, shaed meaning and understanding, as it requires individuals to engage in dialogue and discussion. The purpose of systems thinking is to understand relationships and inter-relationships, as well as the context and the forces that affect the behavior of the organization (Kam Hou Vat, 2004). System thinking also states that all the characteristics of learning organization must be apparent at once in an organization for it to be a learning organization.

According to Dale (2000) learning organization can be described as organization in which learning and working are synonymous. It facilitates the learning of all its members, has a climate in which individual members are encouraged to learn and develop their full potential. In this way, learning organization continuously transforms itself (Lipinskienė, Daraškevičiūtė-Raginienė, 2007). Pedler, Burgoyne, Boydell (1991) defines the learning organization as an organization that facilitates the learning of all its members and continuously transforms itself and its context. Kerka (2005) summarizes definitions of a learning organization and concludes that learning organization provides continuous learning opportunities, uses learning to reach their goals, fosters inquiry and dialogue, making it safe for people to share openly and take risks.

From all stated above it is evident that *learning* becomes a core activity in the learning organization. Moreover, in the learning organization learning from experience which is interrelated with reflection and reflective learning from one's own activity and other person's experience by exchanging the understandings and personal knowing through communication and collaboration is crucial. This form of learning requires a favorable environment that fosters collaboration, the support from management, the emotionally safe psychological climate and organizational conditions for knowledge sharing and dissemination (Vasiliauskiene, Stanikuniene, et al., 2005).

Main requirement of learning organization – facilitate the learning of all its members despite of position, gender or age, create learning environment - a climate in which individual members are encouraged to learn and develop their full potential. Consequently we may conclude that reasonable and rich *learning environment* has to be created in the learning organization. Here it is important to put stress that the learning environment is not the same as educational environment. We used to believe that learning occurs in the educational environment created by a teacher in the educational institution. The concept learning environment is wider than educational environment. According to Stanikūnienė and Jucevičienė (2007) learning environment may be identified in two ways: first, learning environment as emerging from an educational environment that is based on the targeted educational impact created by a teacher. In this case it should be emphasized that learning environment identified by a learner may only partly overlap with the educational environment or be completely different. It means that from the same educational environment may emerge different learning environments. Second, learning environments may be naturally emerging and not influenced by the educational environment. They are usually identified in the personal activities a person takes part in. Thus learning in learning environment is not necessarily formal, that takes part in educational environment. Learning in the learning organization occurs in any learning environment, when employee learns from any his activity that he takes part in. In this paper concept of learning environment is perceived as environment that:

- naturally emerges and is not influenced by the educational environment;
- is not necessarily formal;
- learning occurs when employee learns from any his activity that he takes part in.

What factors are crucial for successful learning and what are the features of environment that foster those factors and thereby stimulate and facilitate learning?

Learning environment that fosters learning: theoretical assumptions

Before we start highlighting the features of environment that fosters learning, factors for successful learning have to be revealed.

Analysis of scientific literature (Ramsden, 1992, 1998; Thorlakson, Murray, 1996; Usher, Bryant, Johnston, 1997; Fielding, 1997; Bowden, Marton, 1998 ir kt.), allows distinguish following factors that influence learning:

- learning motivation; according to many authors it is one of most important factors that influence learning.
- Self confidence, belief in power and abilities.
- Trust in other people.
- Deep approach to learning.

Ramsden (1992, 1998) argues that learner's approach to learning can be the source of poor learning outcomes. The concept of approach describes a qualitative aspect of learning. Author propose that concept of approach is about "how people experience and organize the subject matter of a learning task; it is about "what and how" they learn, rather than "how much" they remember. He distinguishes two main approaches to learning: deep and surface. Deep approach generates high quality, well-structured, complex outcomes; the sense of enjoyment in learning and commitment to the subject is produced. When people adopt deep approach to learning their

motive is to gain understanding; they seek to make sense of new knowledge in terms of what they already know.

Here I want to note that deep approach, as well as other factors for successful learning mentioned above, is fostered in *empowering environment (*see research results in Glinskiene, Lipinskiene, 2005). Additionally, empowering environment gives the opportunity to learn, particularly to learn from experience and failures. Therefore the importance of empowering environment and its effect on learning becomes evident. *Empowerment* is meant as creation of proper environment, which increases individual's confidence and encourages him to develop his knowledge and competence (Lipinskienė, Vingilytė, 2006). This particular environment ensures functioning of following conditions: competence (employees' and manager's), material (comfortable workplace that satisfy employees' needs, accessibility of resources), psychological (positive climate based on parity, collaboration) (Lipinskiene, 2005, 2007).

Furthermore, I want to add that, the research results allow us to affirm that most important advantage of empowering environment is, that in the empowered organizations employees at all levels are actively engaged in managing themselves, including their learning process (Lipinskienė, 2005). This environment gives a learner learning power.

Following features of empowering environment interrelate with learning and learning outcomes:

- Individual autonomy over ideas and responsibility for decisions associated with learning
  - Involvement and participation
  - Toleration of failures
  - Reflection
  - Empowering leader
  - Availability of resources
  - Compensation system
  - Collaboration

These features and their interrelation with learning and learning outcomes may be briefly described as follows.

Autonomy means that employee is given freedom to choose learning goals, means and methods It leads employee to the finding the best way to learn and act. Giving autonomy and *responsibility* allows him to control his learning process, transfer of responsibility from manager to employee leads to increasing of confidence and decision – making skills. Being responsible for results is a highly motivating force. As G. Mayes (2003) asserts, all people need to know specifically what they are responsible for and everyone of us wants to know that we have a strategic assignment so important that if we miss it then the whole team will suffer (Lipinskienė, Vingilytė, 2006). Also, a group of three or more, focused on a common goal, becomes a highly intelligent force. They are aware of minor problems and have authority to manage them. The team is recognized for their ability to prevent problems while getting job done.

Involvement and participation can lead to creation of the most suitable learning plan. Moreover, when people are involved and have opportunity to participate in organization's activities and affairs, they develop in themselves pride, self-respect, self-reliance and a heightened sense of responsibility. Opportunity to be involved allows employees to discover their own potential. Employees' involvement and participation is important also for other reason which derives from the main value of the learning organization that is "learning", the result of which can be described as changes in knowledge, competence, abilities, skills, values, approaches, etc. Therefore people have to be inspired to accept changes. Reg Revans says "Learning is about change. Learning is achieved when a new skill, behavior or attitude has been transferred to a real life situation – and has been proved to work." (West, Markiewicz, 2004, p. 90). Hence new knowledge is applied in the activity and causes changes in the organization and personnel behavior. Therefore, learning organization is about continual changes and transformation. Here it is important to mention that people resist changes and there a many reasons for this. Sometimes changes are seen as inconvenient and people resist changes because it is change, regardless of weather they perceive it to be to the benefit or detriment of the organization. They may also feel that changes may be somehow disruptive their own work lives. People resist changes if they see them threatening their job security, power, status, pay differentials or the diversity of their jobs. According to West M. A., Markiewicz L. (2004) people *are much less likely to resist changes if they are involved* in the innovation process. This allows us to assert that employee's active involvement and participation in decision making has to be ensured and supported.

Toleration or acceptance of failure as the feature of empowerment offers more opportunities to learn and reflect; it creates conditions for experiments and experiential learning; thereby learning from each other is facilitated and fostered. With every failure people can learn what does not work, then analyze and develop new ideas of what might work. They also learn to accept failure and bounce back from it. With persistence they find what works. Once again, this is opposite educational environment where students must depend on teacher and have the right answer the first time. Moreover, a contemporary approach to learning argues that mistakes are the learning possibilities. Therefore, managers should encourage the employees to openly discuss their failures and, in turn, should not blame and punish them for the mistakes (Stanikuniene, Lipinskiene, 2006). Here I want to put stress on the concept of *reflection* that is one of the features not only of the empowering environment but also of the learning organization. Hoyrup and Elkjaer (2006) argue that reflection in a group of co-workers is a key element in competence development, and actually an important part of the everyday learning process in organizations. By reflection, they mean "a complex activity aimed at investigating one's own action in a certain situation and involving a review of the experience, an analysis of causes and effects, and the drawing of conclusions concerning future action, and which results in a changed conceptual perspective" (Hoyrup and Elkjaer, 2006, p. 29). According to the authors, both individuals and organizations can benefit by reflection. At the individual level, reflection gives the employee opportunity to learn from mistakes, share knowledge and ask for feedback. At the organizational level, reflection can create space for vision and knowledge sharing among

employees, and thereby yield some new ideas and even challenge groupthink. Thus, reflection can lead to experimentation and innovation when employees find it important to put new ideas into practice (Hoyrup and Elkjaer, 2006). Ellstrom (2006) points that reflecting activities in organizations which focus on the content, processes and outcome of employees' actions, require time to observe, think, discuss and exchange ideas with other people. Therefore, Ellstrom (2006) suggests that organizations use the time well by putting reflection on the agenda, with the purpose of creating a space for learning and competence development in and through the work.

Opportunity to risk is related with acceptance of failure. Repetitive tasks kill the desire to learn, an attitude that rejects change and accepts the status quo. There is always a better way of doing a task, including repetitive task, and better ways are found among empowered peoples. Challenges motivate people to learn and the desire to learn is based on opportunity for challenges. Risk is very important requirement for finding a better way of doing a task and opportunity to learn from it. Therefore it is important to ensure freedom to risk. According to Schein E. H. (1999), the freedom to risk is directly correlated with the freedom to innovate because all innovations, new ideas, creativity are risky as there are no guarantees of success. Consequently, the significance of establishment of the climate in which there is a freedom to fail and where mistakes are seen as lessons becomes evident. When someone has the freedom to fail without undue fear of personal repercussion then they have the freedom to risk (Lipinskienė, Vingilytė, 2006).

Empowering leader creates *ambience* for trust, helps to make apparent what an employee already knows and can do, and what else needs to be discovered. He facilitates gaining of new knowledge and skills. Moreover, empowering leader gives *feedback*, which is crucial to successful learning because it provides with information, which is important for persistence and reflection on how to improve. Feedback is often regarded as important part in improving learning and task performance in organizations. It can give individuals a chance to learn from the consequences of their actions and can be used to reward performance and motivate for future achievements (Hoyrup and Elkjaer, 2006). Feedback is the final step of the learning process because without some kind of feedback, individuals are unable to learn. Additionally the role of *coaching* in learning has to be underlined. According to West, Markiewicz (2004) coaching means helping people to achieve their objectives and their potential by giving frequent and specific support, encouragement, guidance and feedback. It is the process of facilitating the individual and collective efforts of members of a team. Coaching is inspiring people to find solutions to problems. People, who only follow orders do not assume responsibility, are not motivated and do not have a desire to excel. Finding solutions is a motivating force, it also becomes a habit. Coaching is sharing knowledge. According to Burdett J. O. (2000), central to the coaching is the problem solving as well as the need for the leader to involve, probe, share, reflect and summarize. Besides, coaching encompasses a comprehensive review of learning styles and an analysis of the partisipant's own style. The role of the coach is that of active listener, questioner and a partner in the act of reflection.

Following this line of reasoning we can say that in the learning environment the role of the leader as facilitator and coacher becomes significant. The leader of learning organization is the one who inspires other people to accept changes and participate actively in the process of implementation of innovations. Lipinskienė D., Daraškevičiūtė-Raginienė O. (2007) claim that three domains of capability are important here: knowledge, competencies and motivational drivers. The leader creates empowering environment.

Relevant data, access to demanded resources makes the process of learning easier. Efficiency is as effective as available resources to complete tasks. These resources are tools, supplies, work environment. However, in addition to these obvious needs, other significant resources include the opportunities for training needed to develop genuine proficiency, targeted assistance in regard to problem solving, mentoring devoted to skill and leadership development, adequate access to new ideas, etc. (Lipinskienė, Vingilytė, 2006). People can work hard to get job done, but they need quality resources to be efficient.

Appropriate and adequate compensation. In order to motivate people to learn appropriate compensation system that is clear, simple, specific fear and valuable by the employees has to be created in the organization. In order to foster learning employees' efforts and mindedness participate actively in their learning, learning from experience particularly have to be valued and rewarded. Therefore compensation system that is oriented to rewarding learning efforts, initiative has to be created in learning organization. What rewards for mindedness to learn, including his efforts to increase input in education, skills, to be creative and initiative, are valued and expected by employees? According to research results (Lipinskienė, Guloglu, 2007) employees' mindedness to learn, including his efforts to increase input in education, skills, to be creative and initiative should be rewarded by recognition, career opportunities and growth/development opportunities.

Noteworthy, psychological rewards are not a substitute for wage, but managers should not make the opposite error, which believes that money can be a substitute for psychological rewards. The needs for both money and psychological rewards are important (Lipinskienė, Guloglu, 2007). Besides, research results showed that different context (country as well as position) requires different reward – either money or psychological rewards. For example, according to research results among Lithuanian respondents financial rewards are less valuable than intangibles and among Turkish respondents they are more valuable. In comparison with Turkish respondents, Lithuanian respondents value most such rewards as career opportunity (72 %), growth and development opportunity (56%), recognition (55%) and bonus (55%), whereas main rewards such as pay (62%), career possibilities only 38 %, job security (37%), status (32%) are for Turkish respondents. Noteworthy, growth and development possibility as a reward is important only for 7% of Turkish respondents, and recognition as a

reward is important only for 2% of Turkish respondents (Lipinskienė, Gulogu, 2007).

The analysis of the features of empowering environment allows us to conclude that such environment gives an employee possibility to learn from his mistakes, to know better himself and in this way to make his current experience wider and broader, it fosters belief in his power and keeps up the motivation of qualitative learning. In other words, all features of the empowering environment together give employee learning power, including self-confidence and trust in each other. Thus, empowering environment has influence on success of every employee's learning.

Summing up, learning in the learning organization can be fostered in the environment which creates following conditions for learning: autonomy and responsibility, involvement and participation, empowering leader, toleration of failures, risk, availability of resources, compensation system, collaboration, reflection. Schematically the functioning of such environment is presented in the learning environment in the learning organization model (see fig.)
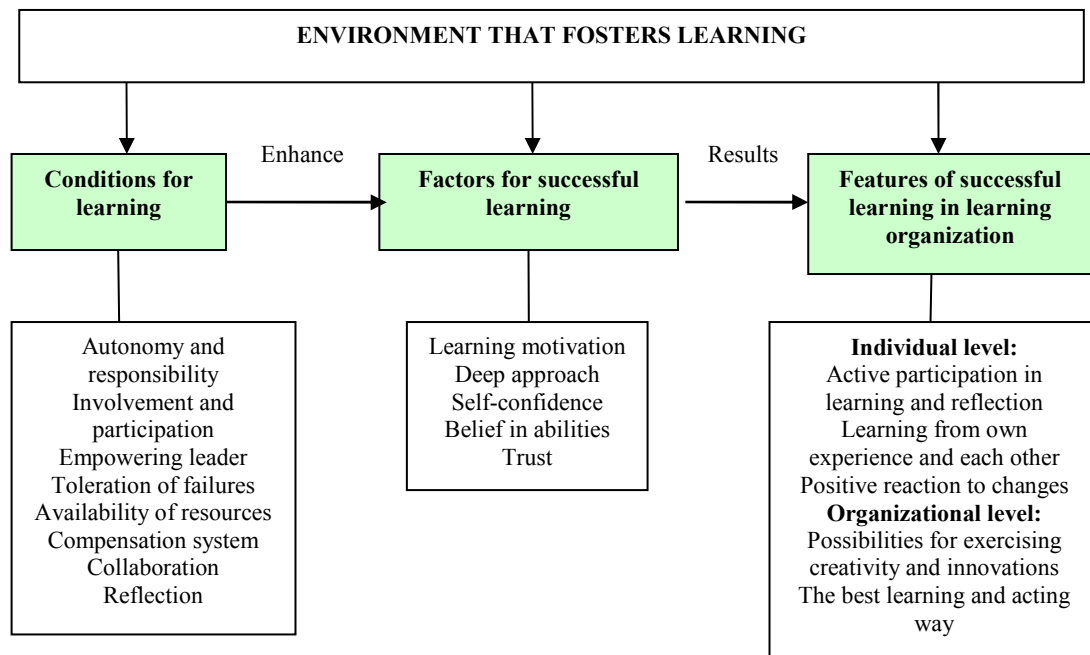

Figure 1. Learning environment in the learning organization

As we can see from the model presented in figure above, the expression of the following factors of successful learning may be enhanced if we create adequate conditions for learning: deep approach to learning, motivation of qualitative learning, self confidence, and belief in abilities and trust in other people. Taking all together, as the result we have environment that fosters successful learning in the learning organization which is characterized by active participation of employees in their learning; employees are initiative, creative, like to experiment, reflect and learn from own and colleagues' experience. Obviously, creation of conditions allows them to find the best learning and acting way.

In summary we can assert that learning organization should be oriented in creation empowering environment for it fosters development of knowledge and learning.

Conclusions

Analysis of scientific literature allows us to point up critical features of successful learning in the learning organization both from the side of individual and organization. From the side of individual these features are: positive employees' reaction to changes, active his participation in learning and reflection, learning from own experience and each other. From the side of organization it is important to ensure the possibilities for exercising reflection, creativity and innovations; and to help employee to find the best learning and acting way. The following features become features of the learning environment, which is supposed to be created in the learning organization in order to foster learning.

Seeking foster learning and aiming for the successful learning in learning organization, it is advisable to create empowering environment which is characterized by following: the first issue central to setting the learning environment is creation of following conditions for learning: autonomy and responsibility, involvement and participation, empowering leader, toleration of failures, risk, availability of resources, compensation system, collaboration, reflection. The second important component in structuring an environment for learning lies with enhancing the expression of factors of successful learning. Following factors were highlighted: deep approach to learning, motivation of qualitative learning, self confidence and belief in abilities, and trust in other people.

References

1. Bowden, J., Marton, F. The University of Learning: beyond quality and competence. London: Kogan Page, 1998.
2. Burdett, J. O. To coach or not to coach – that is the question! // Mabey Ch., Iles P. (eds.) Managing Learning, International Thompson Business Press, 2000, pp. 133-145.
3. Ellström, P. E. Integrating Learning and Work: Problems and Prospects // Human Resource Development Quarterly. 2001, nr. 12, p. 421-435.
4. Fielding, M. Empowerment: emancipation or enervation. Education, autonomy and democratic citizenship: philosophy in changing World, 1997, pp.177-189.
5. Fullan, M. Pokyčių jėgos. Vilnius, 1998
6. Glinskienė, R., Lipinskienė, D. The factors of educational environment: their influence on students' approach to learning // Pedagogika. – Vilniaus pedagoginis unversitetas, 2005, pp. 10-16.
7. Hoyrup, S., Elkjaer B. Taking it beyond the individual // Productive Reflection at Work, 2006
8. Kam Hou Vat. Toward a learning organization model for student empowerment: a teacher-designer's experience as a coach by the side. In IADIS International Conference Cognition and Exploratory Learning in Digital Age (CELDA 2004), 2004, pp. 131-140.
9. Kerka, S. The learning organization: myths and realities, 2005, http://www.cete.org/acve/dogen.asp?tbl=archive&ID=Ao28.
10. Kudokienė, N., Jasnauskaitė, R., Bianchi F. The Expression of School Head Teacher's Competences as a Leader in a Learning Organization // Changes in Social and Business Environment: Proceedings of the 2nd international conference. Selected papers. - Lithuania, Panevezys, 2007, pp. 132-138.
11. Lipinskienė, D. Competence development: in searching for the successful environment // Bridges. 2005, nr. 2, p. 25-31.
12. Lipinskienė, D. Theoretical Substantiation of Empowering Environment as a Condition for Successful Competence Development // The Journal of Industrial Relations and Human Resources, Vol. 9, No. 2, April 2007, ISSN 1303-28 60, pp.79-94.
13. Lipinskienė, D., Daraškevičiūtė-Raginienė. Leader's roles in the learning organization: Leader as strategic thinker // Changes in Social and Business Environment: Proceedings of the 2nd international conference. Selected papers. - Lithuania, Panevezys, 2007, pp. 139-143
14. Lipinskienė, D., Guloglu, T. Research on expectations of the employees in respect of reward for different inputs: case of Lithuania and Turkey // Changes in Social and Business Environment: Proceedings of the 2nd international conference. Selected papers. - Lithuania, Panevezys, 2007, pp. 144-150.
15. Lipinskienė, D., Vingilytė, J. Empowerment and creation of empowering environment: theoretical background // Changes in Social and Business Environment: Proceedings of the 1st international conference. - Lithuania, Panevezys, 2006, pp. 120-124.
16. Mumford, A. Individual and organizational learning: the pursuit of change // Mabey Ch., Iles P. (eds.) Managing Learning, International Thompson Business Press, 2000, pp. 77-86.
17. Pedler, M., Burgoyne, J., Boydell, T. The learning company: a strategy for sustainable development. London, 1991.
18. Paloniemi, S. Experience, competence and workplace learning // Journal of Workplace Learning. 2006, nr. 18 p. 439-450.
19. Ramsden, P. Learning to Teach in Higher Education. London: Routlege, 1992
20. Ramsden, P. Learning to lead in higher education. London: Routlege, 1998
21. Senge, P. M., Kleiner, A., Roberts, Ch., Ross, R. B., Smith, B. J. The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization. London, 2000.
22. Simonaitienė, B. Besimokančios organizacijos veiklos bruožų raiška gimnazijoje // Daktaro disertacija. Kaunas, 2001.
23. Stanikuniene, B., Juceviciene, P. The theoretical model of the potential learning environments of higher education teacher // Changes in Social and Business Environment: Proceedings of the 2nd international conference. Selected papers. - Lithuania, Panevezys, 2007, pp. 260-265.
24. Stanikunienė, B., Lipinskienė, D. The Theoretical Model for Employees' Competence Development inside the Organziation // IV international scientific conference „Management and engineering '06": scientific proceedings. – Bulgaria, Sozopol, 2006, Vol. 2(85), pp. 191-195
25. Svensson, L., Aberg, C. Integrating formal and informal learning at work // Journal of Workplace Learning. 2004, nr. 8, p.479-91.
26. Thorlakson, A.J.H., Murray, R.P. (1996). An Empirical Study of Empowerment in the Workplace . Group & Organisation Management, 1, 21, 67-83.
27. Usher, R., Bryant, J., Johnston, R. Adult education and the postmodern challenge: learning beyond the limits. London: Routledge, 1997.
28. Vasiliauskienė, L., Stanikūnienė, B., Lipinskienė, D. The employees' Competence Development inside the Organization: Managerial Solutions // Inžinerinė ekonomika. Engineering Economics. – Kaunas, 2005, No. 5 (45), pp. 51-59.
29. West, M. A., Markiewicz, L. Building Team-based working: a practical guide to organizational transformation. United Kingdom: MPG Books, Bodmin, Cornwall, 2004.

Diana Lipinskienė

Besimokanti organizacija: kokia aplinka skatina mokymąsi?

Santrauka

Besimokanti organzacija (BO) mokslinėje literatūroje apibrėžiama kaip organizacija, kuri yra įgalinusi visų lygių darbuotojų mokymąsi ir, ypač, mokymąsi iš savo ir kitų patirties. Todėl organizacija, siekianti tapti besimokančia, turi kurti mokymuisi palankią aplinką. Šiame straipsnyje ir siekiama atsakyti į klausimą, kokiais bruožais turi pasižymėti BO mokymosi aplinka, kad joje būtų skatinamas mokymasis. Straipsnį sudaro dvi dalys. Pirmojoje pateikiama BO esmė, antrojoje - modeliuojama mokymąsi skatinanti BO mokymosi aplinka. Mokslinės literatūros analizė leidžia teigti, kad BO sėkmingas mokymasis susijęs tiek su individu, tiek su organizacija. Pirmuoju atveju sėkmingas mokymasis priklauso nuo to, ar darbuotojai pozityviai reaguoja į pokyčius, aktyviai dalyvauja mokymosi procese, reflektuoja savo ir kitų veiklą, mokosi iš savo ir kitų patirties. Antruoju atveju svarbu, kad organizacija sudarytų sąlygas darbuotojų kūrybiškumui, eksperimentavimui, refleksijai bei padėtų savo darbuotojams rasti geriausią mokymosi bei veiklos būdą. Šių sėkmingą mokymąsi besimokančioje organizacijoje apibūdinančių bruožų raiškos stiprumą lemia sėkmingo mokymosi veiksniai (straipsnyje išskirti penki veiksniai, t.y. mokymosi motyvacija, giluminis požiūris į mokymąsi, pasitikėjimas savimi, savo gebėjimais bei kitais žmonėmis), kurių didinimui turi būti sudarytos šios sąlygos: autonomija ir atsakomybė, dalyvavimas mokymosi procesuose, įgalinantis lyderis/vadovas, refleksija ir klaidų toleravimas, išteklių, reikalingų mokymuisi, prieinamumas, mokymąsi, refleksiją, kitų patirties priėmimą skatinanti atlygio sistema. Straipsnio pabaigoje pateikiamas mokymosi besimokančioje organizacijoje modelis.

About the author

Diana Lipinskienė, Kaunas University of Technology, Lithuania
Email: diana.lipinskiene@ktu.lt
Scientific interests: learning organization, empowerment, motivating salary system, learning environment.

INVESTMENT IN SCHOLASTIC EDUCATION IN LITHUANIA AND COUNTRIES JOINED THE EUROPEAN UNION TILL 1995: TO KEEP THE TRACE OF OLD MEMBER STATES OR TO TAKE ONE'S COURSE?

Diana Lipinskienė[1], Giedrė Morkūnaitė[2], Ekrem Tufan[3]
[1,2]Kaunas University of Technology, Lithuania, [3]Canakkale Onsekiz Mart University, Turkey

Abstract

Investment to scholastic education as an area which affects subsidiary spheres is very important for states' economic growth, competitiveness in labor market and magnetization of private capital. The comparison of Lithuania and countries joined the European Union till 1995 in educational sphere discovers that high funding of scholastic education can be one of the reasons for state's innovation, attraction of potential investors and economic growth.

Keywords
Scholastic education, funding, competitiveness, labor

Intorduction

The rising economical and political bunching of countries springs up a necessity to prepare the society for variety of economical and social structures. Affecting subsidiary ranges (for example culture, ecological and civil consciousness, competitive ability of labor force) the process of education is a great tool by way of developing tolerant, conscious, competitive, educated, capable to systematize necessary information society. Webbink (2005) maintains that "The realization that inputs in the education process are endogenous is important for the validity of traditional findings". Determinative education and training importance for each country development of innovation and competitive potential is presented in general European Council and European Commission 2006 year report about the progress made considering "Education & training 2010 work program". In this report education is named as "an integral part of the social dimension of Europe, because they transmit values of solidarity, equal opportunities and social participation, while also producing positive effects on health, crime, the environment, democratization and general quality of life". Investment in education process in pursuance of education objectives is particularly important because social feedback made-up through new discoveries, greater labor productivity (which influences higher GDP on the run of time) stimulates the economic growth and the process of lifelong learning. Felouzis G. and Perroton J. (2007) determine education as a "highly particular commodity". Unfortunately, as often as not imposed on education funding thus preventing a lifelong learning and continuous economic growth.

Lithuanian scientists B. Martinkus and V. Žilinskas (2001) define investment as injection of funds for purchasing tangible capital. It should be noted that these scientists value investments only as business expenses, neglecting expenses of government: "(...) investment – business companies expenses for new companies building, equipment purchasing, sketching in reserve of ready-made goods" (Martinkus, 2001, p. 51). Ch. Pass, B. Lowe and L. Davies (1997, p. 166) lays an objection for B. Martinkus and V. Žilinskas definition: "in analysis of national income, investment is reputed as the guarantor of social values, which are under construction of the government (roads, hospitals, schools) and, accordingly, such investments are considered as a part of government expenses".

The problem tackled in this article can be formulated as a question: whether major investment in school education can have an impact on economic and competitive country development providing the competitiveness and adequate education of the labor? It is useful to accomplish comparative analysis of investment in scholastic education in Lithuania and countries joined the European Union till 1995 in order to solve the formulated problem, namely to disclose investment in scholastic education influence on the social sphere and young people as potential competitive labor creation through the development of education. This analysis would enable to compare economic processes partly influenced by support of scholastic education and changes that have occurred in the social context as a result of successful investment in education area of states which are different by the economic situation but belong to the same economical and political formation (the European Union). Besides another relevant aspect of the problem pending in this article is noteworthy: the positive other countries experience of investment in scholastic education could help Lithuania to develop the progress of innovation and competitiveness.

The goal of article: to accomplish comparative analysis of investment in scholastic education in Lithuania and countries joined the European Union till 1995.

The *article* was written using *methods* of the scientific literature, document and analysis of statistical data.

The criteria of comparative analysis

Notwithstanding the world or separate regions cooperation in various fields, there still are countries where the availability and quality of scholastic education are not the best. Even within the countries in the same region, let alone a continent or the whole world, the structure of school system and investment in scholastic education – are different. Because of this reason, this article focuses not on all countries of the world, but only on separate group. 16 countries will be compared inter by the aspect of investment in scholastic education: Belgium, Italy, Luxembourg, the Netherlands, France, Germany, Ireland, Denmark, United Kingdom, Greece, Spain, Portugal, Austria, Finland, Sweden and Lithuania.

The group of 15 countries that will be compared with Lithuania was chosen according to the following criteria:
1) all the countries are members of the European Union (economic and political commonality enables to solve problems commonly through benefits of cooperation in various areas).
2) Countries are located in the same continent (the similarity of climate, closely coherent country development context and historical development – factors which determined greater similarity between education systems in these countries than between countries in different continent).
3) The different duration of membership in the European Union (15 countries joined the European Union till the end of 1995, Lithuania in 2004). Unequal economic situation of Lithuania and other 15 countries compared will determine the benefits of investment in scholastic education, arising from a change of the economic and political status (entry into the European Union) and the legal framework governing or recommending one or another direction for changing or improving the education system.

States joined the European Union in 2004 (the Czech Republic, Estonia, Cyprus, Latvia, Malta, Poland, Slovenia, Slovakia and Hungary (with the exception of Lithuania) and 2007 (Bulgaria and Romania) were not selected for consideration because of 3 reasons:
1) 2004 - 2007 stage of development was different till then the former by the number of candidates accepted to the European Union, very different and variant social, economic and political characteristics of accepted candidates.
2) There were more pre-accession conditions for the candidate countries accepted to the European Union during the period 2004-2007, than for previously entered countries, for example, new countries contributed to the consent of the Copenhagen criteria. L. Kasčiūnas mentions 2004 - 2007 year of accession phase as the power asymmetry phase, when "The applicant countries have been forced to commit to automatic accession to the Schengen and the euro zone, as soon as they meet their requirements" (www.ceeol.com). As another important feature he mentions the intermediate stages applied to the candidate countries and the abundance of additional stages of transition. Higher adaptive barrier used for countries joined the European Union in 2007 required the state not only to take over the acquis communautaire (the totality of European Union legislation consisting of primary and derivative sources of law, www.kodeksai.lt), but also to "ensure the rapid and efficient implementation" (Kasčiūnas, 2008, p. 8).
3) Accession conditions for anew (in 2004 - 2007 stages) and formerly joined countries are very different, also different are the economic and political situation in newly admitted members in each other, not mentioning the comparison with the old members of the European Union. From newly acceded members Lithuania was chosen to parallel with the group of 15 old member states on purpose to compare and disclose similarities and differences of the investment in scholastic education and bringing in the examples of the old member states to identify the affect of investment in scholastic education

on the educational process and the state's economic situation.
States were compared by these criteria:
1) Computer usage among pupils ending compulsory education. With reference to this criterion computer literacy as one of requirements for new employee can be disclosed.
2) Youth involvement to the process of education. This criterion displays the degree of social disjuncture problem which can assert in the future.
3) The factors of labor unattractiveness associated with insufficient education and the lack of work ethics of labor. This criterion reveals the view of potential investors who do not want to translocate or establish their business in pending countries.

The results of comparative analysis
In pending countries scholastic education is divided into levels, as well as all 16 countries have age regulated by law to which the scholastic education is compulsory. Compulsory primary education was introduced by Prussia in 18th century since that time it has spread almost all over the world. According to Adikibi (2001) compulsory education in developed countries approximately lasts from 6 to 15 years. The average duration of compulsory education given by Nation Master World Statistics in the world is 8,8 years, the longest duration is 13 years (in Germany, Dominica, the Netherlands, Belgium, and Saint Lucy, Saint Kitts and Nevis), the shortest duration of compulsory education is 4 years (in Angola). Duration of compulsory education (in years, by country) is shown in Figure 1.
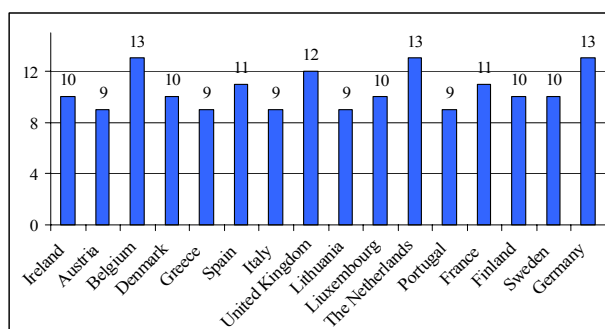

Figure 1. Duration of compulsory education (in years, by country), NationMaster World Statistics, www.nationmaster.com

Longer duration of compulsory education and accessibility of education capacitates society perfection, prompts a life-long learning process and enhances the competitiveness of the state - obvious in comparison Germany (the longest compulsory education) and Angola (the shortest compulsory education) economic situation and standard of living.
It should be noted that in the European parliament debates T. Zotlaukalo has stated that investment in education is directly relevant to the state's economy and productivity levels: "Each additional year of average school attendance raises productivity in an average EU country selectively by 6,2 percent and in the long term by a further 3,1 percent, thanks to its contribution to more rapid technological development" (www.europarl.europa.eu). For example, during the period from 1960 to 1986, when the Ireland started the

reform of education (in late sixties), which sought that more children would attend secondary schools; the Irish economy increased an average of 3 percent GNP per year. Consequently investment in scholastic education returns to the country in shape of the sum of market prices of final goods and services created by educated and trained labor during a certain period (GNP).

It should be noted that in December 2006 Council conclusions on the strategic priorities for innovation at EU level education is defined "as a pre-condition for innovation" (Conclusions of the Council and of the Representatives of the Governments of the Member States, on promoting creativity and innovation through education and training, eur-lex.europa.eu). Approving the increasing investment in education and stressing the importance of scholastic education I. Figueiredo said that "it is essential to ensure quality primary and secondary education, which must be universal, compulsory and free, in order to provide a basic education and key skills which will contribute to the achievement of fundamental social and civic values and education for peace and equality, thereby reinforcing social cohesion and inclusion" (www.europarl.europa.eu).

It is evident that the availability and quality of scholastic education are important not only for creation of socially responsible society, but also for consolidation of cross-border relations and communications. The close communication of European Union Member States in the field of education is necessary in pursuance of strengthening the competitiveness, capacity and cohesion of the European Union as an economic unit.

The preparation of competitive and educated labor through education is state's investment which has a direct impact on the state's economic situation in a few years. In European Parliament debates on Efficiency and equity in European education and training systems, Tomáš Zatloukal on behalf of Culture and Education Committee stated that "increasing the efficiency of education and training brings both individuals and society as a whole a return on investment of up to 8 percent a year. A further benefit is a reduction in unemployment: in today's EU the average unemployment rate is 12,6 percent amongst people who have completed primary or secondary education, as against 5 percent in the case of people who have completed higher education. Furthermore, recent research carried out by the Commission has shown that 75 million EU citizens – i.e. 32 percent of the workforce – have received insufficient education. In 2010 only 15 percent of new jobs will be available for that group of people, most of who come from socially disadvantaged sectors of society". Consequently unable to compete in the labor market incompletely qualified labor suffers from the most burning - social disjuncture problem, which requires additional funds for solution. It is maintained that "major individual difference dimensions like verbal ability and personality traits, have a strong influence on important outcome variables at school level, including academic performance, truancy, and antisocial behavior" (Petrides K. V., 2005).

More an innovative state is competitive, more appreciated is its labor. One of the state's innovation criteria is an application, design and development of information technologies. The application of information technologies

in scholastic education is lessons of computer literacy. Currently 90 percent of all European Union schools have internet access, two of the three schools have their own web sites, and statistically one computer is used by 10 school pupils. Implementation and application of information technologies is one of indicators of state innovation. Investing in popularization of information technology at school, countries encourage young people interest on advanced technologies, innovations, foster curiosity and encourage self-education. Computer literacy is particularly important among 15 - 16 years youth. When pupil is at that age compulsory school education program ends and young people choose on their own whether to continue their education or seek for employment. Personal qualification is very important for finding a job, while high computer literacy is one of the most common requirements of the employer to the employee. For young people who are not computer literate enough the job search may take a little longer. The percentage of 15 years old pupils using the internet every either almost every day (by the place of usage) is shown in Figure 2.
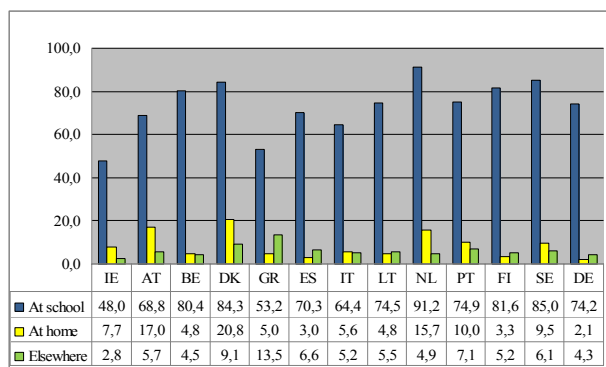

	IE	AT	BE	DK	GR	ES	IT	LT	NL	PT	FI	SE	DE
At school	48,0	68,8	80,4	84,3	53,2	70,3	64,4	74,5	91,2	74,9	81,6	85,0	74,2
At home	7,7	17,0	4,8	20,8	5,0	3,0	5,6	4,8	15,7	10,0	3,3	9,5	2,1
Elsewhere	2,8	5,7	4,5	9,1	13,5	6,6	5,2	5,5	4,9	7,1	5,2	6,1	4,3

Figure 2. The percentage of 15 years old pupils using the internet every either almost every day (by the place of usage), European Commission data, ec.europa.eu

At school available internet access can become a subject of attraction; attending school increases level of background for both the individual and society, it means that the workforce becomes more competitive. The number of Lithuanian students using the internet should increase after an implementation of 2007 - 2013 years economic growth action program, it schedules to implement these challenges related to internet use up to 2013 year: to increase the number of households having internet from 14 percent in 2005 year to 48 percent in 2013 year; to increase the number of households using broadband connection from 12 percent in 2005 year to 23 percent in 2013.

The gap off education which causes the factor of social exclusion in young age should be diminished in order that young people could obtain an background which at least in part corresponds to market needs or (in case of decision not to continue education) could easier find an employment and integrate into society as a part of the labor market. Orska R. (2007) determines that "The social environment influences the person's measure of value, attitude to different groups of professions, specific social statements and stereotypes". During 7 years (from 2000 to 2007) Lithuania managed to reduce the number of people not participating in education process by half.

The percentage distribution of 18 -24 years old youth living in pending countries, not attending school and absent from secondary education or other education is shown in Figure 3.
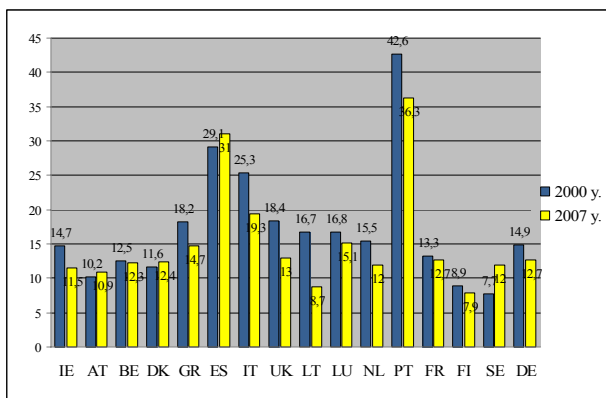

Figure 3. Early school leavers aged 18 – 24 with less than secondary education and not in education or training in pending countries (percentage), European Commission data, ec.europa.eu

In 2007 Lithuania characterized not only by effective solution of youth non-participation in education problems (the number of youth not attending to school since 2000 had reduced by 8 percent.) but also by the progress of innovation - in 2007 under the list of states innovation level composed by the EIS (European Innovation Scoreboard) Lithuania toped from catching-up to moderate innovators level.

Although bear on European Innovation Scoreboard the innovation of Lithuania have increased as well students' knowledge and achievements are well considered at European level, it does not guarantee competitiveness, insufficient education and employability for youth as the potential labor force. It is necessary to reduce the number of people not attending to school, to install internet access in remote areas, to promote students' interest in information technology and the environment. The youth who were provided the poor education at school, can stop learning in higher levels of education and no longer raise their qualification. Insufficient qualification can have an influence on youth unattractiveness for employer and cause the problem of social disjuncture which reduces the state's economic competitiveness.

The world competitive environment analysis according to various criteria is provided in the Global Competitiveness Report 2008-2009. 12 297 representatives of highest businesses control units from 134 countries assessed the possibility to establish or to transpose the business to different countries designating the aspects of unattractiveness because of which states lose investment for business expansion and creation. One of the key factors affecting business entry into the market of one or other country is qualification and background of labor. Insufficient background is mentioned as a weakness which blocks private capital entrance to the state, creation of new work places, economic growth and development. Figure 4 represents the results of research towards the view of potential investors about the factors of labor unattractiveness - insufficient education of labor and lack of work ethics (in percent).
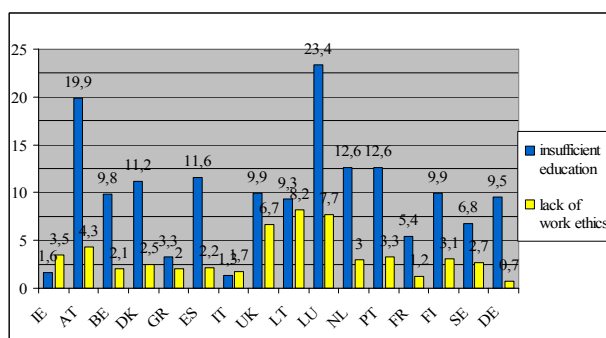

Figure 4. The factors of labor unattractiveness, by country in percent, The Global Competitiveness Report, www.weforum.org

As shown in Figure 4, the minimal problem of insufficient labor education as factor stopping investment is in Italy and Ireland. The most attractive states estimating both criteria are Ireland, Italy and Greece. Lithuanian labor unattractiveness for foreign capital enterprises stops the investment. Lithuanian labor, compare with other countries', is unattractive for potential investors because of the lack of work ethics. The latter factor probably determined by the lack of educating team working. The training focused not on individual action but on team working in Lithuania became popular Lithuania not a long while ago. In order to manage the labor force unattractiveness for potential investors it is necessary to invest to scholastic education, development of young people skills and pursuit of knowledge thus we would help Lithuania to become competitive and attractive for investors.

The successful economic jump of Republic of Ireland titled the "Celtic Tiger" similar to Republic of Lithuania by area and population (area of Ireland 70 238 m^2, area of Lithuania - 65 200 m^2; population of Ireland 3,7 million, population of Lithuania - about 3,4 million) could be an example that investment in education profit. Education reform in Ireland was started in pursuance of increasing pupils' school attendance; recalled taxes in secondary schools; in rural areas was implemented "Yellow buses" program for children from rural areas. Lin J. J. (2008) determines that "public investments in education have long-term impacts on rural human capital accumulation and rural development". School attendance from increased from 25 percent in 1964 to 83 percent in 1994. After reducing the number of children not attending to school and increasing investment in education, Ireland managed to change the economic situation in principle. M. Jurkynas, Vilnius University professor in article "How Ugly Duckling Turned into Celtic Tiger: The Case Economic Miracle in Ireland" maintains that „within 12 years from 1987 Ireland has resolved the important economic problems" (www.ceeol.com). As the key solved economic problems are mentioned: balanced public expenditure; the budget surplus (in 1986 budget deficit was 1,4 billion £ in 1998 it was 2 billion £ surplus), government debt (up to 115 percent GDP in 1987 declined to 55 percent in 1998) was controlled; declined taxes and decreased an unemployment. One of the factors that determined the recovery of economic is investment in education.

By comparison of states, it can be argued that states what bothers not only about sufficient financing of scholastic

education but also the high quality of education and as major as possible parcel of people gained a background, are more competitive and more attractive for the investors. Whereas investment in the country primes the pump, it can be assumed that resource invested in financing of education buy off the funds of foreign investment flow, accordingly occurs the possibility to create additional work places, a greater quantity of goods and services and when public budget increased, to reinvest in education, for growth of economic process. Lithuania should mention the Irish model, when economy recovered after increasing investment in education, also to follow the objective of Germany, Finland and Sweden seeking to continuously increase or not to reduce the investment in scholastic education.

Conclusions

1) Scholastic education, promoting to seek the knowledge in the future and lifelong learning, enables the country to become competitive because of society ever-renewing knowledge, rapid technological development and establishment.

2) The comparative analysis of investment in scholastic education in Lithuania and countries joined the European Union till 1995 exposed that:

- Puny investment in scholastic education affects the low quality of education, which determines the number of youth not attending to school and not devoid of background. Undersell educated young people who can not compete in the labor market sustains the effect of social disjuncture. Additional recourses are necessary in order to stop or at least to reduce this process.

- States reserving high funding for the area of scholastic education progresses faster and are more attractive for investors than countries less funding this area. Such countries are Ireland, Finland, Sweden, Germany, and France. Thus, warranting sufficient investment which enables to make education available, correct and qualitative from the very beginning of school year, the state encourages the potential of society which can be used for consolidation of economic growth in the future.

References

1. Felouzis G., Perroton J, Schooling markets: an analysis in economics-of-quality terms, *Revue Francaise de Sociologie*. 2007, 48, 693.
2. Idėjų žodynas / Owen Adikibi, Bernard Balleine, Elizabeth Breuilly, Cellia E. Deane – Drummond, Denis Derbyshire ir kt. Vilnius, 2005. 569.
3. *Kasčiūnas L.,* The transformation of eu enlargement policy: in search of the third way, *Politology (Politologija)*, 4/2008, 3-32 <http://www.ceeol.com/aspx/getdocument.aspx?logid=5&id=0DBCC959-FFAF-4B89-88AB-4A6C0DA9A97F>.
4. Lin J. J., The Problems and Advice about Rural Compulsory Education - A Comparative Study on Urban Compulsory Education, *Proceedings Of 2008 Conference on Regional Economy and Sustainable Development*. 2008, 532-536.
5. Martinkus B. Ekonomikos pagrindai/ Martinkus B., Žilinskas V. Kaunas, 2001. 790.
6. Orska R., Professional Career, Starting Conditions Based On Compulsory Education, *Society, Integration, Education, Proceedings*. 2007, 238-246.
7. Pass C. Ekonomikos terminų žodynas/ C. Pass, B. Lowes, L. Davies. Vilnius, 1997. 584.
8. Petrides K. V., Chamorro-Premuzic T., Frederickson N., Furnham A., Explaining individual differences in scholastic behaviour and achievement, *British Journal Of Educational Psychology*. 2005, 75, 239-255
9. Webbink D., Causal effects in education, *Journal of Economic Surveys*. 2005, 19, 535-560.
10. Access to European Union law, Official Journal of the European Union (C 79/1) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:079:0001:0002:EN:PDF>
11. Nation master World Statistics, Country Comparisons, Duration of compulsory education (most recent) by country <http://www.nationmaster.com/graph/edu_dur_of_com_edu-education-duration-of-compulsory>.
12. Access to European Union law, Conclusions of the Council and of the Representatives of the Governments of the Member States, on promoting creativity and innovation through education and training <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:141:0017:01:LT:HTML>.
13. World economics forum, The Global Competitiveness Report 2008-2009 <http://www.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.htm>.
14. Teisinės informacijos centras, <http://www.kodeksai.lt/getfile.aspx?dokid=43988558-af8d-402c-b1a7-40a7c66cec81>.
15. *Babylon free online dictionary* <http://dictionary.babylon.com/Acquis_communautaire>.
16. *European Parliament, Debates* <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+CRE+20070926+ITEM-017+DOC+XML+V0//EN>.

Diana Lipinskienė, Giedrė Morkūnaitė, Ekrem Tufan

Investicijos į mokyklinį švietimą Lietuvoje ir šalyse, įstojusiose į Europos Sąjungą iki 1995 metų: sekti senųjų pavyzdžiu ar eiti savo keliu?

Santrauka

Mokslinėje literatūroje mokyklinis švietimas apibrėžiamas kaip ypatingai svarbus procesas, nulemiantis asmens ateities mokymąsi, siekius, požiūrius; mokyklinis švietimas įtakoja ne tik ugdomo asmens, net ir visos valstybės socialinę raidą. Atlikus investicijų į mokyklinį švietimą palyginimą nustatyta, jog valstybės, skiriančios daugiau lėšų mokyklinio švietimo finansavimui yra inovatyvesnės, pirmaujančios taikant naujausias technologijas. Inovatyvumas įtakoja valstybių konkurencingumą, tad, didinant investicijas į mokyklinį švietimą, palaipsniui kuriama konkurencinga valstybė.

About the authors

Diana Lipinskienė – assoc. prof. dr. Kaunas University of Technology, Panevėžys institute, Faculty of Management and administration, Department of Management, address: Nemuno str. 33, Penevėžys, tel. +370 45 59 62 57, e-mail: diana.lipinskiene@ktu.lt.
Giedrė Morkūnaitė – administrator of Economics Department. Kaunas University of Technology, Panevėžys institute, Faculty of Management and administration, Department of Economics, address: Nemuno str. 33, Penevėžys, tel. +370 45 59 62 57, e-mail: giedre.morkunaite@ktu.lt.
Ekrem Tufan - assoc. prof. dr. Canakkale Onsekiz Mart University, School of Tourism and Hotel Management, address: Turizm İşletmeciliği ve Otelcilik Yüksekokulu, Terzioğlu Yerleşkesi
17100 Merkez/ÇANAKKALE, tel. +90 286 213 02 61, e-mail. etufan@yahoo.com.

SOCIO – EDUCATIONAL PREMISES FOR FOREIGN STUDENTS INTEGRATION INTO UNIVERSITY AND CITY LIFE

Irena Leliūgienė, Evelina Kutkaitytė, Nijolė Čiučiulkienė
Kaunas University of Technology, Lithuania

Abstract

The research paper aims to reveal the context of socio – educational premises that influence the integration process of foreign students into social and educational life of Lithuanian university. The research data analysis method is the qualitative content analysis of the partly structural interview. The research results proved that University has a full socio - educational system, enabling foreign students to integrate into new socio – cultural and academic environments, but insufficient English language knowledge, different culture understanding, and social isolation in the group make foreign students' integration of into University life more complicated.

Keywords

Integration, adaptation, foreign students, socio – educational premises, socio – educational environment.

Introduction

The current decade of the 21st century proved to be very active in providing possibilities for foreign students to study in Lithuanian universities. The reality of foreign students' admission revealed some problematic areas: communication in the local language, adaptation to the new culture and understanding of new approach towards life.

As research data prove, not all countries are tolerant towards foreign students. Some of the countries stick to the cultural stereotypes, which influence the behavior pattern with foreign students. For this reason some of the students experience discrimination, stress and culture shock. Thus, the successful integration of foreign students into Lithuanian academic, social and cultural life depends not only on satisfaction of foreign students personal needs, but also on the city communities good willingness and openness to accept foreign students with all their cultural peculiarities.

Research issue relevance:

As the analysis of current scientific literature sources states that at present higher education faces the inevitable globalization process which results in active interchange of ideas, professional support, career development, joint degree, students' exchange and other educational programs. On the other hand, traditions are deeply rooted in human nature. For this reason a great number of foreign students who come to Lithuania with the intention to get acquainted with Lithuanian culture and traditions, to develop their professional competence or simply to study, remain unsatisfied with the environment they are indulged in. They usually complain about the poor living conditions, stale study program.

This conflict between the guest foreign students and the quality of educational product they get in Lithuania reveals the main issue of the research paper: the problems of foreign students' adaptation and integration into Lithuanian social life and studies. The most optimal educational environment, providing the effective involvement of foreign students in Lithuanian higher education system has become one of the most relevant challengers of Lithuanian universities.

It is also worth to notice that the issue of foreign students' adaptation and integration into Lithuanian academic and social life is not widely researched by Lithuanian scientists. N. Čiučiulkienė et all (2006) analyzed the didactic problems connected with teaching in a multinational group. E. Lavrinovitch (2005), D. Janonienė and D. Survutaitė (2004) investigated the adaptation problems of the minority representatives into the secondary school life. D. Biunickaitė (2007) highlighted the Lithuanian students' adaptation and integration problems that Lithuanian students face during their studies abroad. N. Kasatkina and T. Leončik (2003) presented numerous researches on the ethnic groups' integration into local social life. For this reason **the research paper aims** to reveal the social and educational premises for successful foreign students' adaptation and integration into university and city life.

The objectives of the research paper are:

- While revealing the individual's adaptation and integration into educational and social life concept, to define the peculiarities of foreign students' adaptation and integration;
- To highlight the peculiarities of socio – educational support that students receive from Lithuanian universities.

Research methods are:

- **Data collection methods:** half structured interview;
- **Data analysis methods:** the analysis of scientific literature; qualitative content analysis.

Individual's adaptation and integration into educational and social life conceptual interpretation

It is worth to start individual's adaptation and integration into educational and social life conceptual interpretation with the issues of I. Leliūgienė (1997, 2003), N. Kasatkina, T. Leončikas (2003), A. Juodraitis (2004), L. R. Barker (1995), R. Grigas (1995), W. D. Harrison, A. Jagelavičius (1999), J. Leonavičius (1993), V. Leonavičius (2003), N. Čiučiulkienė et all (2007).

N. Kasatkina and T. Leočikas (2003) define social adaptation as the coherence of individual needs,

expectations and possibilities with community expectations and demands.

I. Leliūgienė (2003) characterizes social adaptation as an active process during which a student while communicating with his/her surroundings establishes harmonious relations with his/her contact group and community.

Social integration may be interpreted as the interaction of socially related persons who while establishing common views and attitudes, create more or less coherent social unity (Braslauskienė, Vismantienė, Jakienė, 2006, p. 10).

Society on its turn if it cares for more rapid social integration should provide the foreigners better conditions for participation in the social life. According to L. Liukinevičienė (2006), the degree of integration level and participation in the social life does not serve as a proof for the real integration: for example, if any national minority avoids demonstrating political activity and is hardly noticeable in the social life, it does not mean that such minority can be qualified as socially integrated.

The peculiarities of foreign students' adaptation and integration into Lithuanian academic and social life

According to L. Liukinevičienė (2006), the first step for a foreign student towards the successful independent social integration is the admission and adaptation to the university academic life. The role of a successful independent social integration is the admission and adaptation to the university academic life is evident because if a student fails to adapt to academic surroundings it means that he/she has not developed his/her adaptation competence and most probably will face similar problems in his future life.

2) The indifference of higher education community towards the needs of foreign students' adaptation may be treated as a gap in the interaction between educational environment and the educational impact. The lack of adaptation competence may be explained as a consequence of student's passive participation in the academic and social life.

N. Kasatkina, T. Leončikas (2003) define three factors which may hinder the successful integration of foreign students into social and academic life. They are:

- *Social relations* – any personal or group mutual social duties and responsibilities which provide positive emotions. (Such responsibilities might be formed in the family or in the circle of the closest friends of the "green years"). People usually bring with themselves too different range of the latter experience which may block the successful personal socialization and adaptation.
- *social norms* – the different ways of social behavior, the fulfillment of social and civil functions which may be defined as ethnic differences that on their turn might block the successful adaptation.
- *Verbal skills* may also cause communication problems. The inefficient rhetorical skills, ability to an interesting discussion partner most probably will complicate the adaptation process. (Bankauskienė, Bankauskaitė-Sereikienė, Čiučiulkienė, 2008)

The characteristics of these factors only prove that the human origin may be very important for the individual social adaptation. Adaptation on its side may be also of several types: integration, assimilation, marginalization or even separation (Kasatkina, Leončikas, 2003, p.73).

The characteristics of the factors that complicate integration and adaptation process.

Every person entering the new culture makes a considerable impact on it because the personal initiative acts as a creative power which moderates the new quality of the surroundings. The large the differences, the greater adaptation and socialization problems are. V. Pruskus (2003) defines several major factors that directly influence individual's emotional status and behavior. They are:

- Geographical distance – from home and new cultural surroundings including climate change and value differences;
- Job – hope to perform the same duties like at home, and vice versa: the expectations to develop one's competence and to perform totally different tasks;
- Time spent in a foreign country;
- Social support – different experience is formed when a person goes to the foreign country alone or he/she goes to a foreign country with the family or with a group of close friends;
- Coming back to the homeland – a reward for the time spent in a foreign country;
- Free will and choice – hope that he/she made personal decisions without a pleasure from outside. (Pruskus, 2003)

All these factors influence the success of individual adaptation to university social and academic life after the change of social environment. These factors are independent from individual influence; he/she can not control or change them. V. Pruskus (according to Singh 2003), points out three major problems that foreign students face while studying abroad. They are:

- emotional – loneliness, homesickness, eating problems, nervousness because of the problems at home;
- academical – communication only in a foreign language, higher standards of studies, misunderstandings with teachers and fellow students;
- adjustment to studies – its level depends on the social level of the student (students from higher society adjust to studies more easily than the students from middle and lower society layers.

All these facts only prove that foreign students suffer from culture shock than the local students because they face the problems of communication in a foreign language, cultural disorganization, clash of native and new culture values, lack of family support. Still, according to N. Kasatkina, T. Leočikas (2003), adaptation problems not always are a fault of an individual. For this reason they should be solved while having in mind not only individual attitudes, but also the social context.

The research of foreign students' adaptation and integration into university and city life

The **prevailing methods** of data collection and analysis are half structured interview and the qualitative content analysis. These methods were used to reveal the peculiarities of foreign students' adaption and integration to university academic and social life at Kaunas University of Technology, International studies Centre.

The major research instrument is a questionnaire for the half structured interview. It consisted from nine questions in English. They were presented to the foreign students of International Studies Centre, Kaunas university of Technology. The main goal of the questionnaire was to clarify the reasons of foreign students' choice. There were questions with the intention to understand the reasons why foreign students had chosen Lithuania and Kaunas university of Technology. Some questions were devoted to point out the adaptation difficulties foreign students face while studying at Kaunas University of Technology and who helps to solve them. There also were the group of questions which revealed students' social relations, attitudes towards Lithuania and its culture.

The duration of one interview was from 30 - 40 min.

The characteristics of the research population and sample

The main research population is formed from International Studies Centre (Kaunas University of Technology) foreign full time students who arrived to Lithuania, from 6 different countries. Sample choice was based on three main criteria: the foreign students had to:

- represent different national minorities, prevailing in foreign countries (for example, south and north of Pakistan)
- be full time students with at least 3 months of living in Lithuania experience;
- speak fluent English.

The research procedure: the research was carried in 2009, during the whole May. The collected data were analyzed; the received results were interpreted according to the requirements of qualitative content analysis.

The main research restriction that the researchers face was the respondents' insufficient fluency in English.

Research results

The first step of the interview with foreign students was devoted for the clarifying of their demographic status. So, they were asked question about their age, their native country, how long they are in Lithuania. The full demographic picture of the respondents is presented at the table N1.

Table 1

The demography data of the Interview respondents

	Country	Gender	Age	Duration of studies in Lithuania
1.	Turkey	Male	23 years	9 months.
2.	Egypt	Female	26 years	9 months.
3.	Syria	Male	25 years	5 years, 7 months.
4.	Russia	Female	25 years	1 year, 3 months.
5.	Pakistan	Male	26 years	9 months
6.	Pakistan	Male	27 years	3 months

The first question highlighted students' reasoning on their chose of studies at Kaunas University of technology, International Studies Centre. While performing the qualitative content analysis of the responses, students' answers were grouped into four categories that reflect the main reasons why foreign students choose Lithuania as the country for the future studies.

The first category reveals the financial aspect of students' choice and is defined as **Financial Reasons** for studying in Lithuania.

It is only natural that the price of studies is one of the most burning problems for young people. While choosing the university the young people consider the studies' price, the price for living, etc. they choose Lithuania "*..because prices of studies are relatively low in Lithuania...*"…"*living costs are far more lower in Lithuania than in Great Britain...*").

The second category "**Influence of other people**" highlights the fact that the respondents trust the recommendations of other people. ("*..Several friends were studying in Lithuania and were quite happy. I also wanted to study abroad, so I came to Kaunas university of Technology*"). Some respondents were inspired by the experience of their relatives ("*..my brother entered the unit first, I came after a year...*") or marriage with the Lithuanian ("*...my husband is a Lithuanian, so I came to Lithuania and decided to study here....*").

The third category **"The role of university"** reflects the idea that Kaunas University of Technology is one of the leading higher education institutions in Lithuania. The respondents also underlined the possibility to study in English, to choose the perspective programme and promising future carrier. ("*…I entered this programme because it is in English.*"; "*..Export Engineering is one of the most perspective programmes Thus I have chosen this university...*").

The last category "**Mass Media Information**" proves that Kaunas university website is modern and progressive. It proves that university leads an active campaign while looking for foreign students. As some of them state "*..I was looking for the universities in Europe at the Internet, found Kaunas university of Technology, wrote a letter and was accepted*".

While generalizing the data on foreign students' motivation to come to Lithuania it is possible to state that though foreign students have many different reasons to come to Lithuania to study at Kaunas university of Technology, the most dominating factors are positive financial and carrier possibilities. In this case foreign students act as emancipated carrier decision makers (Čiučiulkienė, Augustinienė, 2008).

As it was pointed out, the main task of this research paper is to reveal the problems of foreign students' adaptation and integration into University's academic and social life. For this reason the respondents were asked to characterize the difficulties and problems while trying to become the active members of University's community.

The content analysis of foreign students' reflections on adaptation problems revealed the following categories:

- Personal experience;
- Problems of communication with local people;
- Social external and internal factors that made the adaptation problematic.

The evidence of the first category "**Personal experience**" revealed the loss of self – esteem, feeling of loneliness, doubts about future ("*..I do not trust myself", "I do not know if I want to stay here any longer", "I am always alone: at unit, in the city, at the dormitory too."*).

The second category "**Problems of communication with local people**" highlights quite a negative impression that foreign students especially from Arabic countries might experience while studying in Lithuania. The most problematic is the stereotypical thinking about the young people from Eastern countries. Their unwillingness to gain some knowledge about the representatives of new culture complicates the young people's integration and adaptation. As they state " ("*...one colleague told me that Lithuania is only for Lithuanians", " Once the boy asked me, why I am normally dressed. He thought that Arabic women should wear long black gowns."*

The third category "**Social external and internal factors that made the adaptation problematic**" lays a stress on the major problematic issue. It was revealed by all respondents for several times. It is the issue of communication in the streets, at the dormitory, in the offices etc…All respondents state that they have experienced the communication isolation because the staff that work at the dormitories, offices, and other institutions are not able to communicate in English. Their are cases stating that even lecturers appointed to work with foreign student sometimes lack the competence to explain the more problematic professional topics in fluent English. As the students state: "*I have no information about the things that are happening in town, I can not read any information, everything is in Lithuanian and I am not so good at it…*"

While generalizing the most burning aspects that block foreign students' adaptation and integration into social and academic life of University it is possible to state that communication gap is the most distressing factor that blocks the adaptation and successful integration into university's academic, social and cultural life. Common Lithuanians tend to be of stereotyped thinking, unwilling to demonstrate tolerance for those who need understanding and help. Such problems should be solved not only at the university, but also at the public level.

The isolation from the information is the second most warning issue. The lack of information most painfully results in provoking social isolation, negative emotions which hinder the positive evaluation of the environment and does not let to integrate into new society.

Conclusions

1. The analysis of scientific literature lets us state that social adaptation may be defined as the individual applicability and flexibility while reacting to social, economical conditions that influence the existence of social groups, organizations and institutions.

2. Social integration may be interpreted as successful joining the social group, community, institution, organization. Successful social integration provides the possibility for active participation in social and academic life. Active participation on its turn enables the further development and formation of the personality.

3. Foreign students that choose Kaunas university of Technology for their future studies point out positive financial and carrier possibilities.

4. The most burning aspects that block foreign students' adaptation and integration into social and academic life of University it is possible to state that communication gap is the most distressing factor that blocks the adaptation and successful integration into university's academic, social and cultural life. As foreign students state, common Lithuanians tend to be of stereotyped thinking, unwilling to demonstrate tolerance for those who need understanding and help.

5. The problem of negative Lithuanian image formation should be solved not only at the university, but also at the public level relying on socially ethical and educational measures.

References

1. Almonaitienė, J. (2008). *Bendravimo psichologija: vadovėlis*. Kaunas: Technologija.
2. Bankauskienė, Nijolė; Bankauskaitė-Sereikienė, Gabija; Čiučiulkienė, Nijolė. *Communicative competence development in engineering studies* // Global Cooperation in Engineering Education: Innovative Technologies, Studies and Professional Development, October 2-4, 2008, Kaunas, Lithuania / Kaunas University of Technology. Kaunas : Technologija. ISSN 1822-8070. 2008, ISI Proceedings, p. 131-138.
3. Barker L. R. (1995). *The Social Work Dictionary*. Washington DC: Nasw Press.
4. Braslauskienė R., Vismantienė R., Jakienė, J. (2006). Socialinės integracijos ir meninio ugdymo sąsajos darnaus vystimosi kontekste. *Tiltai,* Nr. 33, p. 5 – 10.
5. Chieh-Wen L. (2005). *Cultural Shock is not a Shark: Foreign Students cope with unfamiliar culture.* Konferencijos medžiaga. Rutgers University: U.S.A. Peržiūrėta 2009, kovo 12, adresu http://www.allacademic.com/meta/p20251_index.html
6. Čiučiulkienė, Nijolė; Augustinienė, Aldona. *An engineering student as an emancipated career decision maker in the context of neoliberal education* // Global Cooperation in Engineering Education: Innovative Technologies, Studies and Professional Development: International conference proceedings, October 2-4, 2008, Kaunas, Lithuania / Kaunas University of Technology. Kaunas : Technologija. ISSN 1822-8070. 2008, ISI Proceedings, p. 190-195.
7. Čiučiulkienė, Nijolė; Palevičius, Arvydas; Rinkevičienė, Ilona Antanina. *New teaching models as a premise for competence-based studies: a case study of the International Studies Centre at Kaunas University of Technology* // 10th Baltic Region Seminar on Engineering Education : Szczecin, Poland, 4-6 September, 2006; ISI Proceedings. Melbourne : UNESCO International Centre for Engineering Education (UICEE), 2006. (Monash Engineering Education Series). ISBN 073262259X. p. 139-142.
8. Čiučiulkienė, Nijolė; Zdanytė, Jūratė; Barila, Arvydas. *Possibilities to accelerate subject and language learning using problem-based learning (PBL) virtual classrooms in the multicultural context* // Global Cooperation in Engineering Education: Innovative Technologies, Studies and Professional Development: international conference proceedings, October 4-6, 2007, Kaunas, Lithuania / Kaunas University of Technology. Kaunas : Technologija. ISSN 1822-8070. 2007, ISI Proceedings p. 63-69.

9. Donskis L. (2004). *Kas yra bendruomenė. Socialinė ekonomika: vietos bendruomenės poreikiai ir galimybės*. Kaunas: Socialinės ekonomikos institutas.
10. Grigas R. (1995). *Tautos likimas: sociologinė apžvalga*. Vilnius: Rosma
11. Harrison W. D., Jagelavičius A. (1999). *Axioms and assumptions about adaptation: implications for the social professions/ social – psychological aqdaptation and edecation system*. Kaunas: Vytauto didžiojo universitetas
12. Hilbig I. (2005). Svetimšalių sociokultūrinis šokas Lietuvoje: jo apraiškos ir poveikis kalbos mokymuisi Tarptautinė konferencija "*Baltistika kaip gimtoji ir užsienio filologija*", Varšuva.
13. Janonienė D., Survutaitė D. (2007). Tautinių mažumų vaikų mokyklinė integracija. *Pedagogika*, 86. Peržiūrėta 2009, balandžio 7, adresu www.ceeol.com
14. Jucevičienė P., Valuckienė J. (2008) Studijų kokybės sąlygotumas: edukacinės paradigmos raiškos kontekstas, *Socialiniai mokslai* ,4. 5-11
15. Juodraitis A. (2004). *Asmenybės adaptacija: kintamųjų sąveika*, p. 36. Šiauliai: Šiaulių universiteto leidykla.
16. Kantauskaitė D ir Radzevičienė L.(2006). *Visuomenės požiūris į kitataučius: integracijos problemos ir galimybės* . Jaunųjų mokslininkų darbai, 8, p.180 – 184.
17. Kasatkina N., Leončikas T. (2003), *Lietuvos etninių grupių adaptacija: kontekstas ir eiga*. Vilnius: Eugrimas
18. Kučinskas V., Kučinskienė R. (2000). *Socialinis darbas švietimo sistemoje*. Klaipėda: Klaipėdos universiteto leidykla.
19. Kvieskienė. G. (2005). *Pozityvioji socializacija*. Vilnius: Vilniaus pedagoginio universiteto leidykla.
20. Lavrinovič E. (2005). *Kitataučių adaptacijos Lietuvių mokyklose sociokultūrinės determinizacijos analizė*. Magistrinis darbas. Socialiniai mokslai, sociologija. Vilnius: Vilniaus pedagoginis universitetas.
21. Leliūgienė I. (1997). *Žmogaus socialinė aplinka: vadovėlis*. Kaunas: Technologija.
22. Leliūgienė I. (2003). *Socialinio pedagogo (darbuotojo) žinynas*. Kaunas: Technologija.
23. Leonavičius J. (1993). *Sociologijos žodynas*. Vilnius: Academia,
24. Leonavičienė V. (2003). *Tautinės bendrijos raida ir tautinis identitetas. Kultūros tyrinėjimai*. Kaunas: Technologija.
25. Liobikienė N. (2006). *Krizių intervencija : mokomoji knyga*. Kaunas: Vytauto Didžiojo Universitetas.
26. Liukinevičienė L., (2006). Studijų duomenų bazių panaudojimas studentų adaptacijai aukštojoje mokykloje tirti. *Socialiniai tyrimai*, 7, p. 62-74
27. Pruskus V. (2003). *Verslo etika : laiko iššūkiai ir atsako galimybės*. Vilnius: Enciklopedija
28. Pruskus V. (2004). *Multikultūrinė komunikacija ir vadyba*. Vilnius: Vilniaus teisės ir verslo kolegija
29. Torronen M. (1994). *Need definitions and child welfare*. Helsinki: Central Unijon for Child Wlfare.
30. Ward C. (2004). *The experiences of international students in New Zealand. Centre for Applied Cross-cultural Research:* School of Psychology Victoria University of Wellington. Peržiūrėta: 2009-04-adresu https://admin.hero.ac.uk/sites/international/resources/experiences%202003.pdf
31. Ward C.A, Bochner S., Furnham A.,(2001*). The psychology of culture shock*. Routledge
32. Weinhart J. (2004). *Komandinis darbas*. Šiauliai: Šiaulių kolegija.

Irena Leliūgienė, Evelina Kutkaitytė, Nijolė Čiučiulkienė

Užsieniečių studentų adaptacijos ir integracijos į universiteto ir miesto gyvenimą socialinės edukacinės sąlygos

Santrauka

Vykstant Europos integracijos ir globalizacijos procesams, jaunimas vis dažniau pradeda ieškoti galimybių studijuoti užsienyje. Studentams tampa svarbu prisitaikyti prie sudėtingesnių situacijų, naujų socialinių lūkesčių, poreikių, pasikeitusių santykių tarp individų ir svetimos socialinės aplinkos. Straipsnyje nagrinėjami užsieniečių studentų adaptacijos ir integracijos į universiteto ir miesto gyvenimą klausimai. Straipsnio problematika leido giliau pažvelgti į studento, gyvenančio svetimoje šalyje, emocinius, kultūrinius ir akademinius išgyvenimus, atskleisti patiriamas sudėtingas socialines situacijas ir galimus jų sprendimo būdus, kurie padėtų į mūsų šalį atvykstantiems užsienio studentams lengviau išgyventi adaptacijos ypatumus. Atlikto kokybinio tyrimo rezultatai atskleidė, kad užsienio studentai, atsidūrę universiteto ir miesto aplinkoje, išgyvena emocinę krizę, patiria kultūrinį šoką, susiduria su bendravimo problemomis. Išankstinės visuomenės nuostatos, nereti diskriminacijos atvejai, informacijos anglų kalba trūkumas bei nesaugumas mieste neleidžia sėkmingai adaptuotis naujoje aplinkoje. Universiteto teikiama socialinė-edukacinė pagalba yra svarbiausias veiksnys, socialiai integruojantis užsienio studentus į universiteto ir miesto gyvenimą.
Raktažodžiai: integracija, adaptacija, studentai užsieniečiai, socialinės-edukacinės sąlygos, socio – edukacinė aplinka.

About the authors

Irena Leliūgienė is a PhD in Social Sciences (Educational Science); Professor at the Department of Educational Systems, Institute of Educational Studies, Faculty of Social Sciences, Kaunas University of Technology. *Research interests:* theory and practice of social pedagogy and social work, social education as individual social empowerment in the community, social adaptation, training of socio-educational workers. E - mail: ei@ktu.lt
Evelina Kutkaitytė is a young researcher at the Institute of Educational Studies, Faculty of Social Sciences, Kaunas University of Technology. *Research interests*: social integration and adaptation of foreign students, students' mobility research, comparative research in socio – educational work. E - mail: ei@ktu.lt
Nijolė Čiučiulkienė is a PhD in Social Sciences (Educational Science); Assoc. Professor and vice director of International Studies' Centre, Kaunas University of Technology. *Research interests:* communication (international and science communication) studies and rhetoric, learning and teaching in the multinational, multicultural contexts, professional and special language culture, foreign language teaching didactics, IELTS, inquiry based, problem based learning methods, teacher training, teacher competence development. E – mail: nijole.ciuciulkiene@ktu.lt.

CREDIT RISK MEASUREMENT IN BANKS: MODEL SELECTION ACCORDING CLASSIFICATION ACCURACY

Ričardas Mileris[1], Ausma Markevica[2]

[1]Kaunas University of Technology, Lithuania, [2]Latvia University of Agriculture, Latvia

Abstract

Credit risk means incapacity of debtors to implement their financial liabilities for bank. Banks in their activity solve a problem how to reduce potential loss due to crediting not reliable clients. Various internal credit risk models can be applied to measure this risk of each client. Also bank must use the most efficient model which has the highest classification accuracy. In this paper 3 methods were applied for data analysis: discriminant analysis, logistic regression and artificial neural networks (multilayer perceptrons). 9 models were constructed for the credit risk estimation. Analysis indicated that the most efficient model to classify reliable and not reliable clients (Lithuanian companies) is logistics regression analyzing 3 years financial data of companies.

Keywords

Classification accuracy, credit risk, discriminant analysis, logistic regression, neural networks.

Introduction

Internal Ratings Based approaches in Basel II induced banks to develop internal credit risk estimation models. Banks usually measure 3 main credit risk indicators: the probability of default (PD), loss given default (LGD) and exposure at default (EAD). The PD is the estimate of the likelihood of the borrower defaulting on its obligations within a given horizon. The LGD is defined as the loss incurred in the event of default and it is equal to one minus the recovery rate at default. The EAD is the nominal value of the borrower's debt. The potential credit loss at a given horizon is computed as the product of the PD, the LGD, and the EAD (Baixauli, Alvarez, 2009). Also banks use credit scoring models classify credit applicants into two classes: reliable class that is liable to reimburse the financial obligation and the not reliable class that should be denied credit due to the high probability of defaulting on the financial obligation. If bank has several models measuring the same indicators that demands to evaluate the quality of each model and select best model. Measures of classification accuracy reflect the loan applicants' discriminatory power and help to decide which model to use in practice.

The object of the research – classification accuracy rates of different credit risk estimation models.

The purpose of this paper is to measure classification accuracy of different credit risk estimation models.

The newness and importance of the research. This research allowed estimating classification accuracy of 9 credit risk estimation models applying 3 analysis methods and analyzing financial data of Lithuanian companies. Researchers by using rates described in this paper can measure the discrimination power of their developed models. That allows selecting the most effective model and further developing it seeking methods for the rating of banks clients. Clients classified as not defaulted must be grouped according to their possibility to default. Banks usually credit only clients which have the lowest possibility to default.

Credit risk modeling process in banks

Credits in banks have risk of being defaulted. There is always a chance that a corporate borrower will not meet its contractual obligations and may renege from paying the principal and the interest (Bandyopadhyay, 2006). Giesecke K. (2004) credit risk defines as the distribution of financial losses due to unexpected changes in the credit quality of counterparty in a financial agreement. Credit risk arises because borrowers may not be able to fulfil their contractual obligations.

Credit risk is determined by two distinct factors:

- Default risk – probability that default occurs within a given period of time.
- Recovery risk – probability that the value of the security fails to meet the value of the loan outstanding.

Prediction of default probability (PD) for each borrower or group of borrowers is the key input for the estimation of regulatory capital as well as economic capital for banks. It is also equally important for the banking industry and financial institutions to discriminate the good borrowers (non-defaulting) from the bad borrowers (defaulting). This will not only help them in taking lending decisions but also practicing better pricing strategies to cover against the counter party risk (Bandyopadhyay, 2006).

To understand risk levels of credits, banks usually collect information about borrowers. Financial ratio variables remain the primary variables for predicting corporate financial distress. Financial structure, solvency, profitability, and cash flow indicators are the principal financial ratio variables (Lieu, Lin, Yu, 2008). The use of financial ratios in discrimination of failing and non-failing firms started in 1930s. The studies in this group concluded that failing firms exhibit significantly different ratio measurements than continuing entities (Ugurlu, Aksoy, 2006). Kumar, Bhattacharya (2006) also maintain that in practice, credit ratings are assigned to companies on the basis of certain financial ratios, which are used to determine the fiscal health and profitability of the given company.

Statistical predictive analytic techniques can be used to determine default risk levels. Following the pioneering

study of Altman (1968), who used multivariate discriminant analysis (MDA) to differentiate between failed and non-failed US firms, a large body of research has focused on financial distress prediction. The prediction of financial distress continues to be viewed as a matter of considerable interest to both academics and practitioners (including credit and investment analysts), and has obvious importance for the stakeholders (investors, creditors, employees, managers) of a firm (Wang, Li, 2007). A good credit risk evaluation tool can help for banks to grant credit to more creditworthy applicants, thus increase profits; moreover, it can deny credit for the noncreditworthy applicants, so decrease losses. The credit-granting institutions are paying much more attention to develop efficient and sophisticated tools to evaluate and control credit risks, which can help them to win more market share without taking too much risk (Zhou, Lai, Yu, 2009). An early warning system requires an accurate prediction model. Most of the existing approaches are based on statistical models (Quek, Zhou, Lee, 2009).

The features of a sound credit risk management process are discussed in the Basel Committee's paper on principles for the assessment of a bank's management of credit risk. In particular, that paper addresses the following areas:

- Establishing an appropriate credit risk environment.
- Operating under a sound credit-granting process.
- Maintaining an appropriate credit administration, measurement and monitoring process.
- Ensuring adequate controls over credit risk (Bank for International Settlements, 2000).

Internal credit ratings are an increasingly important element of credit risk management at banks (He, Gong, Xie, 2008). Banks' internal ratings are like ratings produced by Moody's, Standard & Poor's, and other public rating agencies in that they summarize the risk of loss due to failure by a given borrower to pay as promised. However, banks' rating systems differ significantly from those of the agencies (and from each other) in architecture and operating design as well as in the uses to which ratings are put. One reason for these differences is that banks' ratings are assigned by bank personnel and are usually not revealed to outsiders (Treacy, Carey, 1998).

According Johnson E.G. (2002), credit rating model development involves the following stages:

- Inputs selection: risk indcators, default experience, rated and unrated benchmarks.
- Model generation: analysis is performed on subsets of the variables and the best performing models are selected for more detailed analysis.
- Validation: quantitative assessment, expert evaluation.
- Sign-off: models must be formally approved.
- Maintenance: performance of models must be periodically measured.

In recent years, credit scoring is also becoming one of the primary methods to develop tool for credit risk assessment (Zhou, Lai, Yu, 2009). Especially, with the fast growth in the credit industry and the huge loan portfolio management, credit scoring is regarded as a one

the most important techniques in banks and has become a very critical tool during recent decades (Abdou, 2009).

Credit scoring is a method to evaluate the credit risk of loan applicants with their corresponding credit score which is obtained from a credit scoring model. A credit score is a number that can represent the creditworthiness of an applicant and it is based on the analysis of applicants characteristics from the application file with a credit score model. The credit-granting institutions can use the scores to categorize credit applicants as either a good credit group whose credit scores are beyond a threshold value and so should be granted credit or a bad credit group whose credit scores are below a threshold value, therefore, should be denied credit. The credit scoring model is developed on the basis of historical data about the performance of previously made loans with some quantitative techniques, such as statistics, mathematical programming, data mining. A well-designed model should have higher classification accuracy to classify the new applicants or existing customers as good or bad (Zhou, Lai, Yu, 2009).

Various techniques have been used in the construction of credit scoring models. For example, some of the earliest credit scoring models developed used discriminant analysis. However, discriminant analysis requires rather restrictive statistical assumptions that are seldom satisfied in real life. Logistic regression, which is less restrictive, has been proposed as an alternative to discriminant analysis. Some of the techniques that have been previously used, but rather infrequently, to construct credit scoring models include genetic algorithm, k-nearest neighbour, linear programming and expert systems. The decision trees has become a popular technique for developing credit scoring models as the results of decision trees are easily interpretable and visualisable. Further, neural networks are also commonly used (Chwee, 2004).

The primary purpose of model validation is to examine whether the internally constructed scoring model can fully explain the credit status of borrowers.

In a quantitative validation framework the comparison of performance could be based mainly on two criteria:

- The discriminatory power.
- The quality of calibration of the output of the different credit assessment systems under comparison.

The discriminatory power refers to the ability of a rating model to differentiate between good and bad cases. Calibration refers to the concrete assignment of default probabilities, more precisely to the degree to which the default probabilities predicted by the rating model match the default rates actually realised. Assessing the calibration of a rating model generally relies on backtesting procedures (Coppens, Gonzalez, Winkler, 2007).

This paper is focused on the discriminatory power of the credit risk models.

Data sample

Data sample consists of two groups of Lithuanian enterprises: successful (50) and bankrupted (50). 3

criterions (8 financial ratios) were estimated to determine is the company successful and expedient for analysis:

- Liquidity: current ratio (CR), quick ratio (QR), cash to current liabilities (CL), working capital to total assets (WA).
- Profitability: gross profitability (GP), net profitability (NP), net profit to total assets (NA).
- Leverage: total liabilities to total assets (LA).

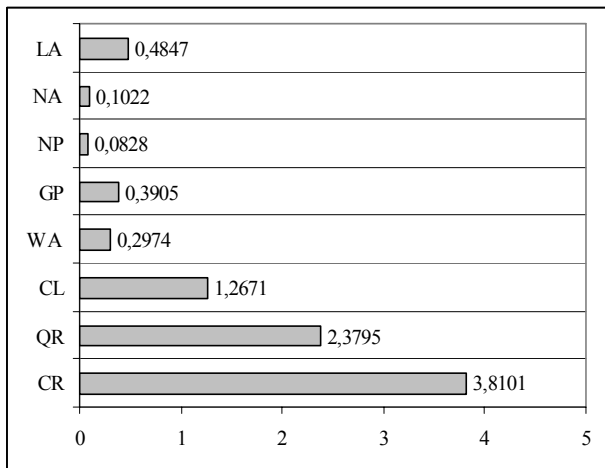Average values of these ratios illustrated in Figure 1.

Figure 1. Average values of financial ratios in group of successful companies

Credit risk estimation models

There were constructed 9 credit risk models by using 3 statistical analysis methods: discriminant analysis, logistics regression and artificial neural networks. Three models were constructed by every method according to financial data available (1-3 years). The essence of all models is described bellow.

1. Discriminant analysis (DA). The classification functions allow determining which group each company most likely belongs. There are 2 classification functions in the model as there are 2 groups of companies (reliable and not reliable). When analyzing data each function computes classification scores for the groups of reliable and not reliable clients:

$$f_j = \alpha_j + \beta_{j1}x_1 + \beta_{j2}x_2 + \ ... \ + \beta_{jn}x_n \qquad (1)$$

In this formula, the subscript j denotes the respective group. The subscripts $1, 2, ..., n$ denote the n variables; α_j is a constant for the j group, β_{ji} is the weight for the variables in the computation of the classification score for the j group; x_i is the observed value of each variable for the respective company. Result f_j is the classification score.

When computed the classification scores we classify the bank client as belonging to the group for which it has the highest classification score f_j.

2. Logistic regression (LR). Logistic regression is a non-linear method for modeling dichotomous dependent variables (Liou, 2008). Logistic regression is used for prediction of the probability of occurrence of an event by

fitting data to a logistic curve. In credit risk estimation the event is company's probability of default (PD).

Logistic regression model:

$$PD = \frac{e^{\alpha + \beta_1 x_1 + \beta_2 x_2 + ... + \beta_n x_n}}{1 + e^{\alpha + \beta_1 x_1 + \beta_2 x_2 + ... + \beta_n x_n}} \qquad (2)$$

where β_0 is the intercept and $\beta_1, \beta_2, ..., \beta_n$, are the regression coefficients of variables $x_1, x_2, ..., x_n$ respectively.

All PD values depend to range [0; 1]. They reflect enterprise's probability of default from 0 to 100%. Because classification of clients was implemented into two groups the classification threshold was set to 0,5.

3. Artificial neural networks (ANN). Three multilayer perceptron (MLP) networks were made to solve bank clients' classification problem. MLP network consists of a set of source nodes forming the input layer, one or more hidden layers of computation nodes, and an output layer of nodes. The input signal propagates through the network from one layer to another. The perceptron computes a single output from multiple inputs by forming a linear combination according to its input weights and then possibly putting the output through some nonlinear activation function. This can be written as:

$$y = f\left(\sum_{i=1}^{n} w_i x_i\right) \qquad (3)$$

where x_i – inputs, w_i – weights, f – activation function.

The activation function is often chosen to be the logistic sigmoid or the hyperbolic tangent. The logistic sigmoid function is:

$$P(t) = \frac{1}{1 + e^{-t}} \qquad (4)$$

The hyperbolic tangent function is:

$$\tanh(t) = \frac{\sinh(t)}{\cosh(t)} = \frac{e^t - e^{-t}}{e^t + e^{-t}} = \frac{e^{2t} - 1}{e^{2t} + 1} \qquad (5)$$

These functions are related by:

$$\frac{\tanh(t) + 1}{2} = \frac{1}{1 + e^{-2t}} \qquad (6)$$

There is one neuron in the input layer for each variable. These values are standardized in the input layer so that the range of each variable is [-1; 1]. Also this layer distributes the values to the neurons in the hidden layer. In addition to the variables, there is a constant input – bias. It is connected to each of the hidden layers. The bias value 1 is multiplied by a weight and added to the sum going into the neuron.

The values from input neurons are multiplied by weights w_{ji}. Further weighted values are added together producing a weighted sum u_j. This sum is fed into a transfer function f, which outputs a value h_j. The outputs from the hidden layer are distributed to the output layer of neural network. Arriving at a neuron in the output layer, the values from hidden layer neurons are multiplied by weights w_j. The weighted values are added together producing value v_j. Analyzing data this weighted sum is fed into a transfer function f, which outputs a value y. The y value (or values) is the output of the neural network.

Number of neurons in output layer depends on solving problem. In regression analysis with continuous target variables there is a single neuron in the output layer. It generates a single *y* value. Classifying objects with categorical target variables, there are *k* neurons in the output layer producing *k* values.

In this case MLP network solves a supervised learning problem. There is a training set of input-output pairs (data about companies) and the network must learn to model the dependency between them. The training means adapting the weights in neural networks. Number of neurons in hidden layers of constructed networks is given in Table 1.

Table 1

Neural networks characteristics

Model	Neurons in hidden layer
1 year	13
2 years	16
3 years	23

Number of variables in different models (DA, LR and ANN) is given in Table 2.

Table 2

Variables in the models

Model	DA	LR	ANN
1 year	6	9	15
2 years	11	16	37
3 years	13	25	50

Measures of classification accuracy

Estimation of model efficiency can be performed using classification matrix (Table 3). In this table „0" – reliable company, „1" – not reliable.

Table 3

Classification matrix

Model	Actual	
	1	0
1	True Positive (TP)	False Positive (FP)
0	False Negative (FN)	True Negative (TN)

According Falcon (2007), Fawcett (2006), Hillenmeyer (2005) and others the following rates can be calculated to measure model efficiency (Table 4).

Table 4

Model efficiency rates

Rate	Calculation
CCR	(TP+TN)/N
MCR	(FP+FN)/N
α	FN/(FN+TP)
β	FP/(FP+TN)
Se	TP/(TP+FN)
Sp	TN/(TN+FP)
PPV	TP/(TP+FP)
NPV	TN/(TN+FN)

Meaning of rates:
- Correct Classification Rate (CCR) – correctly classified companies.
- Misclassification Rate (MCR) – incorrectly classified companies.
- False Negative Rate (Type I error) (α) – not reliable companies classified as reliable.

- False Positive Rate (Type II error) (β) – Reliable companies classified as not reliable.
- Sensitivity (Se) – correctly classified not reliable companies.
- Specificity (Sp) – correctly classified reliable companies.
- Positive Predictive Value (PPV) – percentage of companies classified as not reliable actually are not reliable.
- Negative Predictive Value (NPV) – percentage of companies classified as reliable actually are reliable.

The *F*-measure can be used as a single measure of performance of the test. The *F*-measure is the harmonic mean of precision and recall (positive predictive value is called precision, and sensitivity is called recall):

$$F = \frac{2 \cdot PPV \cdot Se}{PPV + Se} \qquad (7)$$

The mean square error (MSE) also known as the Brier score:

$$MSE = \frac{1}{N} \sum_{i=1}^{N} (y_i - p_i)^2 \qquad (8)$$

where y_i – the default indicator (1 – default, 0 – not default), p_i – individual probability of default estimated. The MSE statistic is small if the forecast PD assigned to defaults is high and the forecast PD assigned to non-defaults is low. In general, a low MSE indicates a good rating model (Coppens, Gonzalez, Winkler, 2007).

Credit risk estimation models comparison

Credit risk models analysis results of 1 year data are shown in Table 5. The best values in table are highlighted in grey.

Table 5

1 year data models

Rate	DA	LR	ANN
CCR	0,7700	0,8300	0,8587
MCR	0,2300	0,1700	0,1413
α	0,4200	0,2800	0,2143
β	0,0400	0,0600	0,0800
Se	0,5800	0,7200	0,7857
Sp	0,9600	0,9400	0,9200
PPV	0,9355	0,9231	0,8919
NPV	0,6957	0,7705	0,8364

The 1 year data credit risk models analysis indicated that the highest percentage of companies were classified correctly by ANN model (85,87%). The misclassified percentage of companies by this model is 14,13%. ANN model has the highest sensitivity (78,57%) and it's type I error rate is 21,43%. This model also has the highest NPV rate which indicates that the largest portion of enterprises were classified into reliable group actually are reliable.

However the highest model specificity was reached by DA model. That means 96% of reliable companies were classified correctly. Accordingly this model has the smallest type II error rate (4%). Also the highest PPV rate was reached by DA model. This rate indicates that 93,55% of companies classified into group of not reliable clients actually are not reliable.

Analyzing 1 year data no highest rates of models quality were obtained.

So if credit analyst has 1 year financial data of any company, according to the most important classification criterion best model is:

- CCR and sensitivity – ANN model.
- Specificity – DA model.

Credit risk models analysis results of 2 year data are shown in Table 6.

Table 6

2 years data models

Rate	DA	LR	ANN
CCR	0,8400	0,9200	0,9222
MCR	0,1600	0,0800	0,0778
α	0,3000	0,1000	0,1220
β	0,0200	0,0600	0,0408
Se	0,7000	0,9000	0,8780
Sp	0,9800	0,9400	0,9592
PPV	0,9722	0,9375	0,9474
NPV	0,7656	0,9038	0,9038

The 2 year data credit risk models analysis indicated that the highest percentage of companies were classified correctly by ANN model (92,22%). Misclassification rate is 7,78%. This model has the highest NPV rate and it indicates that 90,38% of model's classified companies into group of reliable clients are actually reliable.

The highest sensitivity was reached by LR model: 90% of not reliable companies were classified correctly. Type I error rate accordingly is 10%. Same as ANN model NPV rate is 90,38%.

The highest specificity was reached by DA model: 98% of reliable companies were classified correctly. Type II error rate is 2%. Also DA model has the highest PPV rate indicating that 97,22% of companies classified into group of not reliable bank clients are actually not reliable.

So if credit analyst has 2 year financial data of any company, according to the most important classification criterion best model is:

- CCR – ANN model.
- Sensitivity – LR model.
- Specificity – DA model.

Credit risk models analysis results of 3 year data are shown in Table 7.

Table 7

3 years data models

Rate	DA	LR	ANN
CCR	0,8400	0,9700	0,9551
MCR	0,1600	0,0300	0,0449
α	0,3000	0,0200	0,0976
β	0,0200	0,0400	0,0000
Se	0,7000	0,9800	0,9024
Sp	0,9800	0,9600	1,0000
PPV	0,9722	0,9608	1,0000
NPV	0,7656	0,9796	0,9231

The 3 year data credit risk models analysis indicated that overall highest percentage of correctly classified companies reached by LR model (97%). Only 3% of companies were misclassified by this model. The highest sensitivity is 98%, so this model is the most precise to classify not reliable bank clients. Type I error rate is only

2%. Also the highest NPV rate indicates that 97,96% of companies classified into group of reliable clients are actually reliable.

The highest specificity was reached by ANN model. All reliable enterprises (100%) were classified correctly. Model did not made any type II error ($\beta = 0$). Value of PPV rate is also 100%: all companies classified as not reliable by model actually are not reliable.

So if credit analyst has 3 year financial data of any company, according to the most important classification criterion best model is:

- CCR and sensitivity – LR model.
- Specificity – ANN model.

Table 8

Best credit risk model selection

Criterion	1 year	2 years	3 years
CCR	ANN	ANN	LR
Se	ANN	LR	LR
Sp	DA	DA	ANN

Models classification quality results are summarized in Table 8. It shows which model is the most reasonable to use in practice according to different situations and classification criterion importance.

The maximum efficiency of created models according to available financial data about enterprises is shown in Figure 3.
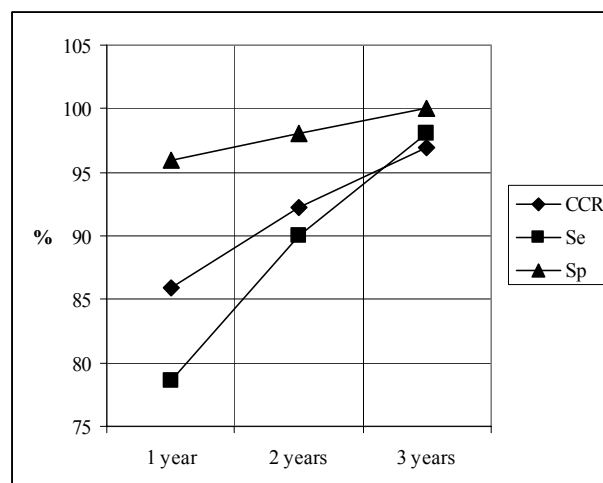

Figure 3. Maximum accuracy of created models

Figure 3 shows that all measures of classification accuracy become higher when analyzing data of longer period.

F-measures were calculated in Table 9.

Table 9

F-measures of the models

Model	DA	LR	ANN
1 year	0,7160	0,8089	0,8354
2 years	0,8139	0,9183	0,9113
3 years	0,8139	0,9702	0,9487

This measure considers correct classification of not reliable clients is more important. The maximum value of this measure is 1. This occurs when model correctly classifies all actually not reliable clients (Se = 1) and all clients numbered into class of not reliable companies actually are not reliable (PPV = 1). According to this

measure best model is LR analyzing 3 and 2 year financial data. If analyst has 1 year data the best model is ANN.

Mean square errors (MSE) of models calculated in Table 10. The lowest error (3,36%) reached by LR 3 years model. Analyzing 2 years data the lowest MSE has ANN model (6,74%), 1 year data – LR model (10,6%).

Table 10

MSE values

Model	DA	LR	ANN
1 year	0,181454	0,106871	0,134189
2 years	0,142605	0,075291	0,067418
3 years	0,142439	0,033658	0,044928

Conclusions

1. A good credit risk evaluation tool can help for banks to grant credit to more creditworthy applicants, thus increase profits and decrease losses. Banks are paying high attention to develop efficient and sophisticated tools to evaluate and control credit risks. An early warning system requires an accurate prediction model.

2. Measures of classification accuracy described in this paper allow estimating credit risk models classification quality and comparing different models.

3. The best rates reached by credit risk models analyzing data of Lithuanian companies are: correct classification percentage – 97%, sensitivity – 98%, specificity – 100%, F-measure – 97,02%, MSE – 3,36%.

4. According to the data available about companies and the most important classification criterion credit analyst can select the best model to use in practice.

References

1. Abdou, H. An Evaluation Of Alternative Scoring Models In Private Banking // The Journal of Risk Finance. Vol. 10, No. 1. 2009. P. 38-53.
2. Baixauli, J.S., Alvarez S. On the accuracy of loss-given-default prediction intervals // The Journal of Risk Finance. Vol. 10 No. 2, 2009. P. 131-141.
3. Bandyopadhyay, A. Predicting Probability Of Default Of Indian Corporate Bonds: Logistic And Z-Score Model Approaches // The Journal of Risk Finance Vol. 7, No. 3, 2006. P. 255-272.
4. Bank for International Settlements. Best Practices for Credit Risk Disclosure. 2000. 27 p.
5. Chwee, P.G. Credit Scoring Using Data Mining Techniques // Singapore Management Review. 2004.
6. Coppens, F., Gonzalez, F., Winkler, G. The Performance Of Credit Rating Systems In The Assessment Of Collateral Used In Eurosystem Monetary Policy Operations // Occasional paper series No. 65. European Central Bank. 2007. 42 p.
7. Falcon, T. Logit Models to Assess Credit Risk // Credit Risk Assessment Revisited: Methodological Issues and Practical Implications. 2007. P. 28-47.
8. Fawcett, T. An Introduction to ROC Analysis // Science Direct Pattern Recognition Letters 27. 2006. P. 861-874.
9. Giesecke, K. Credit Risk Modeling And Valuation: An Introduction // Credit Risk: Models And Management, Vol. 2. 2004. 67 p.
10. He, X., Gong, P., Xie, C. Research On Internal Credit Ratings For Listed Companies // Kybernetes. Vol. 37, No. 9/10. 2008. P. 1339-1348.
11. Hillenmeyer, M. Machine Learning. Stanford University. 2005. http://www.stanford.edu/~maureenh/quals/html
12. Johnson, E.G. Financial Risks, Stability and Globalization. 2002. 556 p.
13. Kumar, K., Bhattacharya S. Artificial Neural Network vs Linear Discriminant Analysis In Credit Ratings Forecast. A Comparative Study Of Prediction Performances // Review of Accounting and Finance. Vol. 5, No. 3. 2006. P. 216-227.
14. Lieu, P.T., Lin, C.W., Yu, H.F. Financial Early-Warning Models On Cross-Holding Groups // Industrial Management & Data Systems. Vol. 108, No. 8. 2008 P. 1060-1080.
15. Liou, F.M., Fraudulent Financial Reporting Detection and Business Failure Prediction Models: a Comparison // Managerial Auditing Journal. Vol. 23, No. 7, 2008. P. 650-662.
16. Quek, C., Zhou, R.W., Lee, C.H. A Novel Fuzzy Neural Approach To Data Reconstruction And Failure Prediction // Intelligent Systems In Accounting, Finance And Management (16). 2009. P. 165-187.
17. Treacy, W.F., Carey, M.S. Credit Risk Rating at Large U.S. Banks // Federal Reserve Bulletin. 1998. P. 898-921.
18. Ugurlu, M., Aksoy, H. Prediction Of Corporate Financial Distress In An Emerging Market: The Case Of Turkey // Cross Cultural Management: An International Journal. Vol. 13 No. 4, 2006. P. 277-295.
19. Wang, Z., Li, H. Financial Distress Prediction Of Chinese Listed Companies: A Rough Set Methodology // Chinese Management Studies Vol. 1, No. 2. 2007. P. 93-110.
20. Zhou, L., Lai, K.K., Yu, L. Credit Scoring Using Support Vector Machines With Direct Search For Parameters Selection // Soft Comput (13). 2009. P. 149-155.

Ričardas Mileris, Ausma Markevica

Kredito rizikos vertinimas bankuose: modelių atranka pagal klientų klasifikavimo tikslumą

Santrauka

Bankai savo veikloje nuolat susiduria su kredito rizika ir sprendžia problemas, susijusias su galimų nuostolių mažinimu dėl klientų nemokumo. Kredito rizikos vertinimui gali būti naudojami įvairūs vidaus kredito rizikos modeliai. Jie dažniausiai pagrįsti statistine duomenų apie banko klientus analize. Visuomet būtina pasirinkti patį tinkamiausią modelį, todėl sprendžiama geriausio modelio pasirinkimo problema. Vienas iš modelio kokybės kriterijų gali būti klientų klasifikavimo tikslumas. Straipsnyje analizuoti modelių klasifikavimo tikslumo rodikliai ir jų prasmė. Šie rodikliai leido įvertinti 9 sudarytų kredito rizikos vertinimo modelių tikslumo parametrus.

About the Author

Ričardas Mileris, Ph.D., assistant at Faculty of Management and Administration, Department of Economical Sciences, Kaunas University of Technology, Panevėžys Institute. e-mail: ricardas.mileris@ktu.lt. Scientific interests: finance, econometrics, credit risk management.
Ausma Markevica, MG. paed., Mg. sc. soc., Engineer of Land Use Planning, head of Post Graduate Studies Department. Latvia University of Agriculture. Liela str. 2, Jelgava, LV – 3001, Ltvia. Ph. 371 630 05607. Email: Ausma.Markevica@lu.lv

TRAINING PRACTICE – THE PREMISE FOR PROFESSIONALISM OF A FUTURE OFFICER OF LAW ENFORCEMENT

Egidijus Nedzinskas, Nijolė Bankauskienė
Kaunas University of Technology, Lithuania

Abstract

The article strives to disclose the educational aspect of the training practice in training officers of law enforcement at the Faculty of Public Security, Mykolas Romeris University. The article analyses the essence of the training practice, its compatibility to the programme of officers' training and its aims. It should be stated that university education has become the advantage of servants of law enforcement: possessing a higher qualification of education, a law enforcement officer can better adapt in his/her workplace. This is required by the changed tendencies of crimes: crimes get younger and more brutal; complex networks of drug circulation controlled by groupments increase in numbers; crimes that are performed by using complex technologies extend. The article consists of introduction and two parts. The first part discusses the essence of the training practice of future officers of law enforcement and the process of its organisation. The second presents the research design and analyses as well as interprets the results.

Introduction

Essential changes of modern public administration should be related to the reforms of educational system of public officers. Not the exception is law enforcement institutions as statutory parts of public sector. Law enforcement institutions influenced by new tendencies of public administration more and more become not the institutions of prosecution but of demilitarised crime prevention (Bubnys, Smalskys, 2005. p. 92-97). This had influence on the quality of teaching and training of law enforcement officers. University education became the advantage of an officer of law enforcement: possessing a higher qualification of education, a law enforcement officer can better understand peculiarities of law enforcement activity in changing society, community relations, which became more open and enhance mutual confidence (especially in the work of crime prevention). As A.Šakočius (2002. p. 27) states, the society requires more different services of criminality prevention, greater responsibility and effective work from law enforcement institutions.

The quality of the personnel of law enforcement officers depends on the strategy of its training very much. At present the following tendencies prevail in the philosophy of the training of Western European law enforcement officers: assistance, attention to and social sensitiveness for community. Institutions of law enforcement officers' training begin to train a law enforcement officer who meets the standards of new public management.

In modern developed and democratic society the service at law enforcement institutions should be considered to be a respectable profession because it requires not only strong character and high intellect, good physical training, but also the wish to serve considering interests of a person, society and state. Referring to these attitudes, the state pays a lot of attention to the quality, improvement and standard of law enforcement officers' training. Its aim is to train a professional, qualified officer of law enforcement, who would be able to solve different legal-social problems in practical activity in order to guarantee law and order (Johnston, Cheurprakobkit,

2002. p. 182-196). Thus professionalism of a law enforcement officer is understood as the kind of work activity, which needs special preparation. A professional officer distinguishes in good knowledge in his/her work. Professionalism is readiness and proficiency to work as well as thorough know-how in the work. Professional activity differs from amateurish activity by its high quality and competence (Tarptautinių žodžių žodynas, 2001. p. 603).

Qualification of law enforcement officers' personnel is acquired by cognition. Needs of high qualification determine suitable technologies of knowledge rendering. Their suitable combination allows to consistently cognise phenomena, but every element of technologies has particular limit of possibilities. At present in the changing environment qualification requirements for officers are changing – it is necessary to make fast self-dependent extraordinary decisions. When making such decisions, immediate and versatile analysis of a situation is necessary; it can be performed by systemising practical information and correlating it with corresponding theoretical attitudes.

At the institutions of law enforcement officer training after the basic training course has been finished, it is necessary to teach not only to organise, to plan, to coordinate the activity of law enforcement as well as to analyse different aspects of its management, but also practical actions of law enforcement and operational activity. Only well-designed study programmes for bachelor's and master's degrees in law and policy work, law and state's border defence can guarantee this; the aim of these programmes is to train a competitive officer of law enforcement ready at any time to fulfil certain functions and ready for more strict activity for society welfare.

Thus, according to Tidikis, R. (2002), the interface of theory and practice is especially important in law enforcement. Theory and practice, scientific and empirical knowledge complement each other, refer to each other, formulate relevant problems, hypotheses, set research goals, define a research subject and content. The opinion of Sherman, L.W. (1978) should be considered,

i.e. „practical teaching of law enforcement officers is oriented to direct implementation of objectives and functions of law enforcement, i.e. to usefulness and effectiveness of law enforcement activity". Our experience shows that professionalism of primary-level officers of law enforcement can be evaluated during the training practice already after two terms of studies when students have to apply the theoretical knowledge acquired at the Faculty of Public Security, Mykolas Romeris University, facing real situations and law violators. During the training practice students must efficiently evaluate situations that do not have analogues, to urgently take proper solutions, on which professional analysis of a situation as well as execution of law violation depends. In order to attain this aim it is very important that a student would have the formed fund of the most important theoretical knowledge and the ability to apply it in practice till the future training practice. Richardson, V. (1990), Aukštkalnytė, D. (2001), Indrašienė, V. (2004), Tamošiūnas, T. Bužinskas, G., Ignatavičius, S. (2004), Middleton, J. (2005), Bankauskienė, N., Augustinienė, A. Čiučiulkienė, N. (2005), Monkevičienė, O., Ladišienė, M. (2007), Monkevičienė, O., Autukevičienė, B. (2007), Montvilaitė, S., Barauskienė, R., Glebuvienė, V.S., Tarasovienė, A.L. (2007), Stankevičienė, K., Monkevičienė, O. (2007) studied educational practice of students – future teachers. Grincevičienė, V, Senkus, V. (2008) analysed educational practice of students of social sciences. Vitkauskas, K. (2005), Nedzinskas, E., Janušauskas, A. (2007a, 2007b, 2007c), Nedzinskas, E. (2007), Janušauskas, A., Nedzinskas, E. (2008). investigated problems of educational practice of future judicial officer. There are many authors, who wrote about professional training. They are: Martin, P.E., Umberger, B.R. (2000), Carroll, N.R. (2004), Anthony, L.J., Palius, M.F., Maher, C.A., Moghe, P.V. (2007), Kolkman, W., Engels, L.E., Smeets, M.J.G.H., Jansen, F.W. (2007), Morse, W.C., Nielsen-Pincus, M., Force, J.E., Wulfhorst, J.D. (2007), Moslemi. J.M., Capps, K.A., Johnson, M.S, Maul, J., McIntyre, P.B., Melvin, A.M., Vadas, T.M., Vallano, D.M., Watkins, J.M., Weiss, M. (2009).

Laužackas, R. (2005), Piščalkienė, V., Mikutavičienė, I., Stasiūnaitienė, E., Kondratavičienė, V (2007) analysed questions of professional training and practical training. However the topic about students' practice as premise for developing officer's professionalism is hardly researched.

Thus the following questions define the scientific problem of the article: whether the skills acquired during educational practice correspond to theoretical knowledge; whether students use acquired theoretical knowledge in practice as well as what features of a judicial officer manifest when trainees observe practice's processes and take place in them.

The aim of this article is to identify what influence is made by the training practice upon professionalism of law enforcement officers.

The research methods are analysed of scientific literature and documents, survey-in-written of students, quantitative data analysis.

The essence and organisation of the training practice of students, future law enforcement officers

The following question constantly emerges in the study process: what is more important – theoretical preparation or practical abilities? There is no doubt: both are important, but is it really achievable? As Gudaitytė, D. and Jucevičienė, P. (1998), Bankauskienė, N. (1999) and Brunevičiūtė, R. (2000) state, general education is important in professional education at higher education institution, which involves very wide space related to different functions of education as well as has to be realised in subjects of a speciality and non-speciality, i.e. in the study programme. Referring to Barnett (1994), education helps higher education to disclose for a student the infinitude of knowledge about different fields of sciences and a possibility to apply necessary knowledge, which creates premises for further development. This becomes the premise for developing an integral personality. Thus a professional widely understanding professional activity and distinguishing in all highest human traits of a personality is developed.

Needs of the knowledge and information society induce the change in the concept profession, and it is suggested to understand a profession as certain area of an activity, in which professional ethics and social relations take a very important place. Socialisation of all professions becomes evident (Brunevičiūtė, 2000. p. 124). This, in its turn, enhances the need to develop other competences beside general and special professional competences, namely: the ability to communicate, the ability to start and to maintain social contacts, to improve a workplace.

The optimal solution might be understood as synthesis of these processes - meaningful reflection-based learning integrating individual experience and theoretical knowledge. Reflective observation and thinking as well as accumulation of individual experience are considered to be equally significant components that insuring effective studies. This model analyses crises of reflective thinking that emerge due to the gap of "heights of academic knowledge" and „chaotic bottoms of the practice, as well as it points out continuity, flexibility, universalism of this spiral of learning. First of all day-time students acquire theoretical knowledge, afterwards they have a possibility to experiment during their practice, i.e. to reflect and to accumulate individual experience (Jucevičienė, Valuckienė,. 2008. p. 37-50, Varricchio, 1998. p. 4-10).

It is possible to assume that the most important condition that guarantees effective application of the time meant for the practice is students' readiness for this type of the activity during their studies. It has to take place in the following directions:

- professional teaching being realised by means of theoretical and practical courses of delivered study subjects;
- development of a professional personality, which manifests as specially organised and controlled process, during which a student gets involved into the professional work of a future officer as well as

professionally important specialist traits are developed.

First of all, the first direction predicts formation of knowledge system about peculiarities a future profession by involving mastering of the foundations of basic subjects of police and state's border defence, getting acquainted with methodology and technologies of practical activity of police and state's border defence, methodology and methods of scholastic cognition. Such preparation is implemented mostly at lectures and seminars of a theoretical subject.

Beside the theoretical preparation it is also necessary to guarantee technological preparation of students for their future practice. Practical classes run the form of seminars, trainings, role-plays and simulations. During seminars preliminary interim defence of activity projects that contributes to improving student's "methical fund" is planned. Enactment of different situations as well as performance of sessions and fragments contributes to improving practical activity and develops self-confidence as well as analyse own actions.

Analytical abilities of students form when observing actions of experienced teachers, analysing own actions, discussing problems at different levels (speeches and reasoning during seminars and lectures). Finally, a student develops the ability of operative reflection, i.e. the ability to perceive work content and its results.

The training practice (further – the practice) – is the form of practical training of students at departments of law enforcement institutions planned in the study programmes of Law and Police Activities as well as Law and State Border Guard. Cooperating with the Police Department (further – PD) and the State Border Guard Service (further – SBGS), the Faculty of Public Security (further – the Faculty), Mykolas Romeris University, plans and coordinates distribution of students to their practice places. Before the training practice begins, the Faculty acquaints students with the aims and objectives of the practice, presents them assignments of their independent work planned in the study programme, programmes of the training practice as well as the methodology for the performance of independent work assignments.

In getting ready for the practice, the attitude that mutual efforts of an educational institution and employees of law enforcement institutions determine qualitative training of an officer was considered.

The performance of the practice is regulated by the Law of Police Activities of the Republic of Lithuania (2000), the Law of State Border Guard Service (2000), the Statute of Interior Service (2003), the Statute of Mykolas Romeris University (2004) and the Regulations of Students' Practice (Traineeship) of Mykolas Romeris University (2005). The content of the training practice has been formulated by referring to the study programme of Law and Police Activities as well as the Standards of Policeman and State Border Guardian Training (2000) confirmed by the order of the Ministry of Education and Science of the Republic of Lithuania on August 29, 2000, No. 1079.

During the practice students: are not given any ammunition, do not get independent any assignments of

service performance, cannot perform any procedural actions.

During the practice students follow the law acts regulating the work of law enforcement officers as well as they must execute the legitimate requirements of their practice supervisors and other officers. Disciplinary punishments and rewards, which might be applied to law enforcement officers, can be allocated to them. If during the practice a student discloses his/her inadequacy for the work of a law enforcement officer or he/she violates discipline, the student can be debarred from further performance of the practice. The officer responsible for the practice informs the Faculty about this. The Faculty is also informed about irregularities performed by a student as well as about student's behaviour worth a reward.

The aim of the practice is to make a student realise public activity of law enforcement and the way of thinking that emphasises cooperation. During the practice proper methods of the activity, the character of law enforcement work as service, representation of own profession by maintaining professionalism of a law enforcement officer, readiness to serve people and the ability to consider expectations of society should be emphasised. During the practice a student should be wider acquainted with the activity of the institutions, with which law enforcement mostly cooperates and with methods of the cooperation. The training practice is the stage, during which it is possible to observe trainee's aptitude for the activity of law enforcement. The aim of the practice is to achieve that students would:

- possess a reality-based view about the activity of law enforcement officers at different se and about requirements set for law enforcement institutions as well as understand the character of law enforcement institutions work as public service;
- learn to perform usual tasks of a universal officer of law enforcement.

The programmes of the first-year training practice (2007) and the second-year training practice (2006) in the study programme of Law and Police Activities as well as the programmes of the first-year training practice (2006) and the second-year training practice (2007) in the study programme of Law and State Border Guard, which are approved at the Faculty of Public Security, Mykolas Romeris University, regulates organisational and methical issues of the practice.

In the beginning of the practice students get acquainted with a receiving institution. They get acquainted with the organisation of law enforcement departments, the environment of the activity, divisions and subdivisions of the institutions, executives of law enforcement institutions, work hours and other conditions of the service, as well as they find out about the issues related to the use of service dress, a certificate and special means. Students have to be acquainted with requirements for work security. Matters of didactics are also considered. Also students have to sign that they will announce any confidential information obtained during their practice.

A law enforcement institution, which appointed for the practice, is responsible for guaranteeing of the resources necessary for the practice as well as for implementation of the practice. The institution obligates to organise and to implement the realisation of the training practice and at

the same time to evaluate the suitability of a law enforcement officer who participates in the practice for the work of law enforcement. The division that receives a student appoints a practice supervisor, who performs the functions formulated in programme of training practice and assesses the suitability of a student who participates in the practice for professional activity. The practice is performed at different structural divisions of law enforcement institutions. The succession of practice performance is established by the direction of law enforcement institutions.

The Faculty is responsible for planning of the content of the training practice, its compatibility to the qualification requirements formulated for professional training of officers. The Faculty controls, informs divisions of law enforcement institutions in time and participates in coordinating the activity of practice supervisors and the officers responsible for the practice. After the practice has finished and the evaluation of the results of students' activity during their practice has been made, the officer responsible for the practice presents his/her report about

the organisation of the practice for the vice-dean of the Faculty, the directions of the PD and the SBGS. During the practice students have to perform all training assignment given by their practice supervisor as well as other tasks related to the practice. Training assignments are given at every division of a law enforcement institution, in which a student performs the practice. A practice supervisor formulates assignments independently. The practice supervisor inscribes formulations of assignments, their assessments and remarks about the activity of a trainee into the documents of students' practice performance.

The research design and analysis of the results

Before the research started, the aims of the study programmes of Law and State Border Guard as well as of Law and Police Activities at the Faculty of Public Security, Mykolas Romeris University, were analysed. They were compared to the aims of the practice for first- and second-year students (see Fig. 1.).
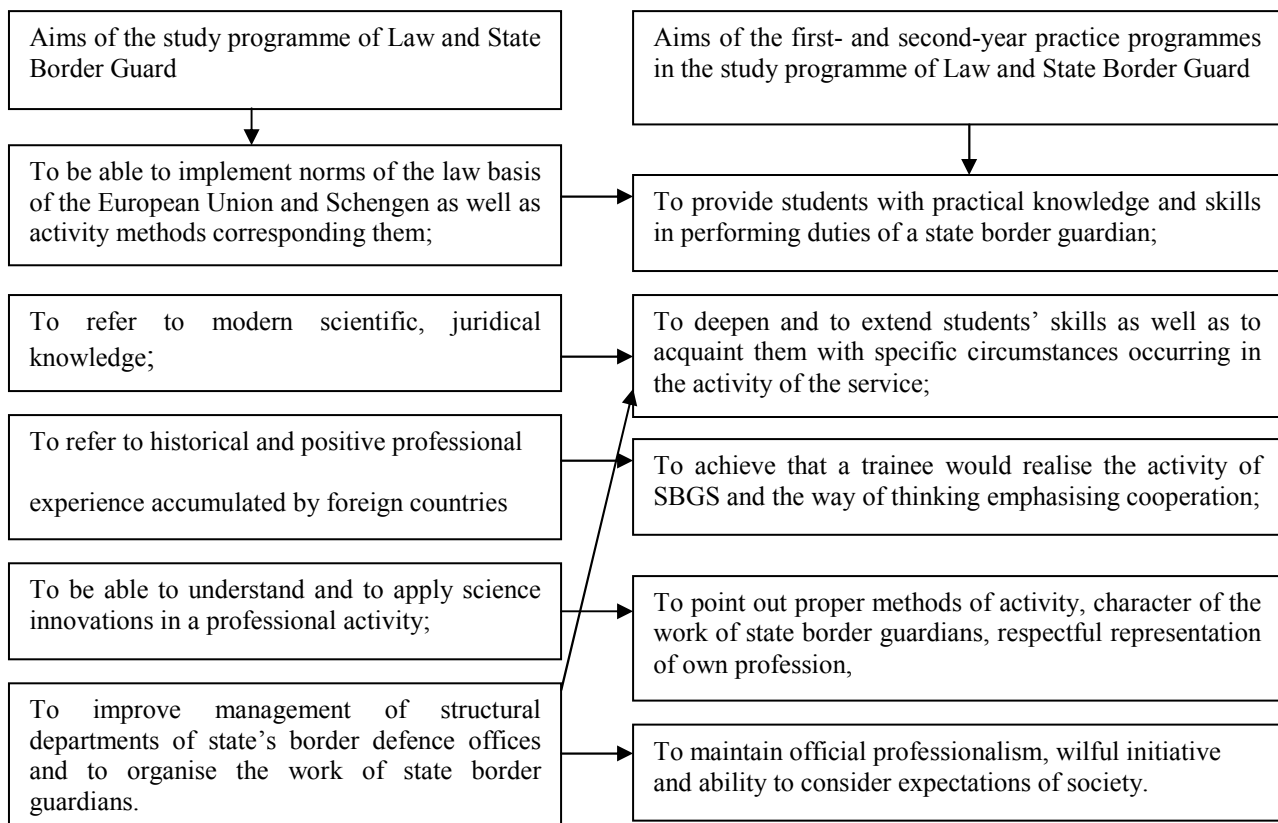

Figure 1. Compatibility of the aims between the study programmes of law and state's border defence and the practice for first- and second-year students

It is possible to state that five aims of the study programme of Law and State Border Guard match the aims of the first- and second-years practice programmes
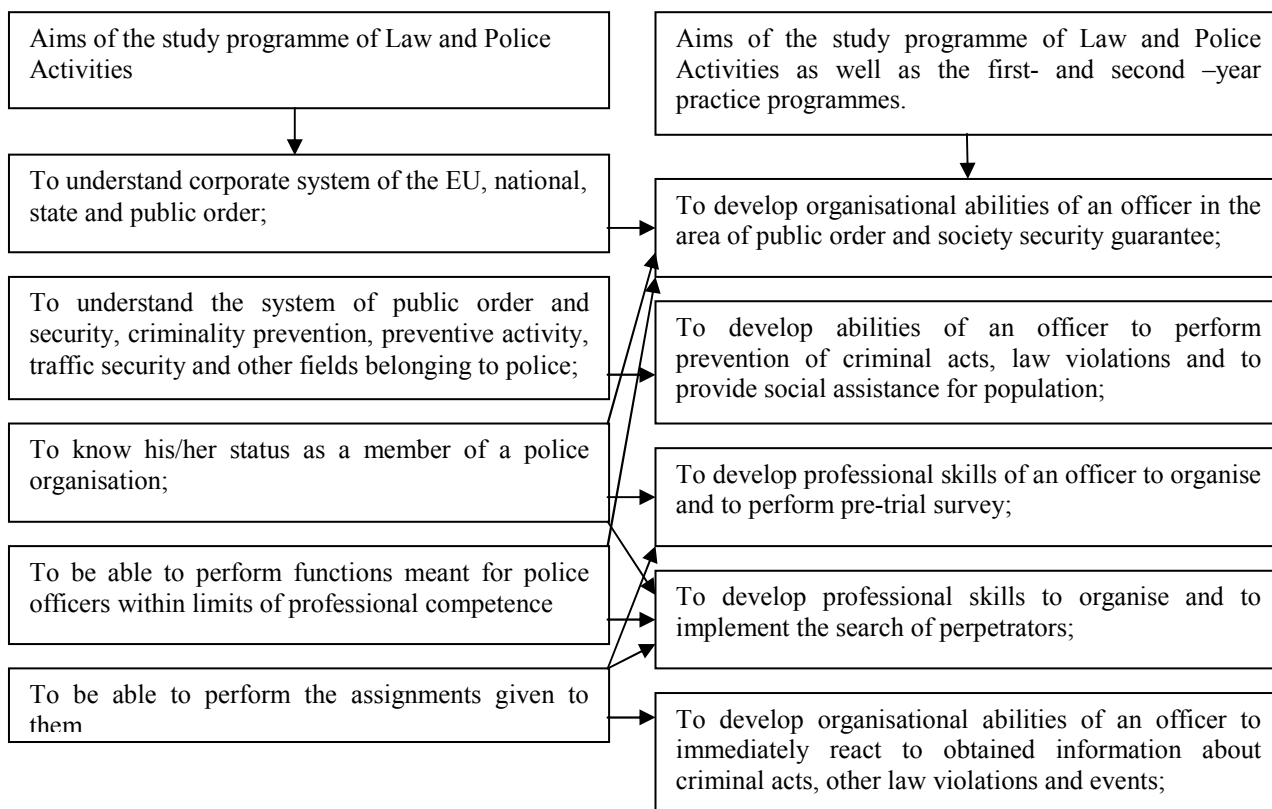
Aims of the study programme of Law and Police Activities		Aims of the study programme of Law and Police Activities as well as the first- and second –year practice programmes.
To understand corporate system of the EU, national, state and public order;	→	To develop organisational abilities of an officer in the area of public order and society security guarantee;
To understand the system of public order and security, criminality prevention, preventive activity, traffic security and other fields belonging to police;	→	To develop abilities of an officer to perform prevention of criminal acts, law violations and to provide social assistance for population;
To know his/her status as a member of a police organisation;	→	To develop professional skills of an officer to organise and to perform pre-trial survey;
To be able to perform functions meant for police officers within limits of professional competence	→	To develop professional skills to organise and to implement the search of perpetrators;
To be able to perform the assignments given to them	→	To develop organisational abilities of an officer to immediately react to obtained information about criminal acts, other law violations and events;

Figure 2. Compatibility of the aims of the study programme of Lawand Police Activities and the aims of the first and second year practice programmes

Compatibility between the aim of the study programme of Law and Police Activities as well as the aims of these programmes and the first- and second-year practice programmes is also evident. The performed analysis of the compatibility of the aims contributed to formulating questions for students in the questionnaire. The questionnaire consists of two blocks: demographic and professional. The questionnaire contained 10 questions.

Research sample: In the research, 44 students of the Faculty of Public Security, Mykolas Romeris University, In the beginning the respondents were asked whether the Faculty cared that future law enforcement officers would apply the theoretical knowledge, acquired during lectures, during their practice. Every fifth respondent indicated that the theoretical knowledge acquired at the Faculty they completely applied during their practice; every second respondent pointed out that they only partly

participated, namely: 17 students of the second-year in the study programme of Law and State Border Guard and 27 students of the fourth-year in the study programme of Law and Police Activities. The students of both programmes participated in training practices when they studied in the first- and second-year. The respondents got 44 questionnaires. All were returned, so their feedback is 100 percent. The researcher who answered all questions of the respondents also participated in the research. Friendly and mutual trust prevailed.

applied the theoretical knowledge and only every seventh respondent stated that they were not able to apply the theoretical knowledge, acquired at the Faculty, during their practice (see Fig. 3).
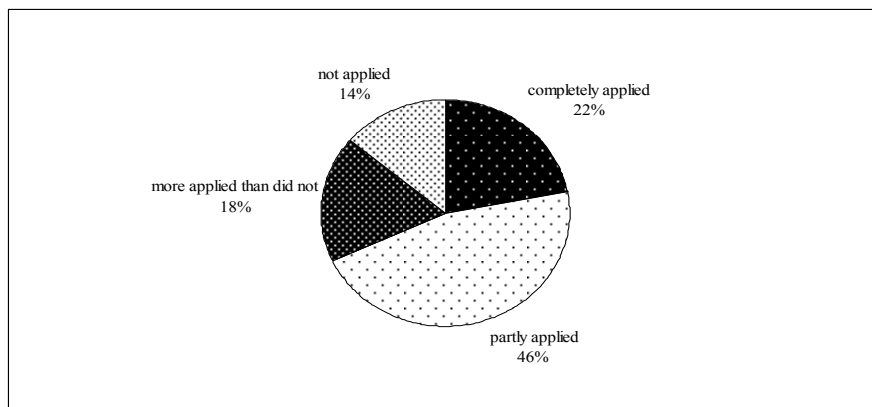

Figure 3. Opinion of the respondents about application of the theoretical knowledge, acquired at the Faculty, during their practice

The survey data show that prevailing majority of the students completely or partly applied the theoretical knowledge acquired at the Faculty in order to solve emerged problems during their training practice. In the nearest future it would be expedient to analyse the reasons why 14 percent of the respondents did not apply the theoretical knowledge acquired at the faculty during their training practice. It should be assumed that the reason for this could be students' frustration with their future profession and indisposition to master theoretical knowledge, as well as the absence of complicated fast-answer requiring situations in practice. However these are only premises requiring more detailed analysis.

The authors of the article asked the respondents whether the knowledge and skills acquired during the practice contribute to strengthening the resolution to become law enforcement officers. 34 percent of the respondents answered that the knowledge and skills acquired during the practice absolutely strengthened their resolution to become law enforcement officers. 38 percent of the respondents indicated that it contributed partly, 14 percent – more contributed than did not. Also 14 percent of the respondents were of the opinion that the knowledge and skills acquired during the practice did not contribute to strengthening their resolution to become law enforcement officers. So it is possible to state that this strengthens the above-mentioned assumption that these students got frustrated with their future profession.

The respondents were asked to give their arguments why, according to them, the knowledge and skills acquired during their practice contributed to strengthening their resolution to become a law enforcement officer and vice versa. It should be noted that second-year trainees did not express their arguments. It is possible to assume that they could lack both experience and courage to express their critical opinion. Fourth-year students, already having greater experience, presented their opinion in detail and courageously. It was observed that fourth-year male students indicated only positive arguments why the knowledge and skills acquired during their practice contributed to strengthening their resolution to become law enforcement officers. Some female students critically evaluated the situation that emerged during their practice and stated that not always during their practice the tasks they had to do and the formed environment contributed to strengthening of their resolution to become a law enforcement officer (see Table 1).

Table 1

How the knowledge and skills acquired during the practice contribute to strengthening resolution to become a law enforcement officer (answers of the four-year male and female students)

Chosen answer	Positive viewpoint after the practices	Chosen answer	Negative viewpoint after the practice
Absolutely contributes (female students)	„All knowledge is useful". „Because a possibility to compare real work at a law enforcement institution and the one described in textbooks is given".	Does not contribute (female students)	„most frequently during the practice you have to perform such work that is not related to direct work of officers".
Absolutely contributes (male students)	„During the practice a student sees his real future work, which either strengthens his resolution or causes the change of his opinion".	Absolutely does not contribute (female students)	„because during the practice we are not irrelevant to anyone, everyone is engaged in their work, and a trainee stays in the background. And he/she hears a question why you entered this university". „because during the practice you not always perform what you should (e.g. you sit and file documents in the personnel department)!"
Partly contribute (male students)	„Most students change their opinion when they go to the police commissariat for the practice because you see different evils and then you understand that the reality greatly differs from the theory". „Because during the practice a student does not yet experience real trials as in real work. A student is only an observer". „Because the practice differs from the theory".		
More contributes than does not (female students)	„More contributes than does not because the practice differs from the theory".		
More contributes than does not (male students)	„Perhaps because that during the practice a student gets acquainted with real specifics of police work, in which there a lot of minuses, but it does not change the resolution to become a law enforcement officer".		

Having found out the respondents' opinion on application of theoretical knowledge in practice, it was interesting to know whether the practice influenced the development of theoretical knowledge thesaurus. One third of the respondents indicated that their thesaurus of theoretical knowledge enlarged, for two thirds of the respondents this fund only partly enlarged. Only a small part of the respondents thought their fund of theoretical knowledge did not enlarge (see Fig. 4). These data allows stating that the respondents who participated in the research noticed and positively evaluated that during their practice the thesaurus of theoretical knowledge enlarged, it was applied in practice.
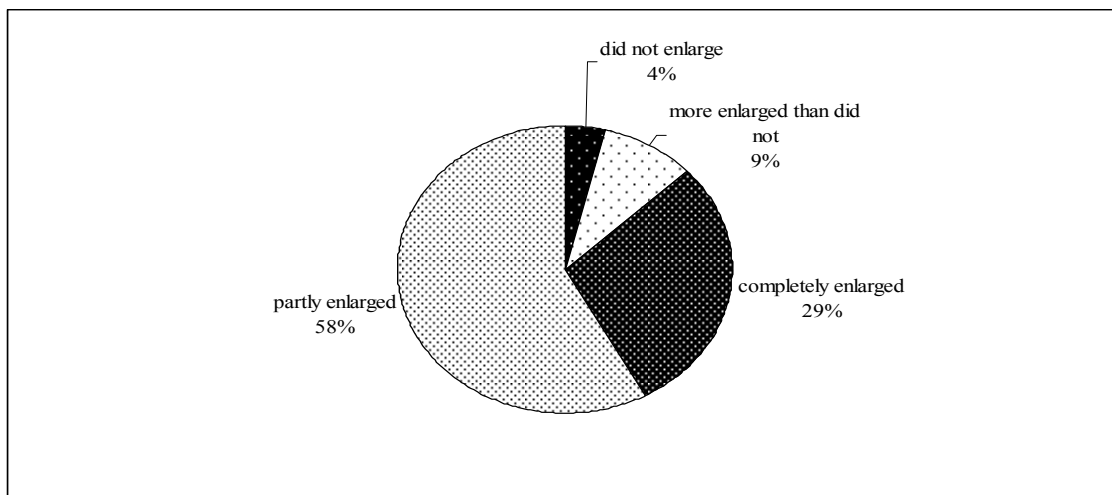
Figure 4. Influence of the practice upon the enlargement of theoretical knowledge thesaurus

It was interesting to find out whether during the practice the conditions for students to develop their skills of filling official and professional documents were guaranteed. 30 percent of the respondents stated that they improved these skills completely, 46 percent of them pointed out that they partly improved these skills and 12 percent of the respondents indicated that they more improved than did not their skills of filing official and procedural documents. Only 12 percent of the respondents stated that during the practice the conditions to improve their skills of filing official and procedural documents were not created. Considering that filing official and procedural documents is a very important part of the work of a law enforcement officer, the answers revealed that the conditions to implement this process were guaranteed during the practice at the maximum. Future officers get acquainted and participate in the process of filing official and procedural documents; they are able to name and to state the facts emerged during the practice.

During permanent training of a law enforcement officer and during the practice it is very important that during their practice they would be taught to evaluate and to analyse different situations, which they face continuously. The answers of the respondents are the reason to pay some attention: only 18 percent of the trainees were taught to thoroughly analyse and to evaluate situations. Other respondents stated that they were more than were not taught to analyse situations or they were partly taught. Even 23 percent of the respondents indicated that they not taught to evaluate and to analyse different situations during their practice. Again the fourth-year students, especially female students expressed their critical viewpoint. It allows assuming that either organisers of the practice do not trust students or their abilities, or the organisers do not have reliable instruments how to teach to evaluate and to analyse

different situations, or perhaps they do not pay enough attention to this.

The respondents were also asked whether their responsibility to act in different situations was developed. This question was formulated according to the insights on the concept of responsibility as one of basic categories of ethics and law presented in the article by Nedzinskas, E. and Bankauskienė, N. (2009); this concept is alongside such concepts as honesty, liability, diligence, dignity (this is the construct of self-awareness, mechanism of person's self-control related to understanding justice and fault manifesting as the responsibility for own independent and sovereign actions taken by a person: it shows the level of consciousness, moral culture and freedom). The answers to this question were very laminated: 18 percent of the respondents pointed out that this liability/responsibility to act in different situations was completely developed; 48 percent of the respondents declared that it was partly developed; 23 percent of the respondents indicated that it was more developed than was not and 11 percent of the respondents thought that their liability/responsibility to act in different situations was not developed. And again the fourth-years female respondents indicated that liability/responsibility to act in different situations was only moderately and less developed or it was not developed at all. Less than a half of the respondents pointed out that liability/responsibility to act in different situations was partly developed during their practice.

All respondents who participated in the research were asked to what subjects should be paid greater attention when getting ready to the practice – speciality subjects, speciality and general subjects or only general subjects. Only 20 percent of the second-year students indicated that it would be necessary to stress only speciality subjects – perhaps they did not have greater experience and did not see wide possibilities in the activity of law

enforcement officers. 80 percent of the respondents pointed out that during the practice it was important to content shows the ability of the respondents to orient in educational space of Europe and Lithuania as well as the ability to predict what is mostly lacking and to what the attention of higher education institutions training law enforcement officers should be paid.

During their practice students face miscellaneous activity of officers, professionalism of officers as their human traits becomes evident. Future officers of law enforcement perhaps not so open but discuss and evaluate the behaviour of their working colleagues. Thus the respondents were asked what imposes them when observing the work of officers during the training practice. 44 respondents presented 81 evaluating feature. Mostly the respondents pointed out that they were imposed by the responsible viewpoint of officers to the assigned tasks. This made 25 percent of all evaluations. The second place went to the trainees' estimation (the greatest impression) that the officers before decision-making consulted with their colleagues (23 percent of all estimations). The third place (17 percent) went to the students' statement that law enforcement officers worked fast and professionally. Future law enforcement officers were imposed that the specialists of law enforcement used to perform their assignments in time (14 percent). The trainees stressed that officers were civilized (12 percent of all estimations) with detainees, arrestees and waiters. However the statement, that officers were civilized and polite got least estimations (9 percent).

The answers of the second- and fourth-year students to the question what made them a positive impression when observing the work of officers during their training practice were analysed. The fourth-year students indicated the statements twice as more than the second-year students. This allows drawing a premise that the fourth-year students have already possessed greater experience, they are more observant, they are not afraid to express their opinion. The second-year students still lack wider knowledge on officers' activity and evaluation skills. It should be pointed out that the second and fourth-year male students more than female students demonstrated their insight in evaluating officers' activity. The students – respondents were asked whether they had possibilities and whether the conditions to develop their different value attitudes were created during their practice. The respondents answered that the possibilities to develop the following value attitudes were created: dutifulness, punctuality, liability/responsibility and culture, communicativeness and honesty. When answering this question, the fourth-year students, especially the male students were more insightful. The

emphasise development of both speciality and general abilities. Such competitive evaluation of the practice second-year male students more frequently than the second-year female students indicated that during their training practice they had a possibility to develop the following value attitudes: dutifulness, liability/responsibility, communicativeness.

Conclusions

1. Having performed the analysis of scientific literature and documents, it is possible state that the training practice implicates the development of both speciality and general abilities. Components of the aims of the faculty programmes completely pertain with the aims of the practice programmes of single courses. This contributes to developing professionalism of a law enforcement officer. The results obtained during the research proved that prevailing majority of the respondents completely or partly applied the theoretical knowledge acquired at the faculty in order to solve the tasks that emerged during their practice. Almost all students emphasised the development of general and special abilities; and only few respondents indicated that it was important to develop only special abilities. Such competitive evaluation of acquired theoretical knowledge proved the ability of the respondents to orient in modern educational space of Europe and Lithuania, to express what is most missing and to what organisers of law enforcement officer training should pay their attention.

2. Having performed the research it is possible to state that prevailing majority of students completely or partly applied the theoretical knowledge acquired at the faculty in order to solve issues that emerged during their training practice. It is also identified that acquired knowledge and skills completely or partly strengthened the resolution of most students to become a law enforcement officer.

3. Having analysed the answers of the trainees on what imposed them when observing the activity of officers during their practice, it was identified that most respondents valued responsible viewpoint of officers to their assignments, that officers consulted with their colleagues when making decisions, performed their assignments fast and with expedition. The respondents pointed out they had possibilities to develop the following value attitudes during their training practice: dutifulness, punctuality, responsibility/liability and culture, communicativeness and honesty.

References

1. Anthony, L.J. Palius, M.F. Maher, C.A., Moghe, P.V. Using discourse analysis to study a cross-disciplinary learning community: Insights from an IGERT training program. Journal of Engineering education. APR 2007. ISI:000251314100007. Volume 96. Issue 2. 1069-4730. 2007.
2. Aukštkalnytė, D. Pedagoginė praktika kaip būsimų mokytojų bendravimo kompetencijos gerinimo prielaida - Acta paedagogica Vilnensia. 2001.
3. Bankauskienė, N., Augustinienė, A., Čiučiulkienė, N. Action Learning and Action Reasearch As Apossibility To Depelop A Teachers's Modern Competencies. Mokytojų ugdymas. Mokslo darbai. Nr. 4. 2005.
4. Barnett, R., The Limits of Competence. Knowldge, Higher Education and Society. The Society for Research into higer Education and open University press. 1994.
5. Brunevičiūtė, R. Bendrasis ugdymas aukštosios mokyklos profesiniame rengime. Socialiniai mokslai. Nr. 3 (24). 2000. p. 124.

6. Bubnys G., Smalskys V. Policijos struktūrų valdymas ir personalo rengimas naujosios viešosios vadybos kontekste. Viešoji politika ir administravimas. Nr. 13. 2005. p. 92-97.

7. Carroll, N.R. Benefits of interdisciplinary graduate education from a graduate student's point of view: The NSF-IGERT experience (Integrated Graduate Education Research Traineeship). 228th National Meeting of the American-Chemical-Society. ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY. AUG 22-26. 2004. Philadelphia. ISI:000223712801435. Volume 38. Issue 3. 0034-8910. 2004.

8. Čiučiulkienė, N., Augustinienė, A. An Engineering Student as an Emancipated Career Decision Maker in the Context of Neoliberal Education. 2008. p. 190-195.

9. Gudaitytė, D., Jucevičienė, P. Aukštojo mokslo profesinio rengimo terminų šiuolaikinės aktualijos (sud. ir ats. red.) Edukologijos idėjos Lietuvos švietimo sistemos modernizavimui. Monografija. Kaunas: Technologija. p. 153-159,

10. Indrašienė, V. Pedagogų rengimo kompetencijos projekto analizė pedagoginių praktikų metodikos ir turinio atžvilgiu. Pedagogų rengimas Lietuvoje. Pertvarkos, pastangos. Vilnius: Danieliaus leidykla. 2004.

11. Janušauskas, A., Nedzinskas, E. Professional career of the students of faculty of public security. Global cooperation in engineering education: innovative technologies, studies and professional development: international conference proceedings, October 2-4, 2008, Kaunas, Lithuania. 2008. p. 139-142.

12. Johnston, C. W., Cheurprakobkit, S. Educating our Police: Perception of the Police Administrators Regarding the Utility of a College Education, Police Academy Training and Preferences in Courses of Officers. International Journal of Police Science&Management. 2002. Vol. 4-3. p. 182-196.

13. Kolkman, W., Engels, L.E., Smeets, M.J.G.H., Jansen, F.W. Teach the teachers: An observational study on mentor traineeship in gynecological laparoscopic surgery. GYNECOLOGIC AND OBSTETRIC INVESTIGATION. 2007. ISI:000247029500001. Volume 64. Issue 1. 0378-7346. 2007.

14. Laužackas, R. Sistemoteorinės profesinio rengimo kaitos dimensijos. Kaunas: Vytauto Didžiojo universiteto leidykla. 1999.

15. Martin, P.E. Umberger, B.R. Trends in interdisciplinary and integrative graduate training: An NSFIGERT example. Conference of the American-Academy-of-Kinesiology-and-hysical-Education. (AAKPE)OCT 05-07, 2000. ISI:000181021300010. LAKE GENEVA, WISCONSIN. Volume 55. Issue 1. 0033-6297. 2003.

16. Middleton, A.J. Reflective log linked to personal development plans (PDPs) and the practice professional development plan (PPDP). Education for Primary Care, Volume 16, Number 5, September 2005. p. 593-596(4).

17. Monkevičienė, O., Ladišienė, M. Pradedančiojo dirbti ir studento praktikanto konsultavimo modeliavimas. Ugdymo kokybė: teorinės ir praktinės dimensijos. XV – osios tarptautinės mokslinės konferencijos „Švietimo reforma ir mokytojų rengimas" programa ir tezės. Vilniaus pedagoginio universiteto leidykla. 2007. p. 77.

18. Monkevičienė, O., Autukevičienė, B. Studento praktikanto ir pradedančiojo dirbti pedagogo gebėjimo mokytis tendencijos. Ugdymo kokybė: teorinės ir praktinės dimensijos. 2007.

19. Montvilaitė, S., Barauskienė, R., Glebuvienė, V.S., Tarasovienė, A.L. Mentorystė pedagogų rengimo procese. Ugdymo kokybė: teorinės ir praktinės dimensijos. XV – osios tarptautinės mokslinės konferencijos „Švietimo reforma ir mokytojų rengimas" programa ir tezės. Vilniaus pedagoginio universiteto leidykla. 2007. p. 37.

20. Morse, W.C., Nielsen-Pincus, M., Force, J.E., Wulfhorst, J.D. Bridges and barriers to developing and conducting interdisciplinary graduate-student team research. ECOLOGY AND SOCIETY. DEC PY 2007. ISI:000252310900036. Volume 12. Issue 2. 1708-3087.

21. Moslemi, J.M., Capps, K.A., Johnson, M.S., Maul, J., McIntyre, P.B., Melvin, A.M., Vadas, T.M., Vallano, D.M., Watkins, J.M., Weiss, M. Training Tomorrow's Environmental Problem Solvers: An Integrative Approach to Graduate Education. BIOSCIENCE. JUN 2009. ISI:000266546500012. Volume 59. Issue 6. 0006-3568.

22. Nedzinskas, E., Bankauskienė, N. Sąvokų atsakingumas ir atsakomybė semantiniai ryšiai su etikos kategorijomis. Jaunųjų mokslininkų darbai = Journal of young scientists: Šiaulių universitetas. 2009, [Nr.] 1(22). p. 136-144.

23. Nedzinskas E., Janušauskas, A. Ar pakankamas būsimųjų policijos pareigūnų rengimas tarnybai: mokomųjų praktikų vertinimo analizė. Policijos pareigūnų profesinio rengimo aktualijos [Elektroninis išteklius]: mokslinių straipsnių rinkinys. 2007. p. 41-50.

24. Nedzinskas, E., Janušauskas, A. Studentų mokomosios praktikos reikšmė rengiant policijos pareigūnus. Policijos pareigūnų profesinio rengimo aktualijos [Elektroninis išteklius]: mokslinių straipsnių rinkinys. 2007. p. 61-69.

25. Nedzinskas, E., Janušauskas, A. Kai kurie studentų mokomosios praktikos aspektai. Policijos pareigūnų profesinio rengimo aktualijos [Elektroninis išteklius]: mokslinių straipsnių rinkinys. 2007. p. 51-60.

26. Nedzinskas, E. Peculiarities of the assessment of a profession chosen by students applying on the data of practice. Gobal cooperation in engineering education: innovative technologies, studies and professional development : international conference proceedings, October 4-6, 2007, Kaunas, Lithuania. 2007. p. 121-124.

27. Piščalkienė, V., Mikutavičienė, I., Stasiūnaitienė, E., Kondratavičienė, V. Praktinio mokymo ir mokymosi realioje darbo vietoje vertinimas studentų požiūriu. Mokslo taikomieji tyrimai Lietuvos kolegijose. 2007. Nr. 4. p. 71-76.

28. Richardson, V. Significant and Worthwhile Change in Teaching Practice. Teacher Education at the College of Education, University of Arizona, Tucson, Arizona 85721. Educational Researcher, Vol. 19, No. 7. 1990. p. 10-18.

29. Senkus, V., Grincevičienė, V. Pilietinio ugdymo ypatumai: pedagoginę praktiką atlikusių studentų požiūris Pedagogy Studies (Pedagogika). 2008. p. 83-88.

30. Stankevičienė, K., Mockevičienė, O.Mokymo praktikos vadyba: mentoriavimo kompetencijos. Pedagogika. Nr. 85. 2007. p. 61-67.

31. Sherman, L.W. The Quality of Police Education. San Francisco: Jossey – Bass Publishing House, 1978.

32. Šakočius, A. Gyvenamosios aplinkos saugumas ir šiuolaikinės policijos sampratos problema. Jurisprudencija. 2002. T. 35 (27).

33. Tamošiūnas, T., Bužinskas, G., Ignatavičius, S. Požiūriai į pedagogų rengimo koncepcijos projektą. Pedagogų rengimas Lietuvoje. Vilnius. 2004.

34. Tarptautinių žodžių žodynas. Vilnius. 2001. p. 603.

35. Tidikis, R. Policijos mokslų sisteminimo metodologinės prielaidos. Jurisprudencija. 2002. T. 35(27).

36. Varricchio, D. Continuing Education: Expending Opportunities for officers. FBI Law Enforcement Bulletin. 1998. No 67, p. 4-10.

37. Vitkauskas K. Mokomosios praktikos įtaka policijos pareigūnų rengimui. Teoriniai ir praktiniai statutinių pareigūnų rengimo aspektai [Elektroninis išteklius]: respublikinė mokslinė konferencija, 2005 m. birželio 10 d., Kaunas: straipsnių rinkinys. 2005. p. 6-15.

38. Lietuvos Respublikos policijos veiklos įstatymas, 2000 m. spalio 17 d. Nr.VIII-2048 // Valstybės žinios. 2000, Nr. 90-2777, Nr. 101.

39. Lietuvos Respublikos Valstybės sienos apsaugos tarnybos įstatymas, 2000 m. balandžio 3 d. Nr. 92-2848, Nr. VIII-1996.

40. Lietuvos Respublikos vidaus tarnybos statutas, 2003 m. balandžio 29 d. Nr. IX-1538 // Valstybės žinios 2003, Nr. 42-1927.

41. Mykolo Romerio universiteto statutas, 2004 m. spalio 28 d. Nr. IX-2515// Valstybės žinios, 2004, Nr. 163-5952.

42. Mykolo Romerio universiteto Senato 2005 m. liepos 5 d. patvirtinti nutarimu Nr. 1SN- 99, Mykolo Romerio universiteto Studentų praktikos (stažuotės) nuostatai.

43. Policininko rengimo standartas. 2000 m. rugpjūčio 29 d. Nr. 1079.

44. Pasieniečio rengimo standartas. 2000 m. rugpjūčio 29 d. Nr. 1079.

Egidijus Nedzinskas, Nijolė Bankauskienė

Mokomoji praktika – prielaida būsimojo teisėsaugos pareigūno profesionalumui

Santrauka

Straipsnyje siekiama išryškinti mokomosios praktikos edukacinį aspektą rengiant teisėsaugos pareigūnus Mykolo Romerio universiteto Viešojo saugumo fakultete. Straipsnyje nagrinėjama mokomosios praktikos esmė, dermė su visa pareigūnų rengimo programa ir siekiais. Konstatuotina, kad universitetinis išsilavinimas tapo teisėsaugos tarnautojo privalumu: turėdamas aukštesnį išsilavinimo cenzą, teisėsaugos pareigūnas galėjo geriau adaptuotis darbo vietoje. Tai reikalauja pasikeitusios nusikaltimų tendencijos: jaunėja ir žiaurėja nusikaltimai, daugėja, gausėja, grupuočių valdomų narkotikų platinimo sudėtingų tinklų, nusikaltimų, vykdomų panaudojant sudėtines technologijas, išplitimas.

Straipsnį sudaro įvadas ir dvi dalys.Pirmojoje dalyje aptariamas būsimųjų teisėsaugos pareigūnų mokomosios praktikos esmė ir jos organizavimo procesas. Antroje dalyje pateikiamas tyrimo dizainas ir analizuojami bei interpretuojami rezultatai.

Raktažodžiai: studentas, mokomoji praktika, teisėsaugos pareigūnas, pareigūno profesionalumas.

About the authors

Egidijus Nedzinskas, lecturer, Department of Police Activities, Faculty of Public Security, Mykolas Romeris University; a doctoral student (educational science), Kaunas University of Technology; author of 17scientific articles. Research interests – optimisation of study process and career peculiarities, educational and learning environments, security of society. E-mail: e.nedzinskas@mruni.eu

Nijolė Bankauskienė, associated professor, Department of Educational Systems, Faculty of Social Sciences, Kaunas University of Technology, doctor of social sciences (educational science); director, Centre of Educational Competence, Institute of Educational Studies, author of 80 scientific articles. Research interests – history of educational science, didactics of teaching the Lithuanian language, teacher training, action research, communication, change of teacher's roles, expression of competences socio-educational activity. E-mail: nijole.bankauskienė@ktu.lt

THE THEORETICAL SUBSTANTIATION OF THE FACTORS INFLUENCING EMPLOYEES' LEARNING ENVIRONMENT

Asta Oficerovienė[1], Kuldar Kiil[2]

[1]Kaunas University of Technology, Lithuania, [2]SAIMA BEVERAGES OY LTD, Finland

Abstract

The article examines the learning environment of employees and the influencing factors. Learning of employees in a modern organization increases its competitiveness and enhances the economic position. When seeking to create an environment conducive to learning in an organization, a necessity arises to identify the factors affecting the employees' learning environment. The major share of scientific research is devoted to analyze different learning environments on theoretical as well as practical level. This article analyzes such learning environments, which are identified by employees learning in a contemporary manner. The article aims at substantiating theoretically the *employees' learning environment and the affecting factors.*

Keywords
Employees' learning, learning environment, informal learning, self-directed learning.

Introduction

The changes transpiring in economic environment, determined by globalization, as well as the development of new technologies force the organizations to change, adapt and survive while seeking for the set objectives of activities. Contemporary organizations base their activities on fast reaction to environmental changes and on the focus on higher technologies, intellectual and creative work. Due to this, effective learning of employees nowadays becomes the main objective of organizations. The employee learning conception in the context of modern organization, presented in scientific literature, is predicated upon the new approach to learning while emphasizing its constructive nature and examining it as a cognitive phenomenon that is determined by the environment.

Foreign (Kolb, Fry, 1975; Senge, 1990; Pedler, Burgoyne, Boydell, 1991; Dall'Alba 1991; Wilson, 1995) authors and Lithuanian (Lipinskienė, 2002; Jucevičienė, Stanikūnienė, 2003; Jucevičienė, Tautkevičienė, 2004; Jucevičienė, 2007; Stanikūnienė, Jucevičienė, 2007) scientists pay much attention to the learning conception as well as to learning environment while examining it on theoretical and practical levels. The relevance of this area is the outcome of the belief that employee learning has positive impact on the company's results. However, scientific studies pertaining to employees' learning environment in an organization and the influencing factors are scarce. *Because of this, the work examines what factors influence the employees' learning environment identified in the organization.*

Purpose of the article. Theoretically substantiate the factors influencing the employees' learning environment.

Object of research. Employees' learning environment.

In the article, *the method of* scientific literature analysis was used.

The first part of the article provides a theoretical definition of the employees' learning environment conception. Based on the presented conceptions, the second part of the article substantiates theoretically the factors affecting the employees' learning environment. At the end of the article, conclusions are presented.

The conception of employees' learning environment

According to many scientists, the lifelong learning idea draws attention to the time dimension – periodical or continuous learning as well as emphasizes the variety of learning activities. The learning activity from a contemporary point of view can take place at different times and in different spaces: at work, at home, during leisure time, etc. Many individuals who do not learn formally generally do not identify themselves as learners and do not raise any learning objectives. Nonetheless, it is obvious that while participating in certain activities and acquiring experience, individuals simultaneously learn. When working and learning, new methods of work are being taken over and mastered, many professional and personal competencies are acquired.

According to D. A. Kolb and R. Fry (1975), knowledge is the outcome of learning and it can be acquired while reflecting and conceptualizing the experience, and the experience, therefore, transforms into knowledge.

Other author (Dall'Alba, 1991) states, that learning is the interpretation of ideas and theories in order to realize the reality.

Based on different authors (Jarvis, Hoford, Griffin, 2004 and Knowles, 1975), P. Jucevičienė (2007) suggests that a learning individual is a self-directing learner, who organizes his/her improvement process deliberately, while realizing it in various environments of life.

According to L. Sugerman (1986), individuals and their environment constantly interact. Seeing that the environment constantly changes as information and knowledge society develops, employee's roles as well as improvement requirements posed to them also change. In the context of learning paradigm, this improvement is determined by self-directed learning. The employee deliberately plans his/her learning opportunities in environments of all his/her roles in life.

When talking about professional improvement of individuals, it is mostly influenced by the employee's learning environment, created within and outside the organization. Many researchers concur that learning environments favorable to employees are being created in the kind of organizations, which strive for the quality of

the learning organization. This article, therefore, often refers to a learning organization, which according to P. Jucevičienė (2007), is defined as environment of continuous organizational learning for individuals, transpiring on individual and collective levels as well as within their interaction and that is created by the organization itself, thus ensuring effective activities under constantly changing conditions.

The learning environment of the contemporary learning organization must ensure and facilitate the learning of its members and create the most favorable conditions for learning.

B. G. Wilson (1995) states that the learning environment is the place where people, using the resources, create significant solutions of problems. In this environment, the staff establishes their learning objectives and needs, use and assesses all the potential measures and resources.

P. Jucevičienė and Tautkevičienė (2004) describe the learning environment as the space in which the learner, while interacting with information sources and individuals possessing more experience, acquires knowledge, abilities and values acting constructively, willfully, deliberately, purposefully and reflectively.

It can be stated that there can be many learning environments for employees, because learning environments refer to all life and activity spaces of individuals having educational value and enabling personal improvement of the individual through learning efforts. P. Jucevičiene (2007) distinguishes educational environment, i.e., dynamic, information space of the learning activity, created and affected by the educator. D. Lipinskienė (2002) states that learning transpires in educational environment, when learning environment is understood as the environment of the entire educational institution, connecting all other environments of the learner.

Hence, the employees' learning environment is understood in a broader sense than educational environment created by the educator. In this case, the discussion concerns rather the informal education; when the employees raise their qualification, attend courses, etc. Following the contemporary approach to learning it is recognized that learning occurs in organizational environment as well as everywhere where learners use the sources of information and measures to solve the problems and construct new understanding (Jucevičienė, Tautkevičienė, 2004).

Employees' learning environment has to be organized in such a way as to make the employees feel able to improve personally and to learn. Moreover, supporting and empowering learning environment, being created in an organization, where employees can reflect upon their activities and learn from experience, enables controlling one's learning process, promotes creativeness and motivates for qualitative activity and learning.

Employees' learning environment denotes the space within the organization that has strong influence over their learning in working activities. This space may be affected also by the educational environment created by the organization for its employees as well as other learning environments, existing outside the organization.

Learning and particularly self-directed learning of employees is best promoted by such an organization, which strives towards the quality of the learning organization. The learning environment could be defined as the environment surrounding the learners that affects their learning. This refers to the space, in which the learners work together and support each other using various means and information resources, striving towards learning objectives and solving the problems. Each learner perceives the learning environment individually. This depends on competence and experience possessed by them as well as learning objectives. It can be stated that employees' learning environment in an organization is associated with learning as well as with educational environment, encompassing learning and teaching.

Substantiation of factors influencing the employees' learning environment

Scientific literature analysis allows distinguishing the groups of factors, influencing the employees' learning environment: direct factors, affecting the employees' learning environment and operating on organizational level and indirect factors, manifesting when the employees are acting outside the organization, i.e., when they no longer perform the role of employee.

One of the direct factors, affecting the employees' learning environment, is *personal learning experience of employees* (see Fig. 1). *Competence and personal potential powers* covers the learning experience. Personal potential possessed, i.e., knowledge, abilities and values, determines the learning competence of employees.

The learning competence (Pukevičiūtė, 2007) covers the following aspects: organization of one's learning process, its direction, control and assessment of oneself and of one's learning activity, founded upon knowledge, abilities, skills and realization and based on positive attitudes.

Thus, the learning employees must be able to assess their learning experience, to get to know their learning style and to learn to direct their learning: to search for motivation for learning, to choose relevant and important contents and methods, matching their learning style, professional perspectives and experience of life. (Simonaitienė, 2008).

V. J. Pukevičiūtė (2007) emphasizes that the basis for the learning competence is comprised by employees' *personal potential powers*, their abilities to act, determined by the knowledge possessed, skills in certain field and values attitudes. Personal attitudes confer individual nature to the employee's activities that affects the development of abilities. The majority of employees are able and willing to grow and improve, because they have a positive motivation for learning. However, continuous assurance of employee learning may be impeded by previous negative learning experience (e.g., parents forcing the child to learn, etc.).

In A. J. Meier's (2001) opinion, individual abilities form in the interaction of knowledge and subject-specific skills. Here, individual's preparation for activity is important that is predicated upon value-related attitudes.

Independent and individual learning utilizes routine activities and experience acquired through them as a learning opportunity. Such learners experiment, test alternative activities, constantly ask and analyze the

achievements. Thus, learning environments are opened that enable implementing experiential learning (Simonaitienė, 2008). It can be, therefore, stated that employees' learning environment is influenced by the employees' personal learning experience.

Organizational culture is another direct factor influencing the employees' learning environment. The culture of contemporary learning organization emphasizes initiative-taking, continuous learning. Much attention, therefore, is paid to employees' learning environment and factors that influence it. In a contemporary organization, employees' learning environment is affected by *organizational value* system: *organization's philosophy, organization's climate* – all this comprises *organizational culture* (see Fig. 1).

Organizational culture is conditioned by organization's values, habits, traditions and rituals. This helps modeling certain behavior and forming the perception. Organizational value system, principles and beliefs, supported by the staff, comprise the basis determining the organization's policy and practice. (Jucevičienė, 1996).

The organization follows *the values* in everyday work. This can be the company's code of ethics, principles of work advocated or internal regulations. Upholding the organization's values is the basis for strong organizational culture. Correct values help the company to survive for a longer time and to perform its activities more successfully. The attitudes of the staff and the organization to values must match, because only then the best results can be expected. If the organization fosters the values of learning and improvement, efforts are being made to create an environment conducive for their implementation (Šulcienė, 2005).

Another element of organizational culture refers to *organization's philosophy*. It is perceived by the staff as the basis of activities, while policy outlines the guidelines on how the staff should conduct themselves, what rules and procedures must be observed and what behavior will not be tolerated.

Organizational climate, according to P. Jucevičienė (1996), means psychological quality of organization, reflecting the affinities of employees' emotional states and well-being as well as the nature of their behavior. Employees acting in empowering environment are characterized by understanding, friendliness, mutual trust; certain communication culture prevails. In such learning organization, where positive micro-climate prevails, changes are accepted more easily and the learning environment is adapted more successfully to the needs of the learners.

A. Pundzienė and V. Dienys (2003) distinguish features typical to organizational culture that supports learning:
- ✓ employees discuss what they learned;
- ✓ staff are willing to share their knowledge and experience;
- ✓ knowledge, skills and information are immediately applied at work;
- ✓ various methods and ways of learning are promoted and used (from formal certified courses to discussions during lunch breaks);
- ✓ learning is accessible to everyone;
- ✓ in the company, learning is respected;
- ✓ learning employees are supported and encouraged to learn;
- ✓ learning employees are noted for better communication ability, access to and spreading of information, active cooperation, inquisitiveness and willingness to solve problems.

K. Veličkaitė and D. Lipinskienė (2007) state that in the culture of contemporary learning organizations, initiative-taking and continuous learning are emphasized; attention is paid to internal as well as external environment.

In contemporary learning organizations, when creating the employees' learning environment, particularly important role befalls then *manager* (see Fig. 1). The manager must be capable of creating empowering environment for learning, i.e., provide the staff with the necessary means, create the material conditions, maintain positive micro-climate in the company, apply learning-promoting motivational system, trust the staff and entrust them with performance of important tasks, form positive attitude to the learners.

When creating the learning environment favorable to employees, the manager makes use of his/her abilities and perception of the learning environment creation process.

Manager's influence to employees' learning environment includes the following elements: *manager's position, creation of suitable conditions for learning, manager's style and behavior.*

Manager's position includes promotion of employees' learning, support and granting of authorizations. The manager's example should inspire the staff to learn, to support and encourage them to learn while showing the meaning and benefit. The staff should receive feedback on their work, benefit given by learning, because knowing of results gives meaning to work and the learning process itself. Thus, continuous improvement and changing of learning environment are ensured.

Management style and behavior are also important to the creation of learning environment. Manager's behavior, his/her personal qualities and objectives striven for largely determine the management style. It is obvious that contemporary managers must be capable of combining all management styles subject to the situation and objective being striven for. In a contemporary learning organization, the manager must be able to act decisively as an autocrat as well as to be liberal, so that employees could feel as equal peers and a democrat, who divides the powers, provides the opportunities to improve, allows the staff to use their intellectual and professional potential applying team-work and learning in the organization (Lipinskienė, 2008). Such managers in particular create learning environments that are favorable and empowering for employees.

The *manager's behavior* determines whether the employees' needs will be satisfied and favorable social and psychological climate created in the organization. Manager's respect to his/her staff, trusting them, seeing to their interests and needs, encouragement to participate when examining problems and making the decisions enable the creation of favorable organizational climate and empowering learning environments.

When creating the employees' learning environment, the second factor associated with the manager of the organization is the *creation of conditions favorable for*

employees' learning. Everything that pertains to improvement of working conditions, observance of safety and hygiene norms, adaptation of the means of work to the working and learning employee influences the learning environment and enhances the willingness of the staff to learn.

Positive *attitude of the manager towards learning* ensures good emotional support that encourages learning and simultaneously creates the environment conducive to learning. Support when seeing to development of the staff's qualities and talents, not yet entirely revealed, and creating the suitable atmosphere, so that the staff could focus on the development of their skills and abilities as well as improve comprehensively, is also very important. (Masalskis, Masalskienė, 2008).

Inter-relationships of the manager and subordinates are shaped by *empowerment (delegation)*. Empowerment is useful to the staff because it motivates them, enhances their initiative, provides the opportunity to bring out their better qualities, and promotes improvement and creation of favorable learning environments.

The contribution of *motivation* when creating the employees' learning environment depends on internal and external reward, motives of learning, incentives, self-control and the ability to assess one's learning results. The employees' motivation for learning could be divided into *organizational motivation and self-motivation.*

The main element of organizational motivation is the *reward,* influencing the employees' learning environment. Rewards can be internal and external. According to D. Lipinskienė (2007), *external reward (salary)* motivates the staff as long as their physiological and safety needs are not met. Additional money, for instance, when raising the salary, disbursing bonuses, motivate substantially less, because then social motivators become more important (e.g., respect, recognition, etc.). Nowadays, self-realization is more important to many employees than fulfillment of physiological needs. The reward system must be dynamic and attuned to the changing needs of the staff. Properly motivated employees create the learning environment s favorable to them and engage in learning.

Besides material rewards, the staff equally cares about *internal rewards.* Internal motivation for learning includes such forms of internal rewards: approval, reinforcement and encouragement. Positive reinforcement or encouragement stimulates the learner's activity, self-confidence and self-esteem, enhances the willingness to learn. Independently learning employees are characterized by independence when resolving to learn. Such learning employee is noted for personal motivating qualities: self-confidence, independent decision-making. The role of encouragement is associated with the manager as well as motivation. This shows that influencing elements are inter-related and it is not purposeful to ascribe them to a certain sole factor, *influencing* the employees' learning environment.

Self-motivation for learning is also important to the learning environment.

The learning of the company's employees must be related with *self-control* and *self-assessment when learning,* assessment of the learning process and object; self-assessment of one's abilities and skills. When doing this

regularly, positive impact is noticed on *motivation for learning.* The perspective of learning object application is relevant to the motivation for learning (e.g., learning of a foreign language can be useful when communicating with foreign partners and customers). A learning employee must assess his/her learning results continuously. When learning, it is necessary to set short- and long-term objectives and to justify the motives.

In a contemporary learning organization, the staff's motivation for learning is best promoted by the importance of the need, the variety of motives and significance in individual's personal life, the surrounding environment and learning opportunities (Dovydienė, 2004).

Exchanging the knowledge and reciprocal relationship between the manager and the staff are needed to ensure the functioning of a contemporary organization and favorable learning environment. As members of the organization interact, new ideas are initiated and spread, organizational values are thought over. *Cooperation of the staff* is indispensable and wanted; otherwise, the above-mentioned factors would not be as effective as expected (see Fig.1).

Many authors (Brown, 1988; Resnick, 1987) noted that cooperation is the essential feature of the learning process, seeing as learner constructs new meanings and understanding when sharing knowledge with others.

Employees' cooperation includes *communication, trust in sharing knowledge, team-work and learning.*

According to D. Lipinskienė (2007), *internal communication* refers to the exchange of information within the company. This process involves the employees on different levels and managers. Effective internal communication improves the work and learning environment for the organization's members and creates favorable micro-climate of the organization. Internal communication helps to ensure feedback. the flows of information within the organization between the management and employees are bilateral; the staff are informed about the management's objectives, plans, changes and visions (Lipinskienė, 2007). According to R. B. Adler and G. Rodman (1996), one of the functions of communication in the organization is learning (the ability to listen to and understand the colleagues). The staff must feel that open communication is promoted – openness to their ideas and suggestions, encouraging the creation of learning environments favorable to employees and striving towards common objectives of the organization.

Good atmosphere for communication, respect to other person's opinion, possibility to express freely one's opinion encourage the staff to feel good and treat this as a reward. The second element, influencing the learning environment when cooperating, was therefore distinguished – *trust in sharing knowledge.* As states D. Lipinskienė (2008), the trust of employees in one another when sharing knowledge is important for the creation of learning environments for employees that are significant for the improvement of organization's activities. In contemporary organizations, knowledge sharing is ensured by organizational culture that is favorable to learning and promotes constant improvement, while creating the environments that are conducive and supporting to learning.

The third element, affecting the learning environment of employees, when cooperating, is *teamwork and learning in team.* Teamwork implies that the organization's employees work together to learn from each other and to base upon common experience when considering their works. Learning in team creates new quality of interpersonal relationships, fosters the team responsibility and encourages assuming the obligations (Vasiliauskienė, Stanikūnienė, Lipinskienė, 2005). Due to this, organization's success is increasingly more often associated with teamwork and continuous improvement of the staff. Contemporary learning organizations can operate effectively and strive for the set targets only after building work-teams and creating learning environments for employees that are conducive to learning.

Contemporary business is predicated upon new knowledge and information technologies. Indirect factors were, therefore, distinguished, i.e., other sources of learning that influence the employees' learning environment, however, are not directly connected with the organization. Other sources of learning, influencing the learning environment, are the following: *educational institutions, seminars and courses, mass communication media and technologies, books, social activities, family, friends and leisure activities* (see Fig. 1).

The learning of the staff in the organization occurs in the employees' learning environment as well as in educational environment. The non-formal and informal learning process allows getting involved in the learning process and enhancing one's suitability for the labor market (individual level), increasing the human resources management potential (organizational level); it forms an opportunity to develop personal and professional abilities in different spheres of activities: science, work, home environment (social level).

It can be stated that employees are developed by educational institutions as well as government, society and the entire surroundings – family, mass communication media, public organizations, etc., functioning alongside the education system (Pundzienė, Dienys, 2003).

While realizing that to remain in the labor market they need new knowledge, the employees study, attend different courses and seminars at their own initiative or are sent to them by the companies' managers. The employees thus expand their horizon and create the learning environments, which correspond to the needs of contemporary learning employees.

Rapid development of the means of communication and information technologies allows organizing the learning process in new ways. *Mass communication media and technologies* represent, therefore, another element affecting the employees' learning environment. All this changes the conditions of learning, work, creating and leisure (Olberkytė, Zajančkovskaja, 2007). Learning by using new means and technologies of communication, therefore, enables receiving, conveying, accumulating and transmitting the information and knowledge regardless of time and space.

Self-education –acquiring the knowledge independently from *books,* when communicating with other people and observing different phenomena – has much influence over the development of employee as a personality (Fokienė, 2007).

Participation of the employee as a member of society in *social activities* (e.g., organization of international conferences) grants additional knowledge and skills, which might be eventually used at work.

Family's influence to learning is also significant. Personality shaped in the family acquires initial experience, learns the norms of behavior and develops an attitude to learning. Furthermore, the family members meet their friends, share their knowledge and experience. Hence, learning environment is being formed in the family and the experience of its creation is further applied in organization when creating the employees' learning environment.

Scientific literature analysis enabled presenting and substantiating the entirety of factors, influencing the employees' learning environment, however the manifestation of factors' influence is not always uniform, subject to the working environment. Sometimes the employees' learning environment can be more influenced by direct organizational factors, like manager, in other cases – employee's personal learning experience or self-motivation for learning. Hence, at different moments of working activities the employee may identify different learning environments, influenced by different factors, because the learning environment changes due to being affected by different factors.

Factors influencing the employees' learning environment that were distinguished and theoretically substantiated are presented in Figure 1. The proposed model might help to identify these factors in an organization.

Conclusions

• After analyzing the employees' learning conception in the context of learning organization, it can be stated that from the contemporary learning paradigm point of view the learning in an organization is an active model of knowledge construction, fusion of the increasing volume of knowledge, the entire learning process oriented towards professional improvement of employees and associated with the organizational context and environment. In a contemporary learning organization, the learning of employees denotes continuous searching for and testing of new ideas. In such an organization, the staffs have the opportunities to acquire new knowledge, whereas learning is appreciated and promoted.

• Scientific literature analysis revealed that employees' learning environment is the space where the learners, while interacting with the sources of information and employees possessing broader experience as well as solving problems with other members of the organization, acquires knowledge, abilities and values, and strives for the learning objectives constructively, willfully, deliberately, purposefully and reflectively.

• The learning of employees in an organization is predicated upon cooperation, team learning and assurance of good psychological conditions promoting learning. Such learning involves many qualities of self-directed learning, which emphasize the self-motivation of employees for learning, learning competence and personal potential.
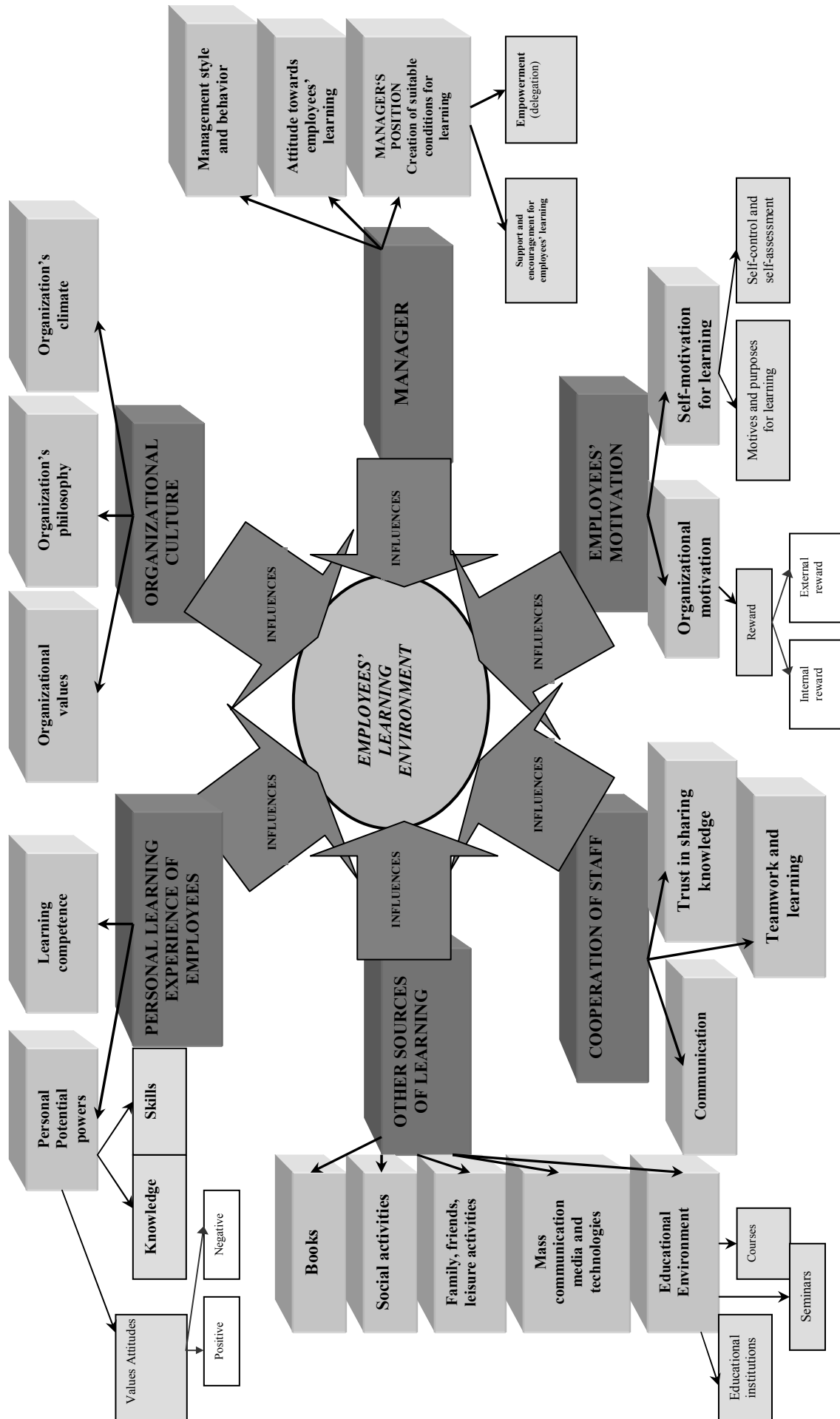
Figure 1. Factors influencing employees' learning environment

- Theoretical analysis allowed distinguishing the following factors affecting the employees' learning environment: *personal experience of employee, organizational culture, manager, organizational motivation and self-motivation for learning, cooperation of the staff and other sources of learning.*

The analysis of the distinguished factors influencing the employees' learning environment disclosed that there are direct factors, i.e., existing in employee's working activities and organization, and indirect factors – related with other roles of the employee in life, i.e., non-work activities. The employees' learning environment, while affected by different direct and indirect factors, may change subject to situation of the working activity.

References

1. Adler, R., B., Rodman, G. (1996). Understanding Human Communication. Oxford University Press.
2. Brown, A., (1988). Motivation to learn and understand: on taking charde of one's own learning. Cognition and Instruction.
3. Dall'Alba, G. (1991). Foreshadowing conceptions of teaching. Research and Development in Higher Education, 13, 293-297.
4. Dovydienė, J. (2004). Suaugusiųjų asmenų užsienio kalbų mokymosi motyvacijos ypatumai //Mokslo taikomieji tyrimai Lietuvos kolegijose, Nr.1, p. 21-27.
5. Fokienė, A. (2007). Neformaliojo ir savaiminio mokymosi pasiekimų vertinimas profesijos mokytojų rengime: poreikiai ir prielaidos Vocational Education: Research and Reality (14/2007).
6. Jucevičienė, P. (2007). Besimokantis miestas. Kaunas: Technologija, p. 407.
7. Jucevičienė, P. (1996). Organizacijos elgsena. Kaunas: Technologija, p. 284.
8. Jucevičienė, P., Tautkevičienė, G. (2004) Universiteto bibliotekos mokymosi aplinkos samprata. *Pedagogika : mokslo darbai.* 71, p. 101-105.
9. Jucevičienė P., Stanikūnienė B., (2003) The University Teacher's educational Competence in the Context of learning Paradigm // Socialiniai mokslai. P 24-29.
10. Kolb, D., A., Fry, R. (1975). Toward an applied theory of experiential learning. In C. Cooper (Ed.), Theories of group process . London. P. 27–36.
11. Lipinskienė, D. (2002). Edukacinė studentą įgalinanti studijuoti aplinka: daktaro disertacija: socialiniai mokslai: edukologija (07 S) Kauno technologijos universitetas. Kaunas. P. 12–14; 17–18.
12. Lipinskienė, D., Guloglu, T. (2007). Research on expectations of the employees in respect of reward for different inputs: case of Lithuania and Turkey // Changes in Social and Business Environment : proceedings of the 2nd international conference, November 8-9, 2007, Panevėžys, Lithuania . p. 144-150.
13. Lipinskienė, D. (2008) Motyvuojanti atlygio sistema. Kaunas: Technologija, p. 185.
14. Masalskis, V., Masalskienė, E. (2008). Vadovavimas, kuris keičia kitus: vadovas ir pasaulis. Psichologija , nr. 5, p. 33.
15. Meier, A., J. (2001). Bewertung von Kompetenz und Kompetenzentwicklung // Kompetenzentwicklung und Innovation. Munster, s. 437–491.
16. Olberkytė, L., Zajančkovskaja, A. (2007). Informacinės ir komunikacinės technologijos mokant geografijos Vilniaus profesinėse mokyklose. Geografija. T. 43. No. 2. P. 76–80.
17. Pedler, M., Burgoyne, J., Boydell, T. (1991). Self- Development in organizations London.
18. Pukevičiūtė, V., J. (2007). Mokymosi mokytis kompetencijos ugdymo aspektai. Acta pedagogika vilnensia nr. 19, p. 17-25.
19. Pundzienė, A., Dienys, V. (2003). Darbas ir mokymasis: darbo pasaulio ir švietimo sąveikos pobūdžio kaita. Profesinis rengimas: tyrimai ir realijos, Nr. 6.
20. Resnick, L. (1987). Education and learning to think Washington.
21. Senge, P. (1990). The Fifth Discipline: the Art and practive of the Learning Organization New York.
22. Simonaitienė, B., (2008) Suaugusiųjų neformalusis ir informalusis mokymasis: kompetencijos įvertinimas ir kvalifikacijos pripažinimas. Prieiga per internetą: <http://www.lssic.lt/alevel/pictures/Dokumentai/Nef_vert_pripaz_2008-01-10.doc>.
23. Stanikūnienė, B., Jucevičienė, P. (2007). The theoretical model of the potential learning environment of higher education teacher // Changes in Social and Business Environment : proceedings of the 2nd international conference, November 8-9, 2007, Panevėžys, Lithuania. P. 260-265.
24. Sugerman, L. (1986) Life-span development. Concepts, theories and interventions. London&New York.
25. Šulcienė, I. (2005) Šių dienų iššūkis – vertybės. // Vadovo pasaulis., nr. 12.
26. Vasiliauskienė, L., Stanikūnienė, B., Lipinskienė, D. (2005). The Employees' Competence Development inside Organization: Managerial Solutions Engineering economics. No 5 (45).
27. Veličkaitė, K., Lipinskienė, D. (2007) Organizacinis mokymasis ir besimokanti organizacija: sampratų analizė. Mūsų socialinis kapitalas – žinios. Kaunas, p. 120-125.
28. Wilson, B., G. (1995) Metaphors for instruction: Why we talk about learning environments. Educational Technology, no. 35 (5), p.25-30.

Asta Oficerovienė, Kuldar Kiil

Darbuotojų mokymosi aplinką įtakojančių veiksnių teorinis pagrindimas

Santrauka

Straipsnyje nagrinėjami darbuotojų mokymosi aplinka ir ją įtakojantys veiksniai. Darbuotojų mokymasis šiuolaikinėje organizacijoje didina konkurencingumą ir stiprina ekonomines pozicijas. Siekiant darbuotojams organizacijoje sudaryti palankią mokymosi aplinką, iškyla būtinybė identifikuoti darbuotojų mokymosi aplinką įtakojančius veiksnius. Didžioji dalis mokslinių tyrimų yra skirti mokymosi aplinkoms analizuoti tiek teoriniu, tiek praktiniu lygmeniu. Šis straipsnis analizuoja tas mokymosi aplinkas, kurias identifikuoja darbuotojas. Straipsnyje siekiama teoriškai pagrįsti *kokie veiksniai įtakoja darbuotojų mokymosi aplinką, identifikuojamą organizacijoje.*

About the authors

Asta Oficerovienė, master degree, assistant, Kaunas University of Technology, Panevezys Institute, Faculty of Management and Administration, Departament of Economics, e-mail: asta.oficeroviene@ktu.lt, phone: +37045576253.
Kuldar Kiil, Managing director, SAIMA BEVERAGES OY LTD, PL226, VALTAKATU 2, 53101 LAPPEENRANTA, Finland, e-mail: kuldar@saimaabeverages.fi, phone: +3725149598.

GenME AND MOBBING

Umut Omay, E. Gültüvin Gür
İstanbul University, Turkey

Abstract

The purpose of this paper is to show the relationship between the emerging mobbing claims and the new generation which is called GenMe. Raising children oversupervised and trying to build up self-esteem cause most of the problem. The main problem with this generation has shown itself as they have begun to entered into the workforce. By entering to the workforce, that generation faced with many problems, because the realities of the workplaces and working life cause disappointments for that generation. So what the working life and the work places have today are the disappointed new comers and the most popular explanation of the new comers' being disappointed is mobbing.

Introduction

There is a common consensus that there have been different types of generations which have different types of characteristics since the World War II. The first generation is called Boomers, the second is called Generation X and the third generation is called Generation Me (or Y or Millenium).
The debates over the Generation Me and the studies are very hot and popular nowadays. Because, that generation has just entered to the workforce, bringing new problems with them. Another hot and popular subject about workforce is mobbing which refers to the emotional abuse in the workplaces. This paper is focused on both Generation Me and Mobbing according to a theoretical framework to find out the possible reasons of the problems.

The GenMe

There is a common belief that the population can be divided into demographical sub-categories depending on the birth dates. For, instance, Marston argues that the generations of the 20th century can be divided into 4 stages which are Matures (born between 1920-1945), Baby Boomers (born between 1946-1965), Gen Xers (born between 1965-1979) and Millenials (born between 1980-2000) (Marston, 2007:3). Just after the World War II, the population increased suddenly and unexpectedly. That period is know as the Baby Boom period so in the social sciences that generation is called as the Boomers. The boomers were followed by GenXers who were born in 1965-1979 period. But there is an argument about the last generation or the generations born after Genereration X. Some authors call the last generation as Generation Y, while some others call it as Generation Me or iGeneration or the Millenials etc. In this paper, we prefer to use the term Generation Me (simply GenMe) because the last generation is much appropriate to the definition given by Twenge who has offered the term. In her book, "Generation Me: Why Today's Young Americans Are More Confident, Assertive, Entitled--and More Miserable Than Ever Before", Twenge argues the formation of a new generation, Generartion Me. According to Twenge

that the GenMe generation is the combination of the people born in the 1970s, 1980s, and 1990s and "all evidence suggests that narcissism is much more common in recent generations" (Trzesniewski et al., 2008: 181), and also "what is most important to this generation are the choices of the individual, leading to a generation of individuals whose attitudes are summed by the statement, "As long as I believe in myself, I really do not care what others think.""(Eubanks, 2006: 1). The main characteristics of GenMe can be summarized according to Twenge's book such as,

- "Compared to Boomers … GenMe is twice as likely to agree with the statement *There is no single right way to live*".
1. "Unlike the Baby Boomers who learned these new standarts as adults, GenMe takes these attitudes for granted and always has."
2. "Feeling good about yourself is more important than good performance."
3. "Overly focused on themselves and lack emphaty for others."
4. "You must love yourself before you can love others." (Eubanks, 2006: 1).

According to Zaslow the taught motto of the recent generation is "You, You, You – you really are special, you are! You've got everything going for you. You're attractive, witty, brilliant." (Zaslow, 2007) As indicated by Twenge, the most common characteristic of GenMe is narcissism though there are many critisims[1].
As growing up, and going into work it seems that GenMe causes many problems in the workplaces. For instance, Marston calls the stiuation as "Peter Pan in the Workforce" (Marston, 2007: 1). Tulgan gives a few striking examples such as (Tulgan, 2009: 1-2),

> "They keep telling me, "Here's what you get in five years, ten years, twenty years . . ." But they expect me to come back to work tomorrow. What do I get tomorrow?"

> "Not long ago, the president of a health care consulting firm told me he had just interviewed a twenty-five-year-old man for a job in his firm. The

---

[1] For a detailed survey, see Trzesniewski et al., 2008.

young candidate came to the interview armed with a number of ordinary questions about job duties, salary, and, benefits. When these questions were answered, he made a request: "You should know that surfing is really important to me and there might be days when the surf's really up. Would you mind if I came in a little later on those days?"

> "Another experienced manager, this one in a retail organization,told me an even more striking story. This manager was trying to correct a young associate who had just spoken rudely to a customer. The young man turned to his boss and said, "You know what? I'm thinking about buying this place. And the way you are going, youare going to be the first one out of here!"

As seen in the given examples, the GenMers are too lenient with their self-esteem and also they have a belief of their being special and unique persons needed to be praised.

The formation of GenMe is mostly related with the increasing of the technology because, "they are the first generation to use e-mail, instant messaging (IM) and cell phones since childhood and adolescence." (Tyler, 2007). So, the formation of GenMe can be associated with the formation of the information society which should be considered as a manipulated society. And that manipulation, causes many psychological and sociological problems. In this paper, we focus on a recent problem, called mobbing. Because as seen in the given examples, the new generation in the workforce brings new problems with them. And also the complaints about mobbing have arosen in the recent years. That is the main hyphotesis of our work. We assume that there is a relationship between the arising of mobbing claims and increasing number of the GenMers in the workforce. We do not deny the fact of mobbing but we assume that most of the claims may be the result of the characteristics of the GenMers.

Mobbing

Mobbing has been an emerging subject among the Human Resource management and Organizational Behaviour fields. Thus, there have been lots of studies and surveys on the subject. But, a common belief on mobbing has been, it is the subject of pscyological approach. In other words, mobbing has been a subject of research only in the psychological perspective. As it is the result of a group of persons behaviour, mobbing should also be the subject of sociological approach.

Mobbing is a common word to highlight the malicious behaviour against a person in a group. Human Resouces Management and Organizational Behaviour fields have taken interest mostly on mobbing which is defined as "workplace mobbing". Davenport defines the term as "a malicious attempt to force a person out of the workplace through unjustified accusations, humiliation, general harassment, emotional abuse, and / or terror." (Yücetürk and Öke, 2005: 61). According to Leymann, mobbing can be defined such as follows:

> "Psychical terror or mobbing in working life means hostile and unethical communication which is directed in a systematic way by one or

a number of persons mainly toward one individual. There are also cases where such mobbing is mutual until one of the participants becomes the underdog. These actions take place often (almost every day) and over a long period (at least for six months) and, because of this frequency and duration, result in considerable psychic, psychosomatic and social misery. This definition eliminates temporary conflicts and focuses on the transition zone where the psychosocial situation starts to result in psychiatric and/or psychosomatic pathological states." (Leymann, 1990: 120).

Literally, "mobbing has been considered a severe social stressor (Zapf, 1999), a traumatic vital event (Wilson, 1991), a silent epidemic that causes job dissatisfaction, psychological distress, and psychosomatic and physical problems." (De Pedro et al., 2008: 220). Being a popular subject, mobbing, just as GenMe, has not been the sole term in use: for example "incivility (Andersson &Pearson, 1999), … , bullying (Einarsen&Skogstad, 1996; Namie&Namie, 2000), … harassment (Björkvistet al., 1994); …emotional abuse (Keashly, 1998), … deviance (Robinson & Bennett, 1995), and victimization (Swedish National Board of Occupational Safety and Health, 1993)" (Blase and Blase, 2002: 674). The reason of being defined in many terms, is just about the assumes about its content[1].

According to a more common consensus mobbing is a psychological and emotional fact. According to Rayner et al., mobbing process is considered to have four types/stages. Those can be a unique level as well as stage followed each other starting from psychological pressure. On the psychological pressure level, target (victim) feels a little bit pressured. But if the psychological pressure turns into psychological harassment level, target (victim) feels the pressure much more evidently. The third level is called emotional abuse in which target (victim) feels damage and in the last level mobbing is fully forced to the target (victim) (Rayner et al., 2002: 10). According to Leymann, mobbing should be considered as a manipulation process which is about:

> "1. The victim's reputation (rumor mongering, slandering, holding up to ridicule).
> 2. Communication toward the victim (the victim is not allowed to express him/herself, no one is speaking to him or her, continual loud-voiced criticism and meaningful glances).
> 3. The social circumstances (the victim is isolated, sent to coventry).
> 4. The nature of or the possibility of performing in his/her work (no work given, humiliating or meaningless work tasks).
> 5. Violence and threats of violence."(Leymann, 1990: 121)

The target can be victimized by verbal or written threats, implications, gossip, harassment, humiliation and so on. The target's dignity and proffessional competence is

---

[1] As indicated in a research report by Ontario Public Service Employees Union, mobbing could be worse than bullying (OPSEU, 2007: 3). In this paper, mobbing is held as to define all of the term given above.

under assault therefore the target's communication with his/her friends is encumbered and given a new work place. S/He has also limited duties. When s/he reacts, s/he is accused of being the hard one. Finally, the target can suffer from psychological diseases and is forced to quit the job. But s/he has chosen to quit the job of his/her own choice the others would say. Bullies mostly, hypocrite, jealous people who are seeking to humiliate others to mask their incompetency and fear. By making fun of the target, they try to overcome their incompetency (Ok, 2008).

Another important point is about the background of mobbing. The mobbing process has a complex structure which is affected basically by the "cultural and socio-economical factors" (Einarsen et al., 2003: 23). This is an important point for the said factors' effecting the mobbing process as a whole. Thus, it is evident that mobbing can be assumed as a socio-cultural and economic result. But the great question still remains unanswered: What causes mobbing? There should be doubts that mobbing should not be considered as a sole subject of psychology but also it should be considered as a subject of sociology. In this case, we assume that studying on GenMers will be a good example for the need of sociological approach on mobbing.

GenMe and Mobbing: a theoretical framework

The reason of the problem: oversupervised and manipulated generation

GenMe is known to be most oversupervised generation. All is designed to feel themselves special and to build up their self-esteem. And as a result of that process for that generation difference is something cool (Tulgan, 2009: 7-8) and their personality depands on being special and different. In order to achieve this purpose, they simply become lenient "to customize their very minds, bodies and spirits" (Tulgan, 2009: 9).

The reason of that huge difference is the information society itself. The information is used to manipulate the social order and social relations. The very acme of that process may be defined as the changing family structure in the developed societies. According to Rideout, "almost every moment of the day in some families is tied to media … It's a huge part of families' lives" (Kornblum, 2006). In a recent study, supported by Kaiser Family Foundation, it was shown that the children were threated by TV because most of the parents use TV as an electronic babysitter (Kornblum, 2006). Preffering TV as a babysitter may be defined as the result of new family structure which is about both parents' working (Jacobson, 2008: 21). But the experts are warning about the effects of TV. For instance, in the study a mother explained the stiuation as "it's really kind of frightening when I sit him down and turn it on. It's like he's transfixed. It's like he gets sucked into the TV."(Kornblum, 2006).

As seen in the study, children become an open target for the uncontrolled information and advertisement attacks and the starting stage of the making of manipulated individuals. The purpose of the manipulation is related with making individuals consumers. As Cross noted, "changes within modern families have also helped to give advertisers the upper hand. Parents have more difficulty monitoring and enforcing restrictions on children's media consumption, especially during after-school hours, because… today both parents work outside the home… Overworked parents who worry about not spending more time with their children sometimes ease that guilt by give into children's consumer demands." (Jacobson, 2008: 21). So, it should not be surprising that the last generation raise as highly self-esteem, individualistic and narcistic individuals. As noted by Tulgan, that generation has made to believe difference is something cool and their their personality depends on being special and different. (Tulgan, 2009: 7-9). Because, the only culture and information all they learn is whatever is given by mass media which depends on advertisements.[1]

Another important point which doubles the problem is about the parents. According to Marston, "for many reasons, explained in dozen of other books, the parents of the [GenMe] – mostly Boomers – became obsessed with their children." (Marston, 2007: 96). Some autors name that situation as "helicopter parenting". For instance, Kathryn Tyler of HR Magazine calls the GenMe as "The Tethered Generation." And argues that "Especially as millennials born since 1985 begin to show up in the workforce, HR professionals and psychologists are just beginning to o see what effect the constant "tethering" to technology has had on the way millennials work, communicate, make decisions and interact. That effect, along with a tethered relationship to their peers and parents—sometimes to the extent that they have been deemed "helicopter parents"—presents challenges for HR professionals integrating millennials into the workplace. (Tyler, 2007). It seems that the last generation is being manipulated also by their own parents. Because, on building up personalities depending on self-esteem, parents don't let their children to make any mistakes and that makes the problem more problematic. As Grafman noted, "if children are not allowed to make small errors, they don't learn through experience." (Tyler, 2007). Oversupervising and overcontrolling of the parents can be seen clearly through the examples given by Epstein, a visiting scholar at the University of California in San Diego:

> "In class, I announced I expect hard work and sacrifice from my students and any professor who said less than that was cheating his students. This young woman's father—a California Superior Court judge—sent a letter to the chair of my department saying his daughter was intimidated by my warning. His letter arrived on judicial stationery… Parental involvement in the lives of their offspring seems to be increasing every year. I've seen parents come to campus protesting a low grade. When I caught one student cheating on a paper, his mom

---

[1] Also it should be noted that TV is not the sole tool used to manipulate individuals. Also, internet is used effectively as an manipulation tool. Surfing through the web pages which mostly contain uncontrolled information and full of advertisements is another manipulation tool to manipulate GenMe.

called and demanded I let him write a new paper" (Tyler, 2007).

In short, the GenMe seems to be the most supervised generation that has never been before. Unfortunately, the implicit or explicit manipulation of the information society caused a generation which lacks self-control and has unrealistic expectations about the real world. A single challange may errode their gold-plated personalities.

A useful tool to analyze the problem: Parsons' methodology

According to Parsons' sociology it is possible to claim that mobbing should be taken into consideration as to be deficit among the generations in the workplace and as well as the workforce. Parsons was famous mostly with his two major works which were "The Structure of Social Action" and "The Social System".
Parsons derived system theory from sibernetics which is a study field of biology (Edgar, 2006: 156). Parsons especially deeply affected from Durkheim's and Weber's cultural sociology thesis and emphasized the importance of systematical theorizing. (Slattery, 2007: 375-376).
Parsons' remarkable works were on defining and explaining "action" as well as defining and explaining "social system". According to Parsons, action should not be understood as an isolated subject, but "as a process in time, or as a system."(Applerouth and Edles, 2008: 351). "...more generally, he saw social action composed of four basic elements that distinguish it from isolated, individual behavior:

> "1. it is oriented toward attainment of ends and goals,
> 2. it takes place in situations, consisting the physical and social objects to which the actor relates,
> 3. it is normatively regulated (i.e., regulated by norms that guide the orientation of action),
> 4. it involves expenditure of effort or energy" (Applerouth and Edles, 2008: 352)

Another important point is, Parsons' differentiation of symbols from norms. He argued that symbols were the attribute meaning to situations given by the actors[1] while norms were the rules for behavior.(Applerouth and Edles, 2008: 352) By doing so, Parsons aimed to highlight the internal and external variables of the action.
According to Parsons the core of the system depends on interaction between people. But the most important units in a society are roles (Smith, 2005: 45-46). The contents

of the roles are controversial. Because Parsons explains the roles with expectation hypothesis (Smith, 2005: 46).
Parsons purpose was to explain and to understand the relationship between the social structures and social organizations. He argued that social structures condition the social actions. Therefore, Parsons argued that in different socially structured societies one can experience different patterns of behavior. He termed them pattern variables because they are patterns of general values and they vary from one society to another acccording to the complexity of the institutional relationships in the society. (http://www.sociology.org.uk)
Parsons argues that there are four "functional imperatives" needed to be handled by the social system, or group or individual to survive (Appelrouth and Edles, 2008: 360). Those are defined by Parsons as, Adaptation, Goal attainment, Integration, Latency. Simply those are known as "AGIL" or "GAIL" system which are the main subsystems[2] of the social system. (Turner, 1991: xviii). We can explain the AGIL model such as follows (Slattery, 2007: 376; Smith, 2005: 48-49; Edgar, 2006: 156):
(A) stands for Adaptation which is about providing the basic needs and Parsons attaches importance to economy in this respect.
(G) stands for Goal attainment which is about making decisions and leadership,
 (I) stands for integration which is about avoiding conflicts and disintegration in the society.
(L) stands for Latency which is latent pattern maintenence and tension management. The members in the society are continually changing by deaths and births. So, latency is about how the society survives. That is how individuals are adapted to their social roles. In order to achieve this, socialization and solidarity are necessary. Latency corresponds to the cultural sub-system. Therefore; culture should be accepted as another system.

GenMe and Mobbing: a hypothetical explanation

We underwent this subject (GenMe and Mobbing) because what has been said of mobbing remains somewhat missing due to the lack of the sociological perspective. In modern societies people enter into different kinds of relationships everyday for their sole interests. And working life is such a social system. Being manipulated by the economic system and so the information society, the so-called GenMe is a good example to understand the Mobbing process and it is possible to claim that most of the current Mobbing claims should be considered as the conflicts between the generations.[3]
Due to a more common idea, young people are more subjected to mobbing. For example, Einarsen and Rankes (1997), Hoel and Cooper (2000) and Quine (1999) paralelly discovered that employees at young ages were

---

[1] Parsons attaches importance to role which comprises the expectancies from the person. The most known example is the "sick role". "These relationships are socially structured in a uniform way for a group of individuals, it does not follow that the ways in which these uniform "roles" are structured are constitutive of each of the different personalities in the same way. Each is integrated into a different personality system, and therefore does not in a precise sense "mean the same thing" to any two of them. The relation of personality to a uniform role structure is one of interdependence and interpenetration but not one of "inclusion" where the properties of the personality system are constituted by the roles of which it is allegedly "made up." (Parsons, 1991: 10).

[2] Parsons tried to lessen the relations among the social system and sub-system to the last smallest units which are also systems at their own (Edgar, 2006: 156).
[3] It should be noted that Mobbing is a fact but we are really very suspicious about most of the current mobbing claims being really the result of mobbing.

at more risk of being a victim.[1] According to a recent study (see Kaymakçı, 2008: 607), the victims, in Turkey, are mostly (59,1 %) 25 or younger than 25 years old. It is not suprising that in Turkey, there is a common notion that young people are rather considered as immature and naive by their elders or superiors. As Rayner states, it is just the function of position (Rayner et al., 2002 : 69 – 70). The position gives the elder (mostly a Boomer or GenXer) the right to bully the young and the immature. In short, these positions are conferred by the society creating a superior/inferior relationship between people. Therefore, the relationship is linked with Parsons social action (role). At that point, the generation gap may obtain a good example, as Parsons " … describes the generation gap typical of contemporary American society as a time in which teenagers' need-dispositions are out of sync with the values of their family as well as wider society. As such, there is a conflict (or gap) between the personality needs of the teenager (e.g. To stay out late, wear "weird" clothes) and the prevailing *cultural* values and norms (e.g. to respect authority, aspire toward educational and occupational success) as teenagers adopt identities, system of meanings, and social roles that contradict the expectation of parents and teachers." (Appelrouth and Edles, 2008: 355). So it is possible to argue that most of the mobbing claims may have been the result of the GenMers having much of self-esteem and being too lenient with themselves and their personal needs (i.e. as indicated above a young man asked for permission for being late to work because of surfing); any mismatch with their self-esteem and personal needs may be called as mobbing. Another point is, most of the mobbing claims may have been the result of the conflict among the roles. It may be assumed that the younger generation (GenMe) expects the same helicopter parenting while the older generation (Boomer or Xer) focus only on work related result. As it is in the example given by Tulgan (Tulgan, 2009: 2):

> "An experienced nurse-manager in a busy hospital told me she stopped a new young nurse from administering the wrong medicine by intravenous drip to a patient. The manager pulled the young nurse aside and explained emphatically how serious a mistake she almost made. "I explained that this is how patients die unnecessarily. I told her, 'You need to check the wrist bracelet, then the patient's chart, then the charge list, then the IV bag. Then you need to check them all again.'" Before she was finished, the young nurse interrupted her. "Actually, you are doing this conversation wrong," she told her boss. "You are supposed to give me some positive feedback before you criticize my work." What did the manager respond? "Okay. Nice shoes. Now, about that IV bag . . ."

[1] Contrastly to these findings, it was reported at Einarsen and Skogstad's (1996) study that older employees were exposed to [...] bullying more that the younger employees." (Gülen, 2008: 156) Again, in an other study the victims were found older than 35 years of age (Palaz et al., 2008: 52) and in an other it argued that the victims are under 25 and above 55 years of age (See Di Pasquale, 2002).

It will not be weird to say that generation gap arises from the need to be taken seriously. It is a way of saying that the teeneger is an individual with his/her beliefs, opinions and ideas. The prevailing cultural norms and values leaves the teenager in a peculiar disposition where s/he has to act acccording to the rules of the others. As noted above the taught motto of the recent generation is "You, You, You – you really are special, you are! You've got everything going for you. You're attractive, witty, brilliant." (Zaslow, 2007) The new comer to the workplace (and also the workforce) has many unrealistic expectations while s/he has to conform the rules and the norms of the workplace and prove that s/he is apt for the job so s/he has to be subdued to the existing system. So, the target (the so – called victim) calls this process as harrasment, bullying, abuse etc.

According to Parsons' sociology, that can be called as an complimentary piece of the social system because "there are such close relations between the processes of socialization and of social control that we may take certain features of the processes of socialization as a point of reference for developing a framework for the analysis of the processes of control. The preventive or forestalling aspects of social control consist in a sense of processes which teach the actor not to embark on processes of deviance. They consist in his learning how not to rather than how to in the positive sense of socialization. The re-equilibrating aspects on the other hand are a special case of the learning process in that they involve the unlearning of the alienative elements of the motivational structure." (Parsons, 1991: 201). Because, "system equilibrium ensues when the needs of the personality mesh with the resources available in the social system and cultural values and norms." (Appelrouth and Edles, 2008: 354) Hence, most of the mobbing claims may be related with the normalization process of the deviant person (in this case GenMers) into the social system.

Conclusions

Changing the social relations and social order, new generations appeared in the last decades of the 20th century. The last generation is GenMe. That generation has all the characteristics demanded by the information society and also the economic system depended on consumption. as being self-oriented, having much of self-esteem and the belief of being unique and very special. By entering to the workforce, that generation faced with many problems. Because the realities of the workplaces and working life cause disappointments. So what the working life and the work places have today are the disappointed new workforce. The most popular claim of the new comers, so the GenMers, is mobbing. Mobbing is a fact, but it should also be noted that all the mobbing claims cannot be considered as fact. We argue that most of the mobbing claims should be considered as the result of the mismatch and disappointment of GenMers in the workplaces because of their having high expectations.

References

1.   Appelrouth, Scott ; Edles, Laura Desfor (2008), Classical and Contemporary Sociological Theory, Pine Forge Press, California.

2.   Aytun, C. (2005), "Enformasyon Toplumu ve Türkiye", Akademik Bilişim Konferansı, 02-04 Şubat 2005, (http://ab.org.tr/ab05/tammetin/101.doc).

3.   Blase, Joseph; Blase, Jo (2002), "The Dark Side of Leadership: Teacher Perspectives of Principal Mistreatment", Educational Administration Quarterly, Vol. 38, No. 5, December 2002, pp. 671-727.

4.   De Pedro, Mariano Mesaguer; Sanchez, Maria Isabel Soler; Navarro, Maria Concepcion Saez, Izquierdo, Mariano Garcia (2008), "Workplace Mobbing and Effects on Workers' Health", The Spanish Journal of Psychology, Vol. 11, No. 1, pp. 219-227.

5.   Di Pasquale, Verena (2002), Study Examines "Mobbing" at the Workplace, (http://www.eurofound.europa.eu/eiro/2002/08/feature/de0208203f.htm

6.   Edgar, Andrew (2006), "Functionalism", Cultural Theory: The Key Concepts, (Ed.: Andrew Edgar ve Peter Sedgwick), Routledge, Oxon.

7.   Einarsen, Stale; Hoel, Helge; Zapf, Dieter; Cooper, Cary (2003), The concept of bullying at work: The European Tradition, Bullying and Emotional Abuse in the Workplace International Perspectives in Research and Practice, Taylor & Francis, London, pp. 3 – 30.

8.   Eubanks, Steve (2006), Generation Me – Executive Summary, (http://www.eubie.com/genme.pdf).

9.   Gates, Bill (2008), Making Capitalism More Creative, (http://www.time.com/time/business/article/0,8599,1828069,00.html).

10.   Jacobson, Lisa (2008), Advertising, Mass Merchandising, and the Creation of Children's Consumer Culture, Children and Consumer Culture in American Society, Praeger Publishers, Westport, pp. 3-26.

11.   Kaymakçı, Hülya Aksakal (2008), "Sakarya İmalat Sektörünün Görünmeyen Yüzü: Mobbing", 1. Ulusal Çalışma İlişkileri Kongresi, Bildiriler Kitabı, Sakarya Yayıncılık, Adapazarı, pp. 593 – 618.

12.   Kornblum, Janet (2006), More Parents Use TV as an Electronic Babysitter, (http://www.usatoday.com/tech/news/2006-05-24-kids-media_x.htm).

13.   Leyman, Heinz (1990), "Mobbing and Psychological Terror at Workplaces", Violence and Victims, Vol. 5, No. 2, pp. 119 – 126.

14.   Marston, Cam (2007), Motivating the "What's in It for Me?"Workforce, John Wiley & Sons, Inc., New Jersey.

15.   Nair, Güney (2001), "Bilgi'nin Değişen Anlamı ve Kavram Tartışmaları", Cumhuriyet Üniversitesi İktisadi İdari Bilimler Fakültesi Dergisi, 2/1.

16.   Ok, Ülgen Zeki; İşyerinde Baskı, Taciz ve Yıldırma (Mobbing), (hhtp://www.mobbingturkiye.net).

17.   OPSEU (2007); "Bullying and Mobbing in the Workplace", Research Paper, June 22, 2007.

18.   Palaz, Serap; Özkan, Sultan; Sarı, Necla; Göze, Fehim; Şahin, Nurdan; Akkurt, Ömrüye (2008), "İş Yerinde Psikolojik Taciz (Mobbing) Davranışları Üzerinde Bir Araştırma; Bandırma Örneği", The Journal of Industrial Relations and Human Resources, Vol: 10, No: 4, September 2008, pp. 41-58.

19.   Parsons, Talcott (1991), The Social System: With a New Preface by Bryne S. Turner, Routlegde, London.

20.   Pattern Variables, (http://www.sociology.org.uk/pathway1.htm?p1pmp5a.htm).

21.   Rayner, Charlotte; Hoel, Helge; Cooper, Cary L. (2002), Workplace Bullying: What we know, who is to blame, and what can we do?, Taylor & Francis, London.

22.   Rigel, Nurdoğan (2000), Rüya Körleşmesi, Der Yayınları, İstanbul.

23.   Shallcross, Linda; Sheehan, Michael; Ramsay, Sherly (2008), "Workplace Mobbing: Experiences in the Public Sector", International Journal of Organisational Behaviour, Vol. 13, No. 2, 2008, pp. 56 – 70.

24.   Slattery, Martin (2007), Sosyolojide Temel Fikirler, Ed., Çev.: Ümit Tatlıcan, Gülhan Demiriz, Sentez Yayıncılık, İstanbul.

25.   Smith, Philip (2005), Kültürel Kuram, (Çeviren: Selime Güzelsarı; İbrahim Gündoğdu), Babil Yayınları, İstanbul, 2005.

26.   Trzesniewski, Kali H.; Donnellan, M. Brent; Robins, Richard W. (2008), "Do Today's Young People Really Think They Are So Extraordinary?", Psychological Science, Vol.19, No.2, pp. 181-188.

27.   Tulgan, Bruce (2009), Not Everyone Gets a Trophy, Jossey Bass, San Francisco.

28.   Tyler, Kathryn (2007), "The Tethered Generation", HR Magazine, Vol. 52, No. 5, May 2007.

29.   Yücetürk, E. Elif ; Öke, M. Kemal (2005), "Mobbing and bullying: legal aspects related to workplace bullying in Turkey", South-East Eurpe Review, 2005/2, pp. 61-70.

30.   Zaslow, Jefrey (2007), The Most-Praised Generation Goes to Work, (http://predictivehiring.com/pdf_files/TheMostPraised.pdf)

Umut Omay, E. Gültüvin Gür

GenMe and Mobbing

Summary

By changing the social relations and social order, new generations appeared in the last decades of the 20th century. The last generation is GenMe. That generation has all the characteristics, such as belief of being unique and special, having much of self-esteem and being much of self-oriented, demanded by the information society and also the new economy. So the social order and social relations needed to be redefined and also the characteristics of the new workforce should be taken into consideration on HR related issues. One of the emerging issues among the Organizational Behavior and HR studies is Mobbing. Mobbing is simply defined as the emonitional abuse in the workplaces and it is fact. But, a common belief on mobbing has been, it is the subject of psycological approach. There should be doubts that mobbing should not be considered as a sole subject of psychology but also it should be considered as a subject of sociology. In this case, we assume that studying on GenMers will be a good example for the need of sociological approach on mobbing. As indicated in the first part of the study, the last generation in the current workforce is raised to care much of themselves and to believe their being unique special persons. So, most of the mobbing claims can be viewed as the complaints of so-called mobbing victims' (mostly GenMers) experiencing conflict and re-equilibrium process in the workplaces. Thus, mobbing claims should be carefully studied.

About the authors

Umut Omay, dr., Istanbul University, Faculty of Economics. E-mail: umutomay@hotmail.com; umutomay@istanbul.edu.tr. Tel: +90 212 440 00 00 / 11489. Interests: Industrial relations, HRM, Labour Relations, Organizational Behavior, Cultural Studies, Sociology.

E. Gültüvin Gür, İstanbul University, Faculty of Communications. E-mail: gultuving@hotmail.com. Interests: Journalism, Communications, English Literature, Cultural Studies, Sociology.

TEXTS AND IFORMATIONAL SOURCES USED FOR STUDIES

Regina Padaigienė, Alina Dėmenienė, Ojaras Purvinis

Kaunas University of Technology, Lithuania

Abstract

The article analyzes training tools and info sources used by students during the studies and library (university or public) services. It also deals about means of learning, such as: reading textbooks, lecturer's notes, the use of electronic textbooks, dictionaries, encyclopedias, teaching materials in Internet and databases. The survey for two-faculty students was carried out by the authors in order to investigate these issues. The obtained questionnaire responses have been processed by descriptive statistical methods and ART (Adaptive Resonance Theory) algorithm was also applied for clustering.

Keywords
Clusters, prototypes, electronic sources of informatikon.

Introduction

The knowledge and informational literacy (the ability to find, to select, to evaluate and creatively use) become more important in the informational society. The knowledge and skills of information search and its management, i.e. the possibility to manage information and to understand the particularity of information (background of the sources, storage of information by various means and in various format, etc) according to Markauskaitė (1999) becomes very important.

There is no single definition for informational literacy. Great contribution in this area belongs to the American Library Association (ALA) and the International Federation of Library Association (IFLA). According to Byerly, Brodie, (1999) the information users must know the information collection strategy, have critical thinking skills for selection, rejection and combination of the information, know how to present it in the new form solving real life problems. The concept of information literacy according to information literacy guidelines (Guidelines, 2006) is given in Figure 1.
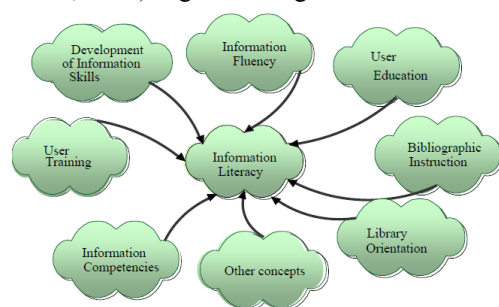

Figure 1. Information literacy concept

Recently, the origin of electronic teaching aids and electronic information sources (Internet, compact disks, etc.) made a great change in traditional learning means (textbooks, magazines, publications, etc.). Libraries and their staff play an important role there. In order to convey the information modern information technologies should be used. This requires the ability to manage information and should not focus just on teaching and learning to use a computer. J. Herring believes that information skills should be considered as thinking skills during the analysis of many inter-related information needed to be understand as an integrated whole (Herring,

1998). The training of information skills has transformed from instructive (to convey the information) model to constructive learning, which aims at understanding the conception of the learned matter.

It is difficult to overestimate the role of academic libraries in studies and information literacy. So these libraries must meet the demands, needs and learning habits of the readers. And vice versa, good possibilities of libraries improve the information literacy skills. So it is important to find out the demands of readers, particularly of students, what resources do they use in their studies. This should reveal the future directions for improving the library performance.

The **subject of this research** is the students of the various courses at KTU Panevezys Institute (campus), Technology, and Management and Administration faculties.

The **purpose of the research** was to determine learning appliances and information sources that are used by the students. The results of such a study would enable to find out demand for information sources and to make decisions on supply of information sources at KTU Panevezys campus faculties.

The **research methods** are the following: students' statistical analysis of survey, monitoring of the training process, summary of the interviews with the library employees. Students' survey was organized in January and February of 2009.

Full-time and part-time students at KTU Panevezys campus were questioned by the authors in order to find out what learning appliances are mostly used in studies.

160 questionnaires were distributed to the students of two faculties of different degree programs and of different courses (Technology and Management and Business Administration); 145 of them were received back.

The questionnaire contained following questions.

1. Do you use Internet to prepare for studies at the university or public library?
2. How often do you use printed educational materials (textbooks, lecturers' notes) for studies?
3. How often do you use educational material from Internet sources (educational materials, electronic textbooks, lecturers' notes, electronic libraries)?

4. Where do you obtain educational materials (at the public library, at the university library)?
5. How often do you use online databases (scientific articles, researches, abstracts)?
6. Point out the years of publication of the most often used textbooks (the last five years, more than five years ago, more than ten years ago, more than fifteen years ago)?

The first two questions were submitted with two possible answers, and they were coded as follows: Yes - 1, no - 4, third, fourth and fifth questions: permanently - 1, often - 2, seldom - 3, never - 4.

ART algorithm

One can find groups with common features no matter each student have individual learning habits. These common features are called the prototype of such group (cluster). ART algorithm was applied in order to find respondent clusters and prototypes in this study.

ART (Adaptive Resonance Theory) algorithm was suggested and published by G.A. Carpenter and S. Grossberg in 1987 (Carpenter and Grossberg, 1987). Its first version, named ART1, was devoted to the binary vector clusterization and was applied in artificial neural networks. The second version ART2 also enabled to clusterize vectors with coordinates expressed by real numbers. Both algorithms build a certain number of vector-prototypes W_j and given vectors according to criteria of similarity are assigned to those prototypes. Vectors make clusters in this way, each cluster represented by a vector-prototype.

ART2 algorithm (Carpenter et al. 1997) consists of the following steps:

1. Select vector a_i, i=1,2, ..n from the given vector set A.

2. Calculate choice function values for the vector a_i according to formula

$$T_{i,j} = \frac{a_i \bullet W_j}{\alpha + \| W_j \|}, j=1,.. m,$$

where $\bullet$ is vectors scalar product, $\| \|$ is vector modulus, m is the number of prototypes, $\alpha > 0$ is a choice parameter.

3. Find the choice function maximum

$$T_{i,J} = \max_j \{| T_{i,j} |\}$$

and check whether choice function maximizing prototype W_J satisfies the condition

$$\frac{a_i \bullet W_J}{\| a_i \|} \geq \rho .$$

Parameter $\rho \in [0,1]$ is called vigilance parameter. It is said that a_i resonances with W_J when this condition is satisfied, If prototype W_J does not meet the mentioned resonance condition, then the other prototype W_{J1}, satisfying condition

$$T_{i,J1} = \max_j (\{T_{i,j}\} - T_{i,J})$$

is selected and the resonance condition is again checked.

4. Assign the vector a_i to J-th cluster and adjust the cluster prototype, i.e. find the new prototype

$$W_J^{new} = \beta a_i + (1 - \beta) W_J ,$$

where $\beta \in [0,1]$ is called the parameter of learning rate.

If a_i has already belonged to other cluster, it is deleted from there.

5. If the vector a_i does not resonate with any prototype W_j then form a new cluster with an initial prototype a_i.

Steps 1-5 are repeated until those iterations change the content of the clusters. Vector number in the cluster and the number of clusters depend on the choice of parameters α and ρ.

The research results

The respondents were students who had choosed technology and social science programs at KTU Panevezys faculties. They use the library that has 60% of titles and copies of textbooks for technological field, 18% - for physical sciences, 11% - for social sciences and 11% - for others. Therefore now the library focuses its activities in broader range of electronic services and an efficient readers information system.

1695 users extensively using the library were recorded in 2008. Today institute's library improves the readers' e-service providing access to databases, improving an electronic directory and complementing CDs. It is convenient for the students to use Panevezys city public library, since it is in the center of the town. The city is quite small in comparison to Vilnius or Kaunas, so to visit this library can be quite fast. However, on the other hand, the need to use libraries and the peculiarities of this use in Panevezys may be influenced by the fact that many students are living in urban area. They have computers at home, Internet access and other good learning conditions. The determination of these aspects for students' learning and information sources in the behavior of KTU Panevezys faculties has not been investigated.

Information technology development has a significant influence on teachers' work as well. University lecturers increasingly set up a new scientific and research information that is available as soon as possible for the students. A decade ago it was enough to provide a printed list of references and a student in the library received the necessary publications, and it was enough. Now a lecturer must not only effectively use electronic services, but also prepare and present them to the students. Yesterday lecturer was a head and transformer, nowadays lecturer is catalyst and navigator (Jensen, 1999).
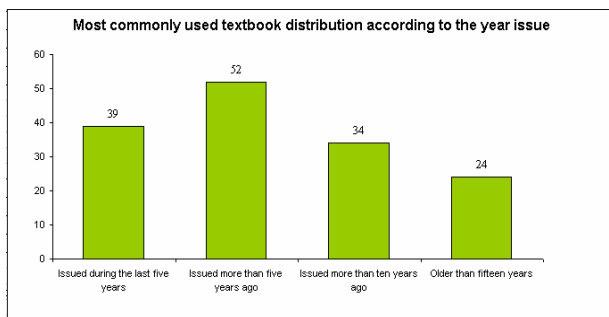
Figure 2. Students' most commonly used textbook distribution according the year of issue

Figure 2 shows that students use textbooks published more than five years ago. Remaining of respondents indicated that they use books issued during the last five years and more than ten years ago. Publications that have been released prior to fifteen years are used mostly by the respondents studying at the Faculty of Technology.
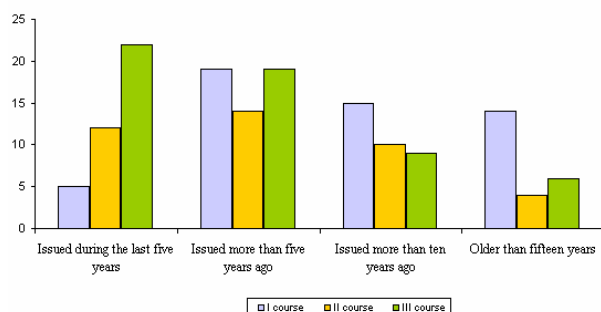

Figure 3. The distribution of students' used textbooks according to the courses and the year of issue

When analyzing the answers by study year, it appeared that the 3rd year students are mostly provided with the recent literature. The students of the 1st and 2nd courses use the literature published over the last five years and (Figure 3). So, more old texts use the remaining senior students.
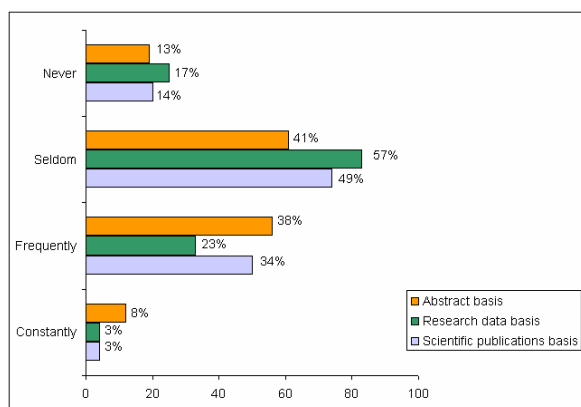
Figure 4. The distribution of online databases

The research revealed that online databases of scientific articles and research databases are regularly used by only a negligible number of respondents. 34% to 38% of respondents use database of abstracts and scientific articles. The survey shows that online databases are rarely used by respondents (from 41% to 57%), and it is never used by 13% - 17% of respondents (Figure 4). In order to

improve the educational level, on-line databases are becoming extremely important research and educational tool. Students obtain the possibility to increase interest in the latest information and scientific achievements.

Analysis by ART algorithm

Each student's responses were considered as a vector and ART algorithm have been applied to divide respondents into groups similar in given answers. For that purpose an additional package of Microsoft Excel macro was developed for implementation of the algorithm.

This package not only enabled to create prototypes describing a typical student as a representative of the group (cluster), but also gave the answers of specific respondent's vectors belonging to the specified cluster, which is described by its prototype.

Algorithm parameters were as follows. Training speed parameter $\beta=0,1$ value was enough sufficient for rapid convergence of the algorithm, because Excel is fairly rapid. Prototype size and number depends on choice and sensitivity parameters size. Parameter values were $\rho=0,8$ and $\alpha=0,01$. In this way it was achieved that the main clusters were not too general and, on the other hand, there would be not too many small clusters.

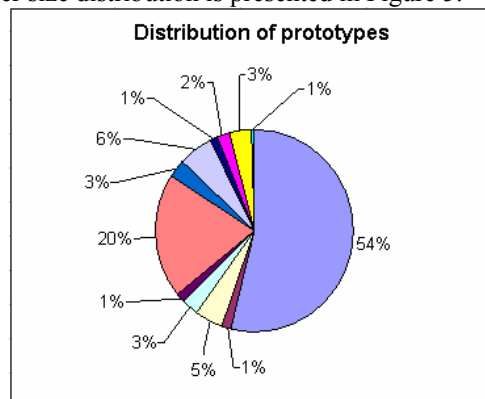12 different clusters were found by ART algorithm. Cluster size distribution is presented in Figure 5.

Figure 5. Prototypes distribution according to the number of vectors (respondents) belonging to them

As it is seen, only two clusters contain more than 10% of respondents. Prototypes of those two clusters are given in Table 1

78 students (54%) correspond to PROT1 prototype. As it is seen from Table 1, most of these students do not use Internet in the libraries and they rarely visit them. They also seldom visit public and university libraries for the other purposes. However, often and very often they use printed and electronic materials for the lectures and e-lecturers' notes. Consequently they receive electronic notes via Internet at home, dormitory, or make copies from the other students. These students also read printed textbooks and use training software

29 students (20%) correspond to PROT2 prototype. They use Internet at the university library, but they do not use it in the public library. These students almost constantly use electronic lecturers' notes and printed lecturers' notes and training programs.

So these two student groups mostly differ by the fact that the first group does not use Internet at the university

library, and the second group uses it. Both groups differ less in the other aspects of learning.

Table 1

Sources used by the students. The two main prototypes

	1. Internet at university library	2. Internet at public library	3. Textbooks	3. Printed version of lecturers' notes	4. Training programs	5. E-textbooks	6. E-version of lecturers' notes	7. E-libraries	8. Visits university library	9. Visits public library
PROT1	4.0	4.0	2.3	1.8	2.0	2.7	1.9	3.4	3.0	3.4
median	4.0	4.0	2.0	1.5	2.0	3.0	2.0	3.0	2.0	3.0
mode	4.0	4.0	2.0	1.0	2.0	3.0	1.0	4.0	2.0	4.0
PROT2	1.0	4.0	2.2	1.5	2.1	2.3	1.5	2.9	2.0	3
median	1.0	4.0	2.0	1.0	2.0	3.0	1.0	3.0	2.0	3.0
mode	1.0	4.0	2.0	1.0	2.0	2.0	1.0	3.0	2.0	3.0

Conclusions

1. The research about student use of learning tools and information sources revealed that most students do not use Internet in the libraries and they rarely visit them. They also rarely visit public and university libraries for the other purposes. Consequently, the access to Internet in libraries is sufficient and meets the requirements.

2. However often and very often they use lecturers' printed and electronic notes. Consequently, they receive electronic notes via Internet at home, dormitory, or make copies from the other students. These students also read printed textbooks and use training programs. This indicates that electronic materials are demanded, and it should be regularly updated and its submission forms must be improved.

3. Students most frequently use textbooks issued more than five years ago.

4. Students often obtain new information in online abstract databases.

References

1. Byerly, Greg and Brodie, Carolyn S. Information literacy skills models: defining the choices. In Learning and libraries in an information age: principles and practice. Ed. Barbara K. Stripling, Englewood: Littleton: Libraries Unlimited, 1999 p. 54-82.
2. Jensen E. Tobulas mokymas. Vilnius: AB OVO. 1999. p. 294.
3. Herring, J. E. Informacinių įgūdžių ugdymas mokykloje. Vilnius: Garnelis. 1998. p. 183.
4. Carpenter, G.A. & Grossberg, S. ART 2: Self-organization of stable category recognition codes for analog input patterns, Applied Optics, 26(23), 4919-4930.
5. Carpenter, Gail, Grossberg, Stephen, A Massively Parallel Architecture for a Self Organizing Neural Pattern Recognition Machine. *Computer Vision, Graphics, and Image Processing*. 1987. Volume 37 (1). p. 54–115.
6. Carpenter, G.A., Gjaja, M.N., Gopal, S., Markuzon, N., & Woodcock, C.E. ART and ARTMAP neural networks for applications: Self-organizing learning, recognition, and prediction. In L.C. Jain (Ed.), *Soft Computing Techniques in Knowledge-Based Intelligent Systems in Engineering*, New York: Springer-Verlag, 1997. p. 279-317.
7. Guidelines on Information Literacy for Lifelong Learning. IFLA, 2006.
8. Markauskaitė L. Informaciniai gebėjimai humanitarinių ir tiksliųjų mokslų sanglaudoje./ L. Markauskaitė // Informaciniai mokslai. 1999, nr. 10.

Regina Padaigienė, Alina Dėmenienė, Ojaras Purvinis

Mokymosi priemonės ir informaciniai šaltiniai studijose

Santrauka

Straipsnyje analizuojama, kokiomis mokymo priemonėmis ir informacijos šaltiniais studentai naudojasi studijų metu. Kurios bibliotekos paslaugomis naudojasi? Ką skaito: vadovėlius, dėstytojų pateiktus paskaitų konspektus, ar naudojasi elektroniniais vadovėliais, žodynais, enciklopedijomis, mokomąja medžiaga internetiniuose šaltiniuose bei duomenų bazėse. Tai reikalinga žinoti, norint tinkamai aprūpinti akademinę biblioteką ir tokiu būdu užtikrinti šiuolaikinę studijų kokybę. Kad atsakyti į šiuos klausimus, autoriai atliko dviejų fakultetų studentų apklausą. Gautieji anketų atsakymai buvo apdoroti aprašomosios statistikos metodais, o taip pat pritaikytas ART (adaptive resonance theory) algoritmas klasterizacijai.

About the authors

Regina Padaigienė. Lecturer, Kaunas University of Technology, Panevėžys Institute, Physical Sciences Department,. tel. (8~45) 46 56 87, regina.padaigiene@ktu.lt.
Alina Dėmenienė. Lecturer, Kaunas University of Technology, Panevėžys Institute, Physical Sciences Department,. tel. (8~45) 46 77 36, alidem@panf.ktu.lt
Ojaras Purvinis. Assoc. Prof., PhD, Kaunas University of Technology, Panevėžys Institute, Physical Sciences Department,. tel. (8~45) 59 62 58, opurvi@panf.ktu.lt

BENCHMARKING AS ENTREPRENEURIAL TOOL FOR BUSINESS IMPROVEMENT AND INNOVATIONS

Edita Petuškienė[1], Elena Druica[2]

[1]Kaunas University of Technology, Lithuania, [2]Business University of Bucharest, Romania

Abstract

In nowadays world the enterprises have to be dynamic and flexible trying to satisfy the requirements of environment. The one of the most effective ways to maintain the positions in market or to better them is to use benchmarking. But theretofore it is important to understand, that benchmarking is not the widely simple way for the fortune and success of the enterprise, because it stands on the entrepreneurship of the organization and the entrepreneurial intellection of its leaders. The quite a number of various problems, barriers can emerge trying to compare the distinct enterprises and aiming to adapt the highest standards of the concrete range of activity. Accordingly, the exceptional entrepreneurial perception, foresight, opportunism are necessary for the benchmarking, which consequently can be considered as the entrepreneurial tool for improvement and innovations.

Introduction

In the complex present environment the survival of the enterprises can be maintained just by flexibility, opportunism, innovation. In other words the prosperity of the enterprise can be achieved if only it has the entrepreneurial contemplation and perception, which enable to hunt out the novel methods of the work. These methods or notably effective improvements of common processes can be not necessarily in the main new, but new, for example, in the practice of concrete branch of economy. So, obviously, entrepreneurship can be supported by the benchmarking, which can be applied as an expedient for the creation of innovations.

Benchmarking has established its position as a tool to improve an organization's performance and competitiveness in business life. According to S. Massa and S. Testa (2004), recent studies indicate that targets for its application have extended from large firms to small businesses as well as the public and semi-public sectors. So, such standpoints substantiate that using of benchmarking is meaningful the same in the small and medium enterprises, which usually are entrepreneurial, as in the large units of the business.

Benchmarking helps to obviate the „reinvention of wheel". The enterprise can apply the achievements of other economical subjects and not to fall behind the leaders, but to become the equivalent rival in the specific brief and to improve the practice, which theretofore was absorbed as the best. So benchmarking enables to star to create novelty not in only the organizational but even in the global level, if the best global practice upgrade. Whereas the benchmarking increases the ability to create the innovations (leastways in organizational level), change the processes of the work subject to the environment using extraneous experience, it can be accepted as a tool for entrepreneurship.

The scientific originality. Very often the benchmarking is describing as „total quality management /reengineering/continuous improvement technique" (Sarkis, 2001). Many researches (Zairi 1994, Chen, 2002; Tavana, Mohebbi, Kennedy, 2003; Balzan, Baldacchino, 2007) detect the benchmarking as the instrument for continual perfection, which is the underlying precept in the total quality management. But in this article benchmarking is analyzing as an entrepreneurial tool. It is evident, that there is lack of the articles studying the relation between benchmarking and entrepreneurship.

The object of the article is the benchmarking.

The aim of the article is to highlight the benchmarking as entrepreneural tool for business improvement and innovations.

The research *method* is the analysis of the scientific literature.

The definition of benchmarking

The etymology of "benchmark" was in words used circa 1842 to describe the surveying practice of establishing marks in the ground to ensure that subsequent placements of a bench supporting surveyor's tools or instruments was assured to be on a level plane and assurance that subsequent measurements from the same place were on exactly the same basis.

"Benchmark", as a noun, describes a point of reference and subsequently extended beyond surveying into a spectrum of organizational practices where the analogy of a level plane is some level of organizational performance or achievement. "Benchmarking", as an adjective, refers to a process which not only seeks to identify disparate points of reference but also has the objective of aligning them in some favorable manner (Moriarty, Smallman, 2009).

Benchmarking gives possibility to assess the organization's inward demerits by the evaluation of the organization's outside. Consequently, D. E. Kempner defines benchmarking as an ongoing, systematic process for measuring and comparing the work processes of one organization to those of another by bringing an external focus to internal activities, functions, or operations (Alstete, 2000). But this is nothing less than one conception of the benchmarking.

Benchmarking definitions and classifications vary between scholars according to the time and criteria they focus on (Išoraitė, 2005). But key themes include measurement, comparison, identification of best

practices, implementation and improvement (Anand, Kodali, 2008). M. Išoraitė (2004) particularly emphasizes the importance of element of best practice in the definition of benchmarking. The mentioned scholar ascribe, that the best practice, in the more traditional uses of benchmarking, is defined by Robert Camp as „those practices that please the customer most". Thus it is argued that goals of a benchmarking study should be based on customer needs, whether the customers are internal (departments within an organization, higher management levels, employees) or external (consumers, citizens, regulators, legislators, local and national environmental groups, investors) (Išoraitė M., 2004).

But it is evident that after trying to please the customer best, the enterprise improves its products or services, processes, strategies and e. c. So improvement is the desirable result of implementing benchmarking. Consequently, improvement element is highlighted in many definitions of benchmarking:

• Benchmarking is the process of identifying, understanding and adapting outstanding practices from within the organization or from other businesses to help improve performance (Vermeulen, 2003).

• Benchmarking refers basically to the process of evaluating and applying best practices that provides possibilities to improve the quality. Benchmarking is first and foremost a tool for improvement, achieved through comparison with other organisations recognised as the best within the area. The central essence of benchmarking is the learning how to improve activities, processes and management (Išoraitė, 2005).

• Benchmarking is a widely used tool for conducting diagnostic analyses and directing improvement efforts (Amaral, Sousa, 2009).

• Benchmarking is one of the best tools that allow defining the opportunities of improvement, key success factors and ways of increase of efficiency of the company (Goncharuk, 2009).

Other scholars try to notice the importance of learning and understanding processes in benchmarking:

• Benchmarking is a process that facilitates learning and understanding of organization and its processes. It enables organizations to identify the key processes that need improvement, and to search for applicable solutions from the best in class (Fernandez, McCarthy, Rakotobe-Joel, 2001).

• Benchmarking is a management tool for attaining or exceeding the performance goals by learning from best practices and understanding the processes by which they are achieved (Anand, Kodali, 2008).

Benchmarking is a way to move away from tradition. It carefully dissects the organization into segments, and then removes and inserts pieces to account for changing environments. Changes occur once the process has started, and will continue to change and mould the organization for as long as individuals are continuously striving to make it better. If these individuals lose the ability to analyze and make changes, they begin to lose ground (Bhutta, Huq, 1999). So, in difficult present environment, where stability of the organization's immovable position in the market and high results can be achieved just by way of changes, benchmarking is the right and beneficial tool.

The benefits of benchmarking

Benchmarking is a very powerful tool in helping organizations optimize their capability to deliver by developing all internal processes to be superior, consistent and very effective and by optimizing delivery to the end customer so there is a clear move from merely fulfilling basic requirements to ensuring total satisfaction and even customer delight. This perhaps can be achieved through offering best product/service with highest quality, lowest price and with most competitive approach, as judged by the customer (Zairi,1994).

The main reasons companies do benchmarking is the need to look outside to determine how effective and efficient their operations are, and to learn from the successful experiences of others. Businesses need to be increasingly more efficient, and have had to develop more sophisticated methodologies to measure their performance.

Benchmarking opens organizations to new methods, ideas, and tools to improve their effectiveness. It breaks down resistance to change by demonstrating problem-solving methods that work, and that are different from the methods presently used, as can be seen in other businesses and organizations that are using them (Hagen, 2009). So, many scientists studying benchmarking (Elmuti, Kathawala, 1997; Fernandez, McCarthy, Rakotobe-Joel, 2001; Išoraitė, 2004; Zairi, Al-Mashari, 2005) endeavour to educe all the main reasons why it is useful to employ benchmarking.

M. Išoraitė (2004) emphasizes, that benchmarking can help enterprise to locate its strengths, pinpoint weaknesses, measure its performance against its competitors, discover what its is possible to achieve (Išoraitė, 2004).

M. Zairi and M. Al-Mashari (2005) summarized the operational and cultural benefits of benchmarking in the following way:

• Removes the need to 'reinvent the wheel';

• Leads to 'outside-the-box' thinking, encouraging organisations to look for ways to improve that come from outside;

• Forces organisations to examine current processes, which can often lead to improvement in itself;

• Accelerates change and restructuring by using tested and proven methods and creating a sense of urgency when gaps are identified;

• Allows the organisation to focus externally and constantly capture opportunities and counter potential threats;

• Helps prevent complacency and inertia within the organisation and its people by setting stretch goals and stimulating new ways to plan for the future;

• Promotes the emergence and evolution of a 'learning culture' throughout the organisation;

• Promotes the development of a customer-centric culture by constantly reminding people of the customer and focusing on critical processes that add value;

• Overcomes the 'not-invented-here' mindset by offering evidence that ideas invented outside the organisation can and do work (Zairi, Al-Mashari, 2005). P. Fernandez, I. P. McCarthy, T. Rakotobe-Joel (2001) separate additionally such advantages of benchmarking:
• It establishes pragmatic goals based on a concerted view of external conditions;
• It determines authentic measures of productivity;
• It supports the quest for a competitive position;
• It creates awareness of industry good practice;
• It provides significant leaps in performance not always attained by other management techniques.

D. Elmuti and Y. Kathawala, were of the opinion that benchmarking can be considered even as a job satisfaction tool, because benchmarking is growing and changing so rapidly, benchmarkers have bonded together and developed networks to share methods, successes, and failures with each other (Vermeulen, 2003).

Benchmarking enables senior managers to answer questions such as: Where are we now? Where do we need to be? How do we get there? How could we remain there? Indeed, as Figure 1 illustrates, strategic objectives are first established based on the voice of the process (capability) and the voice of the customer (true requirements). The desired standards of performance are therefore to optimize process performance in order to deliver total quality and 100 per cent value to the end customer (Zairi,1994).
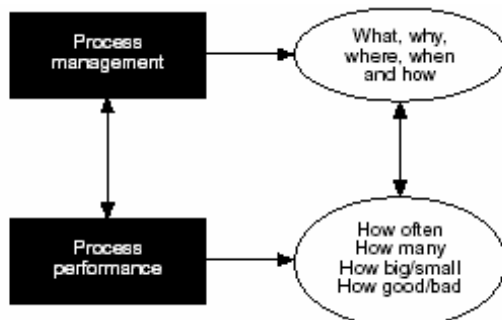

Figure 1. Benchmarking offers the opportunity to ask questions about process behaviours, e. g. process management (Zairi, 1994, p. 17)

A various studies (Elmuti, Kathawala, 1997; Longbottom, 2000; Vermeulen, 2003; Išoraitė, 2004) prove that benchmarking certainly helps to improve organizations. Often the benefit of benchmarking is started to substantiate by the example of Xerox. According to V. K. Omachonu and J. R. Ross, this company became known as the "pioneer" of benchmarking.

The results from this benchmarking process for Xerox included:
• Quality problems cut by two-thirds.
• Manufacturing cost cut in half.
• Development time cut by two-thirds.
• Direct labor cut by 50 per cent and corporate staff cut by 35 per cent while increasing volume (Elmuti, Kathawala 1997).

A study of the Times top 100 companies by consultants Coopers & Lybrand (1995) found that 78 per cent of respondents had been involved in benchmarking studies and of these the following benefits are reported:
• 92 per cent improved productivity;
• 81 per cent improved staff motivation;
• 87 per cent gained new insights;
• 87 per cent warning for competitive disadvantage; and
• 82 per cent vital for managing performance improvement (Longbottom, 2000).

So, it is evident that benchmarking can be useful in practice, but it doesn't means, that all experimentations trying to apply benchmarking always are very successful. According to D. Longbottom (2000), critics, however, may point to a shortage of survey evidence and only the successful case studies are published. Besides, F. Wilson and J. S. Town (2006), after the study investigated the long-term effects of a benchmarking exercise on the quality level of three UK academic libraries, present findings that the benchmarking may only be appropriate for organisations with an existing high level of quality maturity. Additionally, the different conditions should be composed in order to get the maximum positive effect from benchmarking. So, next at this article is studied the problems, that have to be solved in order to get the acceptable outcomes of the implementation of benchmarking.

P. Amaral and R. Sousa (2009) designate such disruptive barriers of benchmarking and its' results:
• Low education and abstraction capabilities. Difficulty in understanding the benchmarking concepts and low abstraction capabilities. This is due to low educational level and lack of further life-long training in languages and information technologies.
• Scepticism/lack of openness. Reticence to novel initiatives that are not seen as important, nor taken seriously; lack of confidence that initiatives are going to work.
• Reluctance to get involved/participate. Unwillingness to contribute to the benchmarking process or take responsibilities. This is due to an organizational culture that does not stimulate participation of employees.
• Hierarchy. A high perception of hierarchy refrains employees from participating in benchmarking activities and openly exposing their points of view.
• Working schedule. Difficulties in maintaining team dynamics due to incompatible working schedules
• Inadequate structure, functions, expertise. Difficulties of some organizational functions to respond to benchmarking challenges. This is due to lack of expertise to implement some of the actions or lack of appropriate organizational conditions.
• Poor project management practices. Difficulties with the integration of the benchmarking initiative with the organizational process, in order to take advantage of the existing organizational capabilities. Difficulties to keep up with the schedule and lack of a progress report. Difficulties in quantifying the payback of improvements

• Data accuracy. Difficulties in making sure that the data are accurate, due to poor information management practices (Amaral, Sousa, 2009)

According to Sheridan, some of the characteristics to make benchmarking successful include: being tied to the corporation's overall strategic objectives; being able to operate efficiently; being composed of interested motivated people; focus on relevant work-group-level issues; set realistic timetables; pick the correct business partners; follow proper protocol; collect manageable bodies of data; understand the processes behind the data; and identify targets in advance (Sarkis, 2001).

Based on the French experience with the benchmarking process, which were analyzed by F. Huq, M. H. Abbo and Z. Huq (2008), the following critical success factors for benchmarking can be identified: understanding of current process; look beyond numerical comparison; advance preparation; upper management support; implementation; continuous improvement; importance of each step varies amongst companies; and critical issues are company and industry specific.

Like many other organizational initiatives, effective benchmarking begins with preparation, and moves through several phases (Benchmarking for Innovation and Improvement). So, trying to make benchmarking successful, it is important to accomplish all these phases, consistently, rationally, faultlessly.

The different stages of the process of benchmarking are analysing by many scientists (Zairi, 1994; Alstete, 2000; Moriarty, Shallman, 2009). Benchmarking procedures can be condensed into four steps: planning the study, conducting the research, analyzing the data, and adapting the findings to the home institution that is conducting the study (Alstete, 2000). Other scholars (Bhutta, Huq, 1999) such benchmarking implementation stages: plan the study (determine what to benchmark); form the benchmarking team; identify benchmarking partners; collect and analyze benchmarking information; and take action (adapt and improve).

The two benchmarking approaches comprise different implementation stages. While they share the first stage (planning the study) and the last stage (business improvement), the intermediate stages differ. The traditionalists' perspective emphasizes team creation and consolidation, selection of benchmarking partners and collecting data. The modernists' perspective emphasizes the adaptation of the benchmarking tool and performing a proper diagnostic (Amaral, Sousa, 2009).

Some of the researchers study the benchmarking process very particularly. For example, M. Zairi (1994) offers 16 stages of the implementation of benchmarking. The mentioned scientist presents nine steps of the competitive benchmarking, which should be making after the seven steps of internal benchmarking are implemented. In other words, before trying to look outwards the organization to the practice of the other enterprises, the internal processes need to be understood and evaluated. G. Anand and R. Kodali (2008) educe twelve stages of the benchmarking (see figure 2). These stages include different steps (over all 54 of them are proposed).
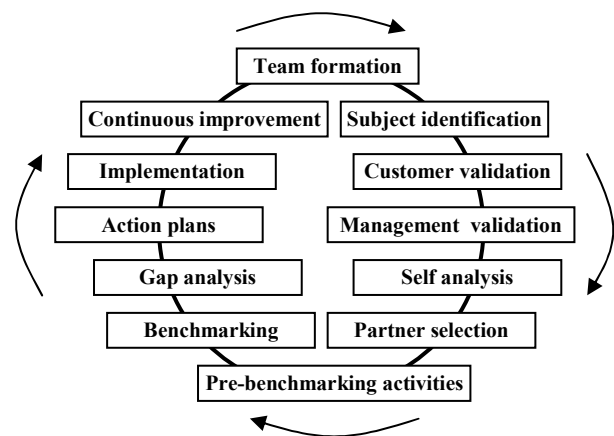

Figure 2. Proposed 12-phase, 54-step benchmarking process (Anand, Kodali, 2008, p. 282)

So benchmarking is the process, which can be carried out in four or much more circumstantial steps. In any case, according to F. Huq, M. H. Abbo and Z. Huq (2008), the essence remains the same regardless of the geographical location or cultural issues. It is also very important to remember improvements are continuous and benchmarks go out-of-date quickly, the competitor's performance will probably continue to improve in advance of one's own (Huq, Abbo, Huq, 2008). So, benchmarking, implementing by special phases, helps to renovate the processes, change mindset and use new opportunities. Therefore, the benchmarking can encourage the entrepreneurship of enterprise.

The benchmarking, innovations and entrepreneurship

As there were analyzed in last part of the article, the value of benchmarking is obvious, but its implementation can be difficult and many successful companies have encountered problems in their early attempts to implement benchmarking practices. All such facts prove that benchmarking has to be adopted in enterprises in creative way. It is important the ability to envisage the possibilities of the own enterprise looking in the practice of the rivals or other market shares, which are very different and sometimes works under unlike conditions. So, the entrepreneurial thinking trying to apply benchmarking is very topical. But how the benchmarking can be proposed as the entrepreneurial tool if the entrepreneurship purportedly is consistent with the imitation and emulating?

Construing the phenomenon of entrepreneurship often are emphasized that entrepreneurs are individuals who recognize opportunities where other see chaos or confusion (Kuratko, Hodgetts, 2004). The usage of the tool of benchmarking quasi proclaims that the achievements of other people and organizations are exploited, that somebody else found the way to improve the process, product or service not the benchmarking doer. But this approach is not right, because apply the success formula, that answered the purpose of other is not the simply easy task.

According to P. Fernandez, I. P. McCarthy, T. Rakotobe-Joel (2001), in order to transfer practices or processes

from one organization to another it must be understood that:

- organisations are different;
- organisations are operating in diverse institutional and cultural environments; and
- that sometimes the processes can be tacit, socially embedded or inalienable.

The tacit conditions of benchmarking include:

- It is not a universal yardstick as it is impossible to establish an absolute measurement in the benchmarking process.
- Transferability, as the adaptation of some processes or practices to another environment is not guaranteed. Processes dial operate in a given environment may not necessarily operate in another environment.
- Validation, as a „best practice" is mostly a subjective attribute since there is no single „best practice" (Fernandez, McCarthy, Rakotobe-Joel, 2001).

Consequently, can be shared Boxwell (Bhutta, Huq, 1999) opinion, that benchmarking should be used as a guide, not for statistical precision. There are no possibilities to transfer all the „facture" of activity with its sometimes invisible subtleties in the different enterprise. So, duplication there is not conceivable in the organizations practices.

Quite often, the benchmarking concept is understood to be an act of imitating or copying. But in reality this proves to be a concept that helps in innovation rather than imitation, as stated by Thompson and Cox (Dattakumar, Jagadeesh, 2003). M. Lankford (Internet source) agrees with this point. The mentioned researcher predicate Copycatting and Benchmarking are not one and the same. Copycatting leads to lessened creativity and stale ideas. Benchmarking is not supposed to take the place of managers bringing insight and original strategies into the organization. Although copycatting is an easy trap for managers to fall into, it is important for managers to realize that benchmarking will never be an excuse for managers to stop being creative and innovative (Lankford. Internet source). So, benchmarking doesn't cross neither the essential entrepreneurs' character feature – innovativeness, nor other entrepreneurial traits.

J. Duobienė lists such the characteristics of entrepreneur (2005): innovativeness, locus of control, appetence for risk, appetence for achievement, creativity, requirement for autonomy, proactive behavior. It is evident, that applying the benchmarking all these characteristics are employing. The benchmarking doer has to be very creative pursing to adjust and adopt methods or process of other enterprises in own organization. Benchmarker has to possess the strong appetence for achievement and locus of control. Furthermore, he or she has to assume risk to meet with failure, if the efforts to transform will influence the negative results. So, benchmarking challenges and requires a lot of efforts, but thereby it lessons and trains the skills.

The benchmarking process is a learning process that involves observation of external practices and performances, comparison with internal ones, identification of knowledge gaps and finally the decision: bridging the gaps acquiring new resources or leveraging

on internal ones and investing in upgrading. The result of this learning process is something new, deriving both from the integration of external inputs with internal previous knowledge as well as from bridging knowledge gaps (Massa, Testa, 2004). G..Anand and R. Kodali (2008), complements this statement affirming that benchmarking should be recognized as a catalyst for improvement and innovation. Founding on such approach it is important to amplify that benchmarking can be used as a tool for entrepreneurs, who want to implement the new ideas for the novelty creation in enterprise.

It is necessary to understand, that conception of innovation doesn't essentially mean the great invention. The various forms of innovation are identified by Johnson D. (2001): product development, new usage of established product or service, changes in market exploited, operational and logistical innovation; business model innovation. So, innovation has many facets and is multidimensional. According to R. J. Cooper, the most prominent innovation dimensions can be expressed as dualisms: radical versus incremental; product versus process; and administrative versus technological (Zhao, 2005). Both and hard innovation (which is primarily to do with the company putting in place structures for innovation, such as innovation stage-gate methodologies, suggestion schemes, reward schemes, quantitative goals) and soft innovation (which involves proper and effective management of the hard aspects of innovation; includes managing the culture and climate of the organization to create an innovation orientation and positive behaviors) are needful. The best practices suggest that it is in finding the correct balance between soft and hard actions that innovation success is built (Pervaiz, Ahmed, 1998). So, if the benchmarking doesn't induce the hard innovation, it doesn't mean that creation of positive for innovations climate is not the valuable new development.
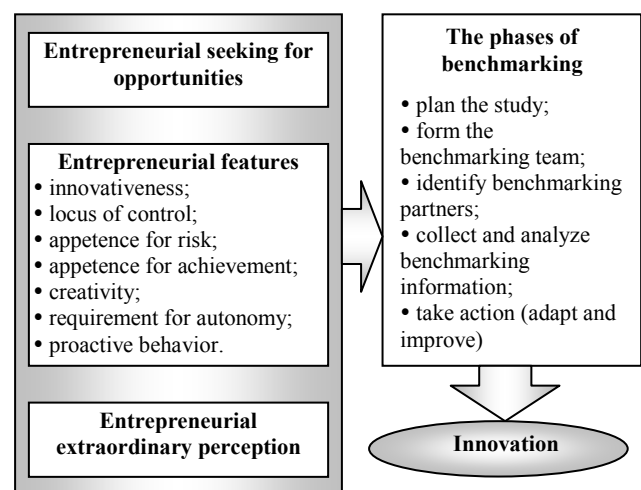

Figure 3. Interrelationship among the entrepreneurship, benchmarking and innovation (structured by article authors)

As was mentioned, the final results of the benchmarking very depend on the conditions under which it is implementing. The entrepreneurial enterprise is the place where such conditions really exist. In other words such organizations leaders have the ability to see opportunities of improvement looking to the internal activities or

watching the work results of completely different organizations. So, entrepreneurs contrive how to adapt the experience of other enterprises in own organization. If the best practice can't be narrowly adjusted, the entrepreneurial thinking helps to remake it creatively. It is evident that exactly mentioned way can safeguards the better results than the trying to copy best practice of unlike market share using overmuch thorough imitation. The attempt to become the second enterprise, which has the same best practice being different by many other characteristics and signs, can influence the failure of the application of benchmarking. So, entrepreneurial environment of organization can positively affect the benchmarking consequents and final results (see 3 figure).

In summary can be emphasized that the benchmarking accelerates and manages change. If this tool is using by the opportunistic and perceptive entrepreneur, the great success and significant results, such as creation of innovation, can be achieved.

Conclusions

The original meaning of the word „benchmark" indicates a metric unit, but in the organizations management definitions of benchmarking vary. Despite this there are several key themes, which dominate in many conceptions: measurement, comparison, identification of best practices, implementation and improvement. So, benchmarking can be conceived as a process, by which organization search the best practices in industry using measurements and comparison in order to make the best achievements and experiences of other fundamental for its improvement and exceptional performance through the implementation of these hunted best practices.

The benefits of benchmarking are palpable not only in theory. Often emerge that application of benchmarking improves many results of organization's work. It stands to reason, that benchmarking enable to avoid the need to reinvent the devised things. A point of departure for the posterior innovations moves up. Besides, the organization using benchmarking exercises vigilance keeping a close watch on external environment. This helps to hold the steady positions in market. Additionally, benchmarking is a possibility to understand and evaluate the internal processes of enterprise. But all these advantages can be obtained just under the proper conditions. All the benchmarking steps have to be contemplated.

The benchmarking and entrepreneurship are very relative. Both of them create changes and innovations. But trying to apply the benchmarking the entrepreneurial thinking is very important. On purpose to use the work methods, processes, products or other inventions of rivals or other market shares, the creativity, insight and flair are necessary, because benchmarking is not the act of copying. Conversely, the application of benchmarking is successful just when it is adopted, accommodated to enterprise ingeniously. Therefore, the use of the best practice method in organization can be accepted as the one of the most effective entrepreneurial tool, which helps to improve and create innovations.

References

1. Alstete J. W., 2000. Association-sponsored benchmarking programs // Benchmarking: An International Journal, Vol. 7, No. 3, pp. 200-205. Available from Emerald Fulltext database.
2. Amaral P., Sousa R., 2009. Barriers to internal benchmarking initiatives: an empirical investigation // Benchmarking: An International Journal. Vol. 16, No. 4, pp. 523-542. Available from Emerald Fulltext database.
3. Anand G., Kodali R., 2008. Benchmarking the benchmarking models // Benchmarking: An International Journal. Vol. 15, No. 3, pp. 257-291. Available from Emerald Fulltext database.
4. Balzan L., Baldacchino P. J., 2007. Benchmarking in Maltese internal audit units // Benchmarking: An International Journal. Vol. 14, No. 6, pp. 750-767. Available from Emerald Fulltext database.
5. Benchmarking for Innovation and Improvement. Internet source: http://www.psu.edu/president/pia/innovation/benchmarking_for_innovation.pdf
6. Bhutta K. S., Huq F., 1999. Benchmarking-best practices: an integrated approach // Benchmarking: An International Journal, Vol. 6 No. 3, pp. 254-268. Available from Emerald Fulltext database.
7. Chen H. L., 2002. Benchmarking and quality improvement: a benchmarking deployment approach // International Journal of Quality and Reliability Management. Vol. 19, No. 6, pp. 757-773. Available from Emerald Fulltext database.
8. Dattakumar R., Jagadeesh R., 2003. A review of literature on benchmarking // Benchmarking: An International Journal Vol. 10 No. 3, pp. 176-209. Available from Emerald Fulltext database.
9. Duobienė J., 2005. Verslios asmenybės ypatumai // Vadovo pasaulis. Nr. 10. Vilnius. P. 65-67.
10. Elmuti D., Kathawala Y., 1997. An overview of benchmarking process: a tool for continuous improvement and competitive advantage // Benchmarking for Quality Management & Technology, Vol. 4 No. 4, pp. 229-243. Available from Emerald Fulltext database.
11. Fernandez P., McCarthy I. P., Rakotobe-Joel T., 2001. An evolutionary approach to benchmarking // Benchmarking: An International Journal. Vol. 8, No. 2, pp. 281-305. Available from Emerald Fulltext database.
12. Goncharuk A. G., 2009. Improving of the efficiency through benchmarking: a case of Ukrainian breweries // Benchmarking: An International Journal Vol. 16 No. 1, pp. 70-87. Available from Emerald Fulltext database.
13. Hagen K, 2009. Benchmarking: Learning from Others to Improve. Internet source: http://www.associatedcontent.com/article/583945/benchmarking_learning_from_others_to_pg8.html?cat=3
14. Huq F., Abbo M. H., Huq Z., 2008. Perceptions about benchmarking best practices among French managers: an exploratory survey // Benchmarking: An International Journal Vol. 15 No. 4, pp. 382-401.
15. Išoraitė M., 2005. Benchmarking needs in Lithuanian transport analysis // Transport and Telecommunication. Vol. 6, No. 1, pp 162-168. Internet source: http://www.tsi.lv/Transport&Telecommunication/v61_en/art21.pdf
16. Johnson D., 2001. What is innovation and entrepreneurship? Lessons for larger organizations // Industrial and Commercial Training. Volume 33, No., 4, pp. 135-140.
17. Kuratko D. F., Hodgetts R. M., 2004. Entrepreneurship: theory, process, practice. Mason: South-Western. 866 p.
18. Lankford M. Benchmarking: understanding the basics // The Coastal Business Journal. Vol1, No. 1, pp. 57-62. Internet source: http://www.coastal.edu/business/cbj/pdfs/benchmark.pdf
19. Longbottom D., 2000. Benchmarking in the UK: an empirical study of practitioners and academics // Benchmarking: An International Journal, Vol. 7 No. 2, pp. 98-117. Available from Emerald Fulltext database.
20. Massa S., Testa S., 2004. Innovation or imitation? Benchmarking: a knowledge-management process to innovate services // Benchmarking: An International Journal. Vol. 11, No. 6, pp. 610-620. Available from Emerald Fulltext database.

21. Moriarty J. P., Smallman C., 2009. En route to a theory of benchmarking // Benchmarking: An International Journal. Vol. 16, No. 4, pp. 484-503. Available from Emerald Fulltext database.
22. Sarkis J., 2001. Benchmarking for agility // Benchmarking: An International Journal. Vol. 8, No. 2, pp. 88-107. Available from Emerald Fulltext database.
23. Tavana M., Mohebbi B., Kennedy D. T., 2003. Total quality index: a benchmarking tool for total quality management // Benchmarking: An International Journal. Vol., 10 No. 6, pp. 507-527. Available from Emerald Fulltext database.
24. Vermeulen W., 2003. Benchmarking as an enabler of business excellence in the South African financial sector // Benchmarking: An International Journal. Vol. 10, No. 1, pp. 65-72. Available from Emerald Fulltext database.
25. Wilson F., Town J. S., 2006. Benchmarking and library quality maturity // Performance Measurement and Metrics. Vol. 7, No. 2, pp. 75-82. Available from Emerald Fulltext database.
26. Zairi M., 1994. Benchmarking: The Best Tool for Measuring Competitiveness // Benchmarking for Quality Management & Technology. Vol. 1, No. 1, pp. 11-24. Available from Emerald Fulltext database.
27. Zairi M., Al-Mashari, M., 2005. The role of benchmarking in best practice management and knowledge sharing // The Journal of Computer Information Systems. Vol. 45, No. 4, pp. 14.
28. Zhao F., 2005. Exploring the synergy between entrepreneurship and innovation // International Journal of Entrepreneurial Behaviour & Research. Vol. 11 No. 1, pp. 25-41. Available from Emerald Fulltext database.

Edita Petuškienė, Elena Druica

Geriausios praktikos metodas, kaip antrepreneriškas verslo tobulinimo ir inovacijų įrankis

Santrauka

Šiuolaikiniame pasaulyje įmonės privalo išlikti lanksčiomis ir dinamiškomis. Vienas iš efektyviausių būdų išlaikyti rinkos pozicijas ar jas pagerinti yra geriausios praktikos metodo taikymas, kuris pageidautina, turėtų remtis organizacijų bei jų lyderių antrepreneriškumu. Siekiant palyginti atskiras organizacijas bei pritaikyti aukščiausius veiklos standartus, gali iškilti daugybė problemų, kurių sprendimui reikalingas ekstraordinarinis mąstymas, išskirtinis aplinkos suvokimas, įžvalga, oportunizmas bei kūrybiškumas – savybės, būdingos antrepreneriams. Dėl šios priežasties geriausios praktikos metodas gali būti laikomas antrepreneriišku įrankiu veiklos tobulinimui ir inovacijoms arba instrumentu, kurį efektyviausiai gali valdyti bei maksimalių rezultatų pasiekti antrepreneriai.

About the authors

Edita Petuškienė. Master of Management and business administration, Kaunas University of Technology, Institute of Panevėžys, Faculty of Management and Administration, Assistant of Economics Department, Nemuno s. 33, Panevėžys. E-mail: petuskiene@yahoo.com, tel. +370 603 174 97. Field of scholar interests: management of organization, entrepreneurship.
Elena Druica. Ph.. D., Professor in Risk Economics, Head of the Department of Economics Faculty of Administration and Business University of Bucharest, 36-46, M. Kogălniceanu Bd, Sector 5, 70709, Bucharest, Romania. E-mail: elenadruica@yahoo.com; druica_e@faa.ro, tel. 004.0723.309.350. Field of scholar interests: business risk, innovation in digital economy.

ASSESSING THE INDUSTRIAL LEARNING IN THE VALUE CHAINS OF THE BALTIC SEA REGION

Mindaugas Puidokas, Giedrius Jucevičius
Kaunas University of Technology, Lithuania

Abstract

The paper presents the conceptual model of preconditions and factors underlying the industrial learning by Puidokas, Jucevicius (2009) and the findings on industrial learning in the Baltic value chain in furniture sector. The industrial learning is regarded as an outcome of interactions between the knowledge provider vs. knowledge recipient, based on the complementarities of their strategies, mental models, technological backgrounds, their levels of motivation and competence. The study was carried out by conducting the structured interviews with the managers of Lithuanian furniture companies that are involved in the international systems of production in the Baltic Sea region.

Introduction

In the environment of global competition and knowledge economy the ability to learn on national, organizational and individual levels is becoming of ever greater importance. This ability to learn is essential for "*latecomer*" countries and companies in their development trajectory, because attracting and installing new knowledge empowers them to fight this backwardness or even create a new trajectory of development. Proof of that are the success stories of such countries as Taiwan, Hong Kong, South Korea, Singapore, Finland, Ireland and their organizations. These once economically backward countries have undergone a successful process of learning in their national economic systems and are nowadays on par with the developed industrialized countries in the global competitive arena (Storper, 1998). It is mainly the process of industrial learning that characterizes the economic catch-up of latecomer countries.

The **aim of the paper** is to reveal and structure the factors influencing industrial learning in the value chains of Baltic Sea region companies using methodology formulated by the authors. The concept of "*value chain*" is used, according to M. Porter (1990, 1998) works.

The concept of industrial learning stands for the transfer and diffusion of valuable managerial and technical knowledge among organizations in the industrial value chain that enables the progression of the latecomer firms towards higher value-added activities (Mathews, 2003, 2005; Stiglitz, 1987; Hobday, 1995; Kim, 1997; Nonaka & Teece, 2001). The phenomenon of industrial learning is usually analyzed by evaluating the development of South-East Asian countries and processes of knowledge and technologies transfer in this supranational region (Ozawa, 2001, 2003, 2004, 2005; Kojima, 2000; Kasahara, 2004; Mathews & Cho, 2000; Mathews, 2004, 2005, 2006). However, few studies exist outside this successful region, although the latecomer countries and firms are not limited to South-East Asia.

The **research methodology** of the paper relies on the model of industrial learning, created by authors of this paper (Puidokas, Jucevičius, 2009). The methodology of industrial learning evaluation is tested in the Lithuanian furniture sector, where local furniture companies are in close relations with Scandinavian and German multinational companies and there exist the empirical evidence of currently happening industrial learning.

Research method: The research was carried out following the methods of scientific literature analysis and an ***in-depth structured interview***.

Model of industrial learning

In this paper the industrial learning is viewed through a prism of knowledge and technology transfer and spread. One of the main aims of the article is to establish assumptions and factors that influence the success of industrial learning in latecomer countries. Therefore assumptions and factors of industrial learning will be assessed, but not processes.

In order to have assumptions for latecomer country's economical catch-up through industrial learning, context factors influencing industrial learning of knowledge/technology provider (developed country) and recipient (latecomer country) must match.

One of the main theoretical constructs is the concept of *proximity* between the partners involved in the knowledge exchange.

The dimensions of proximity are often used in the research on regional policy. Most regional, national and supranational programs for regional growth emphasize such factors as the proximity of university and high-tech firms, as well as the proximity of similar industrial sectors, etc. (Branstetter, 2001; Lang, 2005, Dangelico, Garavelli & Petruzzelli, 2007). In most cases, proximity is treated as a precondition for cooperation and learning. Dimensions of proximity can be indicated as one of the assumptions of industrial learning.

Researchers distinguish various dimensions of proximity: organizational, industrial, technological, geographical, cultural, cognitive, institutional, etc. The dimensions of proximity influence the innovativeness of economical actors through inducement of knowledge spillovers (Branstetter, 2001; Lang, 2005 Dangelico, Garavelli & Petruzzelli, 2007). Olson (2004) notes the direct connection between the innovations and proximity of actors. The successful industrial clusters and regional innovation systems are all characterized by the proximity and compatibility of different actors.

Lang (2005) distinguishes 4 main dimensions of proximity, which influence the success of industrial learning and the diffusion of knowledge and technologies.

1. *Geographical (or spatial) proximity* is the least controversial of all dimensions, as there is wide agreement, that it "expresses the kilometric distance between two units" (Torre & Rallet 2005: 49)

2. *Industrial / technological proximity* outlines the ability of firms to learn from each other, which is based on their similar industrial and technological context; also a positive factor is belonging to the same value chain.

3. *Cognitive proximity*: the similarity of the knowledge base and strategies of two actors is necessary for the communication and mutual understanding.

Behavioural proximity comprises the non-market content of relationships. It complies to a great extent with what Ron Boschma (2005) divides into the three proximity dimensions *organizational, social and institutional proximity*. His line of argument, that three proximity dimensions must be separated because they function along different mechanisms. *Organisational proximity* is dependent on the degree of autonomy the network partners have. *Social proximity* is dependent on trust. It is a feature of friendship, family or long-lasting acquaintance. The mechanisms of institutional proximity are norms and habits, rules and laws. To draw a clear line between the three dimensions is extremely difficult. Even Boschma himself asserts: "As such the social, organizational and institutional forms of proximity may be strongly interconnected, because the ways intra- and interorganizational relations are governed are deeply embedded in institutional settings." (Boschma 2005: 67/68).

The geographical proximity can be subsumed as tangible context factor of industrial learning, and behavioural (organizational, social, institutional) and cognitive dimensions of proximity can be classified as intangible factors of context, influencing the effectiveness of industrial learning.

The industrial and technological proximity is a typical problem occurring during the transfer of knowledge between firms from different countries. Just as the individuals have a specific and limited knowledge base to their disposal, firms have a significant portion of superfixed production factors (Lang, 2005). "Superfixed production factors are long-lasting, tangible and intangible assets which once installed can be replaced only with huge costs and over a long period of time" (Antonelli 2000: 397). Not all new knowledge can be appropriated by a firm, because the superfixed production factors place significant constraints on their ability to adjust to changing environments. Just as the knowledge base of an individual places constraints on the range of new knowledge he is able to assimilate. Technological and industrial proximity outlines the ability of firms to learn from each other.

There are many empirical studies that find that vertical relationships along the value chain and especially customers are the most important innovation partners underline the meaning of industrial proximity (Tödtling und Kaufmann 1999; Freel 2003; Koschatzky und Zenker 2002; Sternberg 1998; Dei Ottati 1998; Markusen 2000; Cornford, Naylor & Driver 2000). New knowledge is produced in similar production contexts, where both partners fulfil the necessary preconditions to assimilate the new knowledge.

Greunz (2004) studied interregional knowledge spillovers in European NUTS I and NUTS II regions. She noticed that regional, geographical and technological proximities play an important role in creating new knowledge in the European regions. The obtained data confirmed that interregional knowledge spillovers most often occur between geographically close regions or between regions, which have similar technical profiles. Nevertheless, if the knowledge is created in a particular country, then national borders become a preventing factor for further inter-regional knowledge spillovers to other countries.

Canaïëls and Romijn (2004) examined the forces that promote the competitiveness and economic growth. The researchers found out that geographical proximity positively influences the effectiveness of economic activity, especially through knowledge spillovers. Authors noticed that the processes of industrial learning and knowledge spillovers are the most fortunate in the clusters, which emerged as regional agglomerations. Therefore it is logical to research regional agglomerations and the presence of industrial clusters in certain regions, because effective industrial and technological learning processes are taking place among companies that constitute clusters.

The tangible contextual factors of industrial learning also include such factors as the government policy, degree of democratization, national infrastructure and fiscal system. Variety of economic activities in the region is also an important factor, because diversity of activities (and, respectively, knowledge) influences the potential of industrial learning in particular country.

It is important to mention that to achieve a successful economic catch-up through industrial learning; the contextual factors must correspond on both sides, involving the provider and recipient of knowledge.

Talking about assumptions and factors directly influencing the effectiveness of international industrial learning, it is necessary to mention mobility of workforce, because Almeida and Kogut (1999) estimated that the movement of main specialists from one country or region to another affect the evolution of industry. A good proof to this is the expert mobility that helped boost the South Korean and Taiwanese semiconductor industries. The individuals acquired the university education and work practice in the USA to return home and promote the industrial development. Within a brief period of time – approximately two decades – these countries have successfully caught-up with the leading countries in the semiconductor industry. The education and work practice in the developed countries helps to save time and avoid potential mistakes on the basis of trial-and-error method and help to teach the local work force and contribute to producing the technological patents (Almeida, Wu, Song, 2003).
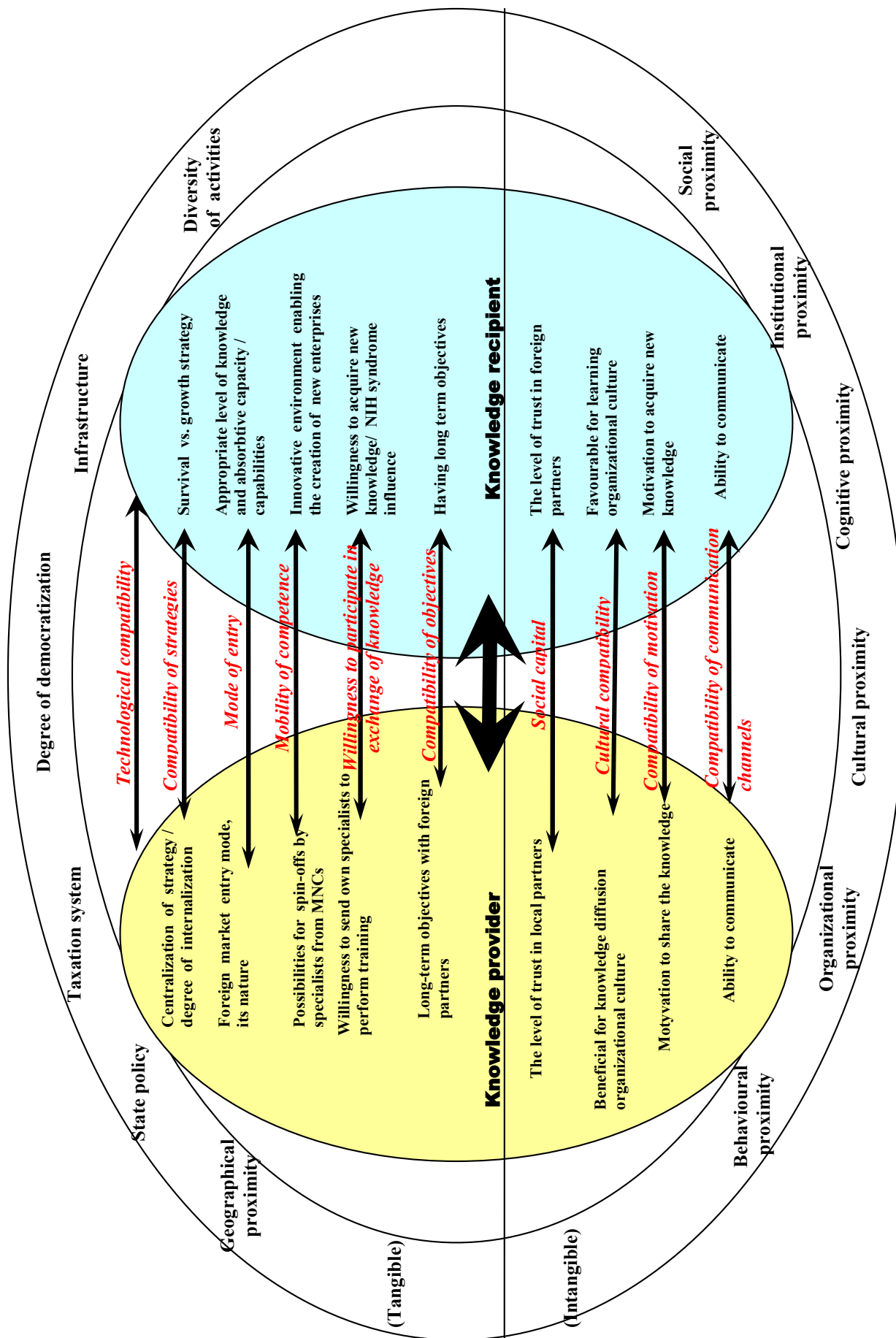
Figure 1. The model of interactive, international industrial learning between enterprises from developed and latecomer countries

315

The inner circle contains reciprocal indexes, because it is assumed that the industrial learning between two or more countries is an interactive process, from which all participants can benefit.

Technological compatibility is very important for knowledge provider and recipient, which can be understood as already discussed technological proximity.

In the case of a provider an internalization decision is very important, because MNCs usually are not engaged in all activities of value chains on their own. The decision about activities that pay off best if a company does them by themselves is called "internalization decision". In addition, a MNC cuts its internalized activities into thin slices and places these slices at appropriate places. This is called "location decision." The smaller is MNC centralization the bigger its inclination for sharing the knowledge with subsidiaries or foreign partners (Kimura, Mitsuyo, 2003). The compatibility of strategies is important too. For example, if provider uses the survival strategy – its demand for industrial learning and new knowledge is low.

The effectiveness of industrial knowledge transfer depends on foreign market entry mode, which is chosen by the firm. For specific, tacit knowledge transfer the most favourable is greenfield investment mode. The biggest learning potential and widest possibilities for knowledge spillover occur while creating joint ventures (Cheng, 2006; Arregle, Hebert, Beamish, 2006). In the case of recipient, one of the major factors, enabling the assimilation of transferred new technology / knowledge is the absorptive capacity of the firm and appropriate knowledge level (Cantner, Pyka, 1998, Tybout, 2000, Savvides, Zachariadis, 2002, Hoekman, Maskus, Saggi, 2004).

Possibilities for spin-offs by specialists from MNCs are directly dependant on contracting regulations forced by corporations. Innovative environment, enabling the creation of new enterprises, is very important for the recipient country firms. Such environment is favourable for industrial learning. These both factors condition the mobility of competence.

The readiness to participate in the exchange of knowledge must be mutual. Industrial learning processes are facilitated and positively influenced by sending MNC specialists to recipient country. Latecomer country firm absorptive capacity and ability to acquire new knowledge also influences the efficiency of learning processes. It is often encountered with NIH (*not invented here)* syndrome and strong resistance to novelties.

A list of tangible industrial learning factors is finished by compatibility of objectives of provider and recipient. Long-term objectives are helpful for industrial learning, because in case of short term goals, firms are confined only by fast returns objectives.

It is much more complicated to distinguish the intangible factors, influencing industrial learning, but mutual trust and ability to communicate, also cultural compatibility and compatibility of motivation can be pointed out.

The industrial learning in Lithuanian furniture industry

Favourable geographical position of Lithuanian furniture sector companies, namely geographical proximity to one of the most competitive economies in the world - countries belonging to the Baltic Sea region (BSR) such as Scandinavian countries and Germany. For Lithuania cultural, behavioural and/or organizational proximity, enabling representatives of local furniture sector to learn and take over new knowledge and technologies from companies of the abovementioned countries is also typical. Lithuanian furniture sector, being a part of the BSR value chain, acquires a possibility not only to start new business relations, with in most cases economically stronger foreign partners, ensure potential supply flows, but also to acquire the good experience of the BSR furniture sector enterprises and proceed to qualitatively higher level of company activity.

In survey tested experts sample is non-random targeted. The survey covered the sample of managers from *9 Lithuanian enterprises* of furniture sector as well as *2 managers in IKEA Company*. The main criterion for selecting the Lithuanian furniture enterprises was that they co-operate with partners from the Baltic Sea region (Finland, Denmark, Norway, Sweden, Germany: the Hanseatic city of Hamburg, Mecklenburg-Vorpommern and Schleswig-Holstein regions). This sample is limited in quantitative terms (not all regions are represented in the survey); however, due to the qualitative nature of the research it is compensated by the depth of answers during the interviews.

The study was carried out following the method of an *in-depth structured interview*.

The questionnaire was structured in line with the above presented model of factors of industrial learning and the value chain as proposed by M. Porter (1990). The latter was used to identify the activities in the value chain, in which the industrial learning is taking place.

The *aim of the research* was to determine the factors and characteristics of industrial learning in the Lithuanian furniture enterprises that belong to the value chains of the Baltic Sea region, with reference to the model of industrial learning, established by authors (Puidokas, Jucevičius, 2009).

Research object is the industrial learning in Lithuanian furniture sector enterprises, belonging to the Baltic Sea region value chains.

After interviewing 9 Lithuanian furniture sector and 2 Swedish capital company "IKEA" subsidiary in Lithuania experts it can be stated that both parties agree that the conditions for industrial learning from foreign partners in analyzed sector are favourable. There can be distinguished such factors, stimulating industrial learning, as partners' mutual willingness to maintain long-term relations, high level of trust among the partners, willingness and readiness of Lithuanian companies to participate in the processes of industrial learning.

Though Lithuanian and foreign partners' attitudes towards industrial learning separated in some cases but both parties agreed that industrial learning of local furniture sector firms in the BSR value chains was obvious in the majority of activities; particularly, in such

activities as firm infrastructure (especially in quality ensuring system), process of production (especially in even balancing of production operations), technological development (in installing new methods of production and activity), etc.

After running an empirical research on industrial learning of Lithuanian furniture sector companies in the Baltic Sea region and after questioning experts of local furniture companies and colleague "IKEA" subsidiary in Lithuania it was identified that industrial learning in Lithuanian furniture companies is operating in nearly all firm activities (except marketing and sales).

The most effective industrial learning of Lithuanian furniture companies from the most advanced companies in the Baltic Sea region (Scandinavia and Germany) is taking part in their following activities:

- in the process of production, especially in the field of even balancing of production operations and loading;
- in firm infrastructure activities, such as development of quality ensuring system;
- in activity of technological development, especially in installing new production and activity methods and in process automatization activities.

Industrial learning of local furniture companies from foreign partners would be complicated without certain favourable influencing conditions. After accomplishing an in-depth structured interview with selected experts, it was found out, that the fundamental factors, influencing industrial learning of Lithuanian furniture companies in the Baltic Sea region are:

- mutual willingness of both partners to maintain long-term relations;
- high level of trust among the partners;
- intention and readiness of local companies to purposively take over knowledge and/or technologies;
- motivation of foreign partners to transfer knowledge and/or technologies;
- predictable behaviour of foreign partners.

Cognitive, cultural and technological proximities of companies, participating in industrial learning processes and earlier experience of both parties in transferring technologies and management knowledge can be regarded to as other important factors, stimulating industrial learning processes in Lithuanian furniture sector enterprises.

Conclusions

According to the analysis of scientific literature, it can be stated that ***industrial learning*** is the diffusion of valuable for industrial activity explicit and tacit knowledge and technologies among the actors of economic system in the local and international context. This diffusion is based on the ability of economy to react intelligently to changing conditions and it is dependent on industrial, technological, geographical, cultural proximities and determines the coming of knowledge spillover.

Industrial learning proceeds when latecomer companies with their resources (for example logistic channels) contribute to international companies created value, in exchange getting access to modern knowledge and technologies. Developed countries' companies get the possibility to lower production costs and optimize it, consolidate in certain new markets, etc.

The success of industrial learning largely depends on the compatibility of partners along multiple dimensions that influence the transfer of knowledge and technologies. Most of the factors are in one way or another linked to the dimensions of proximity, mentioned by the researchers of industrial learning.

An empirical research of industrial learning in Lithuanian furniture sector companies has indicated that qualitative development of local enterprises started to accelerate after they started co-operating with advanced companies of Baltic Sea region and after joining their value chains. Most of activities in companies of Lithuanian furniture industrial sector have changed.

Therefore, on the basis of analysis of industrial learning in Lithuanian furniture sector companies, operating in the Baltic Sea region value chains it can be assumed that after starting to co-operate with advanced companies of the abovementioned region, other companies, belonging to various industries also could grow in quality, after evaluating and analyzing possibilities of industrial learning in a certain industry.

In the case of Lithuanian furniture industry one can conclude that both the lead foreign firms (e.g. IKEA) and their Lithuanian partners admit the presence of generally favourable conditions for the industrial learning on national and sectoral levels. The most favourable aspects to industrial learning are similarity of mental models, previous experience in knowledge and technology transfer and cultural proximity. The main obstacles for industrial learning are the lack of experience in knowledge transfer, tense relations between the business partners, lack of absorptive capacity on behalf of the Lithuanian partner and low level of trust.

In the future, if one seeks to analyze industrial learning in companies of different industrial sectors in more detail it would be useful to try unfold not only contributing factors, but also the process of industrial learning. Nevertheless, if a researcher chooses this kind of research, he should be well familiar with the interior specifics of a sector he analyzes. He also must have a possibility to observe the whole process of industrial learning from its initial stage to the end.

References

1. Puidokas M., Jucevičius G. (2009). Prielaidos tarptautiniam industriniam mokymuisi: Pietryčių Azijos patirtis Baltijos jūros regionui. *Ekonomika ir vadyba*, 2009.14, ISSN 1822-6515.
2. Almeida, P. & Kogut, B. (1999). The geographical localization of ideas and the mobility of patent holders. *Management Science,* July, 955-967.
3. Almeida, P., Wu, G., Song, J. (2003) „Mobility of Engineers and International Knowledge Transfer: Technological Catching-Up in the Korean and Taiwanese Semiconductor Industries, Discussion Paper No. 9, APEC Study Center, Columbia Business School; April.

4. Antonelli, C. (2000). Restructuring and innovation in long-term regional change. in: Clark, F. & Gertler M. 2000: 395-410.
5. Arregle, J.-L., Hebert, L., Beamish, P.W. (2006) "Mode of international entry: the advantages of multilevel methods", *Management International Review,* Nov. 1.
6. Boschma, R. (2005). Proximity and innovation: A critical assessment. In Regional Studies Vol. 39, No. 1: 61-74.
7. Branstetter, L. G. (2001). Are knowledge spillovers international or intranational in scope?: Microeconometric evidence from the U.S. and Japan. *Journal of International Economics Volume 53, Issue 1,* February, pp. 53-79.
8. CanaiÎls, M.C.J. & Romijn, H.A. (2004). Exploring the firm-level foundations of regional dynamism. In Karlssson, C., Flensburg, P. & Hˆrte, S.-A. (eds.) *Knowledge Spillovers and Knowledge Management* (pp.65-93). Edward Elgar Publishing, Northampton.
9. Cantner U., Pyka, A. (1998). Absorbing Technological Spillovers: Simulations in an Evolutionary Framework. *Industrial and Corporate Change*, Vol. 7, No.2, Oxford University Press.
10. Cheng, Y.-M. (2006). "Determinants of FDI Mode Choice: Acquisition, Brownfield, and Greenfield Entry in Foreign Markets", *Canadian Journal of Administrative Sciences,* Sept.1.
11. Cornford, J. Naylor, R. & Driver, S. (2000) New Media and regional development: The case of the UK computer and video games industry. in: Giunta, L. & Pike 2000: 59-108.
12. Dangelico, R.M., Garavelli, A.C., Petruzzelli, A.M. (2007). A System Dynamics Model to Analize Technology Districts' Evolution in a Knowledge-based Perspective. Regional Studies Association, UK. Checked on 2008-12-20 [http://www.regional-studies-assoc.ac.uk/events/lisbon07/papers/Dangelico.pdf]
13. Freel, Mark S. (2003) Sectoral patterns of small firm innovation, networking and proximity. in: Research Policy Vol.32, No.5 : 751-770.
14. Greunz, L. (2004). Interregional knowledge spillovers in Europe. In Karlssson, C., Flensburg, P. & Hˆrte, S.-A. (eds.) *Knowledge Spillovers and Knowledge Management* (pp.110-142). Edward Elgar Publishing, Northampton, 2004.
15. Hobday, M. 1995. East Asian latecomer firms: Learning the technology of electronics, *World Development*, 23 (7): 1171-1193.
16. Hoekman, B.M., Maskus, K.E., Saggi, K. (2004). Transfer of Technology to Developing Countries: Unilateral and Multilateral Policy Options. Research Program on Political and Economic Change, *Working Paper PEC2004-0003*, University of Colorado. Checked on 2009-01-15 [http://www.colorado.edu/ibs/pubs/pec/pec2004-0003.pdf]
17. Kasahara S. (2004): The Flying Geese Paradigm: A Critical study of Its Application to East Asian Regional Development, United Nations Conference on Trade and Development, Discussion Paper # 169, April.
18. Kim, L.S. (1997). *Imitation to Innovation: The dynamics of Korea's Technological Learning*. Harward Business School Press: Cambridge, MA.
19. Kimura, F. & Mitsuyo, A. (2003) "Fragmentation and Agglomeration Matter: Japanese Multinationals in Latin America and East Asia." *North American Journal of Economics and Finance* Vol. 14 (3) pp. 287-317.
20. Koschatzky, K. & Zenker, A. (2002). Networking of small firms: Is the region a knowledge source for innovation? in: Sch‰tzl, L. & Revilla D. 2002: 174-198.
21. Kojima, K. (2000) The 'flying geese' model of Asian economic development: origin, theoretical extensions, and regional policy implications, *Journal of Asian Economics*, Vol. 11, pp.375–401.
22. Lang, W. (2005). Knowledge Spillovers in different Dimensions of Proximity; University of Bremen, Institute Labour and Economy; *Presented at the Regional Studies Association International Conference "Regional Growth Agendas", May, Aalborg.*
23. Markusen, A. (2000). Transforming regional economies: The roles of economic structure, development activism and regional cultures. in: Giunta, Lagendijk & Pike 2000: 23-33.
24. Mathews, J. A. & Cho, D. (2000). Tiger Technology: The creation of a semiconductor industry in East Asia. Cambridge University Press.
25. Mathews, J. A. (2003). Competitive dynamics and economic learning: An extended resource-based view; *Industrial and Corporate Change, Volume 12, Number 1,* pp 115 – 145.†
26. Mathews, J. A. (2004). Understanding the 'how-to' of Technological Change in Fast-growing Economies: The Case of Electronics in Taiwan, Report prepared for the World Bank.
27. Mathews, J. A. (2005). „The intellectual roots of latecomer industrial development"; *Int. J. Technology and Globalisation, Vol. 1, Nos. 3/4, 2005.*
28. Mathews, J. A. (2006). "Catch-up Strategies and the Latecomer Effect in Industrial Development"; New Political Economy, Vol. 11, No. 3, September 2006.
29. Nonaka, I. Teece, D.J. (eds.) (2001). Managing industrial knowledge: creation, transfer and utilization. SAGE Publications Ltd.
30. Olsson, O. (2004). Reference-dependent utility in an industrial cluster. In Karlssson, C., Flensburg, P. & Hˆrte, S.-A. (eds.) *Knowledge Spillovers and Knowledge Management* (pp.268-282). Edward Elgar Publishing, Northampton.
31. Ozawa, T. (2001). "The `hidden' side of the `flying- geese' catch-up model: Japan's dirigiste institutional setup and a deepening financial morass," *Journal of Asian Economics*, 12, 471-491.
32. Ozawa, T. (2003). Pax Americana-led macro-clustering and flying geese-style catch-up in East Asia: Mechanisms of regionalized endogenous growth', *Journal of Asian Economics*, Vol. 13, No. 6, pp.699–713.
33. Ozawa, T. (2005): Institutions, Industrial Upgrading, and Economic Performance in Japan – The 'Flying-Geese Paradigm of Catch-up Growth. Northampton, Massachusetts: Edward Elgar Publishing.
34. Ozawa, T. (2004) „Structural Transformation, Flying-Geese Style and Industrial Clusters: Theoretical Implications of Japan's Postwar Experience", Feb. 29.
35. Porter, M.E. (1990). The Competitive Advantage of Nations, Free Press, New York.
36. Porter, M.E. (1998) Cluster and Competition: New Agendas for Companies, Governments, and Institutions, on Competition, Harvard Business School Press, Boston, MA.
37. Savvides, A., Zachariadis, M. (2002). International Technology Diffusion and Growth in the Manufacturing Sector of Developing Economies. Checked on 2008-12-20 [http://www.bus.lsu.edu/economics/papers/pap02_20.pdf]
38. Stiglitz, J. (1987). Learning to learn, localized learning and technological progress. In Dasgupta, P. & Stoneman, P. (eds) *Economic Policy and Technological Performance*. Cambridge University Press: Cambridge.
39. Storper, M. (1998). Industrial policy for latecomers: products, conventions, and learning. In Storper, M. Thomadakis S.B., Tsipouri L.J. (eds.) Latecomers in the global economy (pp.). London: Routledge.
40. Tˆdtling, F. & Kaufmann, A. (1999). Innovation systems in regions of Europe - A comparative perspective, in: European Planning Studies Vol. 7, Nr. 6: 699-717.
41. Torre, A & Rallet, A. (2005). Proximity and localization. in: Regional Studies Vol. 39, No. 1: 49-50.
42. Tybout J.R. (2000). Manufacturing Firms in Developing Countries: How Well Do They Do and Why? *Journal of Economic Literature*, Vol. XXXVIII.

Mindaugas Puidokas , Giedrius Jucevičius

Industrinio mokymosi įvertinimas Baltijos jūros regiono vertės kūrimo grandinėse

Santrauka

Šio straipsnio tikslas - pateikti metodologiją tarporganizaciniam industriniam mokymuisi įvertinti ir patikrinti ją specifinėse Baltijos jūros regiono pramonės šakose.

Industrinis mokymasis apima vertingų technologinių ir vadybinių žinių perkėlimą ir sklaidą tarp organizacijų vertės kūrimo grandinėje, įgalinant žinių gavėją pereiti prie aukštesnę pridėtinę vertę generuojančių veiklų. Industrinio mokymosi reiškinys sėkmingai paaiškina Pietryčių Azijos šalių ir jų įmonių ekonominio vystymosi procesus, kai per sąlyginai trumpą laiką buvo pasiektas aukštesnis atskirų industrijų išsivystymo lygis, pasinaudojant sėkmingu žinių ir technologijų perkėlimu tarp įmonių, veikiančių skirtingose tos pačios vertės kūrimo grandinės grandyse.

Straipsnyje naudojamas mokslinės literatūros analizės metodas ir struktūruotas giluminis interviu su baldų sektoriaus įmonių vadovais. Tyrimo metodologija yra sudaryta, remiantis autorių (Puidokas, Jucevičius, 2009) suformuotu industrinio mokymosi modeliu, struktūrizuojančiu esminius veiksnius ir prielaidas, įgalinančius industrinį mokymą tarp organizacijų. Modelis apima geografinio, technologinio, elgsenos ir kognityvinio artumo tarp žinių perdavėjo ir gavėjo dimensijas (Lang, 2005). Straipsnyje naudojamas mokslinės literatūros analizės metodas ir pusiau struktūruotas interviu su baldų sektoriaus įmonių vadovais.

Straipsnyje yra pateikiami giluminio struktūruoto interviu su baldų sektoriaus ekspertais duomenys. Industrinio mokymosi įvertinimo metodika yra išbandoma baldų gamybos sektoriuje, kurį sudarančios Lietuvos įmonės palaiko glaudžius ryšius su Skandinavijos ir Vokietijos multinacionalinėmis kompanijomis. Tarp jų vyksta aktyvūs industrinio mokymosi procesai, kurių buvimą patvirtina gauti empiriniai įrodymai.

Tyrimas parodė, kad intensyviausiai baldų sektoriaus įmonių industrinio mokymosi procesai vyksta: 1) gamybos procese, ypač gamybos tolygaus subalansavimo ir apkrovimo srityje; 2) įmonių infrastruktūros veiklose, tokiose kaip kokybės užtikrinimo sistemos tobulinimas; 3) įmonių technologinio vystymosi veiklose, ypač naujų gamybos bei veiklos metodų diegime ir procesų automatizavime. Pastebėti šie esminiai įmonių industrinį mokymąsi skatinantys veiksniai: 1) abipusis partnerių noras palaikyti ilgalaikius santykius; 2) aukštas partnerių pasitikėjimo lygis; 3) šalies įmonių noras ir pasirengimas tikslingai perimti žinias ir/ar technologijas; 4) užsienio partnerių motyvacija perkelti žinias ir/ar technologijas; 5) prognozuojamas užsienio partnerių elgesys.

Raktiniai žodžiai: industrinis mokymasis, vėluojančios šalys, industrinis pasivijimas, žinių perkėlimas.

About the authors

Mindaugas Puidokas, Ph.D. student, Kaunas University of Technology, Business Strategy Institute, e-mail: mindaugas.puidokas@ktu.lt, tel.: +370 37 300120. Research interests: international relations, comparative international management, geopolitics, clusters, interorganizational relations and learning.

Giedrius Jucevičius, Assoc.Prof., Kaunas University of Technology, Business Strategy Institute, e-mail: giedrius.jucevicius@ktu.lt, tel.: +370 37 300120.

Research interests: innovation studies, comparative international management, inteorganizational relations and learning.

STRUCTURE OF MODERNISATION OF PUBLIC GOVERNANCE

Alvydas Raipa[1], Eugenijus Skietrys[2], Inesa Voroncuk[3]

[1,2]*Kaunas University of Technology, Lithuania, [3]University of Latvia, Latvia.*

Abstract

The governance structure has long history and has been shaped by society's ideological values and consists by a lot of public governance elements. The concepts of public management and public governance are not mutually incompatible. Nevertheless, not all practices of public management are part of public governance, and not all features of public governance are in public management structure. The authors suggest and believe that public management and public governance has different dimensions and is separated, but analysis of modern scientific works of last years showed that public government and public governance in the start of XXI century are closely interconnected. Public governance may be defined as all processes, organizations and individuals associated with carrying out law and other rules adapted or issued by legislatures, executive's and courts. Societal changes have both direct and indirect impact to public sector modernization.

Introduction

Democratic governance modernization presumes equality, citizen's participation, accountability. Major dimensions of modern democratic governance include administrative effectiveness, public participation, private-public partnership, moderns assessment models, strategic planning, programming and other parts dimensions of modernization is new public service.

The main aim of article is to analyze the structure of public governance modernization in the period of transformation from Public Management to Public Governance.

The object of analyzing is Modernization Structure of Public Governance.

The main tasks of article are:

- to analyze theoretical-methodological aspects of public sector modernization,
- carry out analysis structure of modernization of public governance,
- to describe further dimensions of democratic modernization using forecasting methods and procedures.

The research methods are: theoretical modeling, comparative analysis, forecasting.

The theoretical-historical aspects of modernisation of public governance

Some authors (Lane, 2001) believe the modernisation of public governance to have started in the sixties of the 20th century, as the so called period of public sector reform became active, when the efficiency of work of the public institutions was considered to be an object of reform with the three basic objectives – efficiency, equality economy, and that called for new models of public policy, practical application and theoretical substantiation of methods and processes.

The sixties, related to the "new public administration" paradigm, which changed the practices and theoretical models of public administration, present since the end of 19th century, which in turn were based on the Wilson-Webber concepts and they were more oriented towards the creation and strengthening of bureaucratic structures, models, hierarchical governance systems, than the results of work and the conditions of their pursuit – democratic environment of governance, citizen involvement into governance, etc.

Some well known theoreticians claim that the end of the sixties is related to the start of development of post-modern theories of social sciences, which had the well known work of S. Kuhn "The Structure of Scientific Revolution" (1970) and the work of P. Berger and T. Luckman "The Social Construction of Reality" (1967) (Fredericson, Smith, 2003) as their fundamental ideological groundwork. M. Harmon claims that public administration as a field of social sciences and a social practice and paradigm is composed of certain knowledge and values has a single goal – modernisation of administration practice. For that, public administration has to develop and integrate the basic notions of the epistemological theory and the descriptive and normative theories, and to relate the descriptive and explanation methods to practice (Fredericson, Smith, 2003).

The phenomenological nature of the public administration theory seeks to define the possibility of interpretation of activities in the public sector, to determine the effect on the circumstances present in the public sector and the role of collective actions (principals of team activities) (Harmon, Mayer, 1986).

Even though the beginning of the contemporary modernisation process of public administration is considered to be the sixties of the 20th century, the foundations for the modernisation were laid at the end of the 19th century-beginning of the 20th century, when public administration (initially as a general concept of administration) was beginning to separate from the scientific management. Special merits belong to probably the best known sociologist of the 20th century M. Weber, who connected the postulates of the distributed bureaucratic theory into a coherent system of the so called classical bureaucracy still in the beginning of the 20th century (Shafritz, Hyde, 1992).

During this period, L. Gullick and L. Urvick formulated the classical abbreviation of public administration – POSDCORB, which lists the essential functional elements of public administration – planning, organizing,

staffing, directing, coordinating, reporting, budgeting (Shafritz, Ott, 1992).

It is interesting to note that beside the other theoreticians of public administration, well known scientists of the end of the 20th century M. Harmon and R. Mayer mention V. Graičiūnas, who described the structure of public sector organizations, their internal connections and social elements of organizational environment, together with J. Hunderson, E. Mayo, H. Fayol, etc., (Harmon, Mayer, 1986).

Regardless certain authors (Arimavičiūtė, 2005) claiming that the especially important modernisation trend and method of increasing efficiency in the public sector – strategic planning has gained its present form and significance in the sixties of the last century as well, it is safe to say that most of the theoreticians who study the public sector see the beginning of strategic planning of public administration as early as in the middle of the thirties of the 20th century, as a forming theoretical doctrine and practical means, foremost as means to overcome the great depression.

The public programmes and projects, strategic budgeting based on programmes, as means of modernisation can also be related with the practice of USA emerging from the economic crisis of the thirties of the 20th century. Finishing the historical-theoretical analysis of public administration it is necessary to note the input of the well known theoretician H. Simon into probably the most important field of public administration – the research of decision-making and their implementation in the aspect of organisational behaviour and decision psychology (Simon, 2003).

Out of the theoreticians of the end of the 20th century, which had their works become the basis for the public sector modernisation methodology, W. Dunn, W. Parsons, J. M. Bryson, G. Fredericson, R. Denhardt, D. Osborne, T. Gaebler, Ch. Hood, M. Harmon, G. Thomason and others can be distinguished for basically summarizing the "good practice" and purifying the "new public management" paradigm, which became the predominant doctrine of public governance since the end of the eighties of the previous century, by directly combining the development and implementation of public programmes and projects as an interaction of the public policy and public administration. They were creative in developing the principle of dichotomy of politics and administration, formulated by F. Goodnow in 1900 (Shafritz, Hyde, 1992).

The efforts of public sector of the modern countries (USA, Great Britain, New Zealand, etc.) in the last decade of the previous century were being consolidated by sophisticating and reforming the functional activities of public organisations, by improving productivity of strategic innovations, modernising various forms of management and control (management of contracts and public acquisitions, partnership of the public and private sectors, application of market relations and principals in the public sector, new possibilities for democratisation of privatisation and governing, as well as citizen participation). At this stage especially important theoretical generalisations were made by B. Guy Peters, D. Kettl, Ch. Pollitt, G. Bouckaert, T. Bovaird, E. Lofler, Terry L., etc. Their works analyse the problem of

modernisation of public governance mostly as a condition for the improving the efficiency of the public sector.

Various methods and technologies can be employed for increasing the efficiency of the public sector, which have an essential goal of modernisation of governance, i. e. modernising the constituents of efficiency in the public sector, which are respective changes in the work process, behaviour of the employees and the management process (Rosen, 1992). The modern-day authors who analyse modernisation of governance (Blum, 2009), address the influence of the global environment, changes in the government structures, stress the role of control of activities and both models and methods of evaluation in modernisation of the public sector, and emphasize pursuit of citizen activity, their initiatives and trust in the new forms of governance, in modernisation of the public sector. In order to perform a permanent and complex modernisation of the public governance as a course of specific reforms, it is necessary to understand it as a whole of necessary means, methods and procedures.

The modern structure of modernisation of public governance

The propositions of the "new public management" remain the ideological foundation for modernisation of public governance in the modern space of global environment, which call for general changes in activities of public sector organizations (Bovaird, Loffler).

One of the most important conditions for implementing the modernisation trends of public sector governance modernisation is a consistent strategy for public sector modernisation. The following components and stages of the public sector strategy can by identified on the theoretical level:

1. first, "global" strategy should be discerned from partial strategies,
2. internal and external factors of the strategy should be specified,
3. modernisation strategy of several stages should be prepared,
4. public governance can be modernised according to a "strict" strategy, based on specific aspects of organisational structure and finances, control systems or according to a "mild" strategy, more founded on cultural and staff views and aspects,
5. the modernisation strategies can be based on "activities" or correction,
6. the modernisation strategies can be named as "political", "economical", "social", etc.,
7. the modernisation strategy is defined by the micro, meso and macro levels of public systems and organisations (Klagen, Haubener, 1995).

When analysing the modernisation structure it can be said that the basic means of modernisation are permanent public governance reforms in all fields of public governance, with the aim of economy of government spending, improvement of quality of public services, encouragement of efficiency of government activities, increasing of possibilities to make the public policy which is formed and being implemented as an integral part of public governance efficient, to make the governing of mutual dependability of public

organisations, or in other terms the internal connections of the organisations and their interaction, possible (Pollitt, Bouckaert, 2003).

An especially important place in the modernisation structure is committed to improvement of organisational culture and behaviour, planning of changes in organisational culture, their implementation, elimination of resistance to change and evaluation of changes in the organisational culture of public governance. Under the conditions of the current global crisis we feel an increasing resistance towards change of organisational behaviour and culture, and to overcome it new forms of motivation and communication, improvement of activities of informational systems, citizen information on the planned and implemented changes, direct involvement of members of the organisation into the management of changes, are required (Aleknienė, Diskienė, Marčinskas, 2006).

Another social condition for successful modernisation is related to sociality education and citizen involvement in formation and implementation of a modern public policy. Even having the full legitimacy right, the government institutions of a democratic society must react to the needs and expectations of the community. The principles of organisation of modern democratic governance encourage direct involvement of citizens in deciding conflicts between citizen groups and interests, moderating the positions of often contradictory positions of the government and citizen organisations, therefore theoreticians and practicians stress the need to introduce a systematic monitoring of governing institutions from the standpoint of public interests and views, while at the same time improving the evaluation methods, developing citizen involvement evaluation procedures, which can now be often seen in various modellings of evaluation – evaluation schemes, models, citizen participation maps, etc. (Abelson, Gauvin, 2006).

Even though the so called "victimisation" of citizens often occurs from the side of government structures, it can be proposed that even though the relationship between the government and the citizens seems confrontational, the statement that achievement of positive results of citizen involvement is only possible through opposition to the government institutions is not entirely true. Such tension is not a permanent dimension or an inevitable necessity in the practice of governance modernisation, but only an introduction in seeking problem resolution (Bučinskas, Raipa, 2001).

The interaction between the public and private institutions and structures has an important place in modernisation of public governance. Its rational implementation instead of vertical governing (Raipa, Petrauskienė, 2007) helps in better using the innovative forms, to seek the improvement of living standards of the society, encourages horizontal and vertical connections based on partnership (Raipa, Skietrys, 2009).

One of the main problems with the interaction between the public and the private sectors is the presentations of a better quality end product, modernisation of services and satisfaction of client's (consumer's) needs. This is where the "new public management" theoretical doctrines and practice are oriented. Therefore, both the theoretical and practical concepts of "client oriented government", in which the clients exist as individuals and as collective groups, and on an even more general level, as stakeholders, are interesting and valuable in modernisation of public governance. The main evaluation criterion of a results-oriented modernisation of activities of public institutions is the evaluation of citizen satisfaction with the institutional activities (Civinskas, 2007).

Closely tied with the democratic aspects of modernisation of citizen participation is the principle of decentralisation (of governance, finances, resources, etc.). Decentralisation allows improvement of activities of bureaucratic structures, as well as expansion of potential for the sub-national institutions (various level structures of local bodies of government) by implementing the subsidiarity principle and thus drawing the governance closer to the users of services and goods. Especially important is the trend of fiscal decentralisation, by limiting the fiscal policy of the central government, which in essence includes fiscal, as well as economical and social relationships in the society. Today, around 80 percent of developed countries and slightly less of the developing countries provide the local levels of government increasingly larger power in the distributing taxes and spending, services, distributions of improvement of solutions between the central government and the sub-national institutions of government (Bartide, Benito, 2006). Even though the decentralisation has many critics in the conditions of current economical decline, and certain tendencies to centralise the results of decentralisation, which were developed under the conditions of the "new public management", namely segmentation of market, functioning of the political and managerial networks that are difficult to control, admiration for the pseudo-democratic forms of government, decentralisation is a complex process, which calls for patience from the government institutions and the citizens, however decentralisations remains the basis for democratic governance.

Further modernisation of democratic governance (no country has implemented an absolute model of democracy) can only be performed by well trained, comprehensively educated, competent, innovative staff of the public sector, which has an interest in both personal development and in career, positions and a proper salary. Therefore, the public office models, which were formed by the new public management and which are essentially results-oriented are not entirely satisfactory in modernising the public office (which is a permanent process). Consequently the career models, which prevailed during the last decades of the 20th century (1974 in Great Britain) and in the beginning of the 21st century are effectively modernised into the position model, which is closer to the "new public office" model, advocated by R. Denhardt and other theoreticians of late years, which essentially is humanizing and democratizing, not only oriented towards economical results, but also seeking a broader evaluation of implementation of attitudes of a legal country and democracy in modernisation of the public sector (Smalskys, 2009).

Conclusions

In summary of the changes and the structure of modernisation of public governance, it can be stated that:

1. When acting in a global and systematically changing environment, the public institutions invoke development of modernisation strategies for improvement of efficiency of activities, which in turn allows implementation of new political concerts, governance innovations, implementation of structural and functional changes of the public governance system.

2. The ideological foundation for the modern public governance are still the elements of the "new public management" paradigm, which changed the traditional public administration, oriented towards implementation of bureaucratic attitudes, governance centralisation and other postulates of the Wilson-Weber governance theory of the end of the 20th century. The well known works of S. Kuhn, P. Berger, T. Luckman and others theoreticians and constant modernisation of the governance policy influenced the emergence of the "new public management" as a governance modernisation paradigm.

3. Permanent improvement of functional activities of public organisations as the main component of efficiency of activities of the public sector becomes the main elements of modernisation of public governance in the global environment, together with the necessity for the public organisations to have strategic orientations for modernisations, i. e. to have partial (branch) strategies of modernisation together with the global strategy (of the entire organisation).

4. Improvement of organisational behaviour and organisational culture, implementation of modern forms of sociality and citizen participation in the public sector become the essential elements of strategic perspectives of both types of modernisation. The structure of modernisation of the democratic governance gives importance to partnership of public and private sectors, governance decentralisation by expansion of the role of sub-national institutions and a new consideration of the public office as a function and innovative thinking of government employees as well as ability to implement the "new public office" models.

References

1. Abelson J., Gauvin F. P. Assesing the Impact of Public Participation: Concepts, Evidence and Policy Implications. Canadian Policy Reasearch Neetwork. March. 2006. p. 16-18.
2. Aleknienė A., Diskienė D., Marčinskas A. Viešojo administravimo institucijų kultūros plėtra.- Viešasis administravimas. 2006, 2(10), p. 28-29.
3. Arimavičiūtė M. Viešojo sektoriaus institucijų strateginis valdymas. Vilnius, M. Romerio universitetas. 2005. p. 11-12.
4. Bartida F., Benito B. Financial Reports and Decentralization in Municipal Governments.-International Review of Administrative Sciences. 2006. Vol. 72(2), p. 223-238.
5. Blum J., Manding N. Public Management Reforms Across OECD Countries.- Bovaird T. Lofter E. (2009). Public Management and Governance. London. Routledge, p. 41-55.
6. Bovaird T. Loffler E. Public Management and Governance. Second Editon. Londos, Routledge, 2009, p. 5-13.
7. Bučinskas A., Raipa A. Piliečių dalyvavimo ir valdžios institucijų sąveika. Tiltai. 2001, 4. p. 6-7.
8. Civinskas R. Pilietis kaip klientas naujoje viešojoje vadyboje.- Naujoji viešoji vadyba. Ats. red. A. Raipa. Kaunas, Technologija. 2007. p. 212-213.
9. Fredericson H. G., Smith K. B. The Public Administration Theory Primery. Cambridge, Westview Press. 2003. p. 129-130.
10. Goodnow F. J. Politics and Administration.- Shafritz G., Hyde A. Classics of Public Administration. Belmont, Wadsworth. 1992. p. 25-28.
11. Gullick L. Notes on the Theory of Organization.- Shafritz J., Ott I. Classics or Organization Theory. Belmont, Wadsworth Publishing Company. 1992. p. 94.
12. Harmon M. M., Mayer R. I. Organization Theory for Public Administration. Toronto, Little Brown and Company. 1986. p. 127-140.
13. Klagen H., Haubener O. Strategies for Public Sector Modernisation.- Halachmi A., Bouckaert G.. The Enduring Challenges in Public Sector. San Francisko, Jossey Bass Publishers. 1995. p. 353-355.
14. Lane J. E. Viešasis sektorius: sąvokos, modeliai ir požiūriai. Vilnius. Margi raštai. 2001. p. 205-206.
15. Petrauskienė R., Raipa A. Partnerystės principo taikymas įgyvendinant „naująją viešąją vadybą".- Naujoji viešoji vadyba. Ats. red. A. Raipa. Kaunas. Technologija. 2007. p. 245-259.
16. Pollitt Ch., Bouckaert G. Viešojo valdymo reforma. Vilnius, Algarvė. 2003. p. 20-23.
17. Raipa A., Skietrys E. Viešosios ir privačios partnerystės socialinio vertinimo teoriniai aspektai. – Socialinis darbas. M. Romerio universitetas. 2009. 8(1), p. 12-13.
18. Rosen A. Improving Public Sector Productivity. Concept and Practice. London. Sage Publication. 1993. p. 107-108.
19. Simon H. Administracinė elgsena. Vilnius. Knygiai. 2003. p. 19-26.
20. Smalskys V. Viešojo valdymo modernizavimas.- Įvadas į viešąjį valdymą. Ats. red. A. Raipa. Kaunas. Technologija. 2009. p. 26-28.
21. Weber M. Bureaueracy.- Shafritz J. M., Hyde A. C. Classics of Public Administration. Belmont, Wadsworth Publishing Company. 1992. p. 51-56.

Alvydas Raipa, Eugenijus Skietrys, Inesa Voroncuk

Viešojo valdymo modernizavimo struktūra

Santrauka

Viešojo valdymo modernizavimo struktūra turi ilgą istoriją, kurią suformavo visuomenės ideologinės vertybės ir kuri susideda iš daugybės viešojo valdymo elementų. Viešasis valdymas gali buti apibrėžta kaip visuma procesų, organizacijų ir individų besilaikančių teisės normų ir kitų taisyklių, priimtų ir svarstomų įstatymų leidžiamosios ir vykdomosios valdžių bei teismų. Socialiniai pokyčiai daro tiek tiesioginį, tiek netiesioginį poveikį viešojo valdymo modernizavimui. Demokratinio valdymo modernizavimas preziumuoja lygybę, piliečių dalyvavimą, atskaitomybę. Modernaus demokratinio valdymo dimensijos apima: administravimo efektyvumą, viešąjį dalyvavimą, viešąją-privačią partnerystę, modernius vertinimo modelius, strateginį planavimą, programavimą bei kitus viešųjų paslaugų modernizavimo aspektus, kurie transformuoja šiandien naująją viešąją vadybą į naująjį viešąjį valdymą, vis labiau tampantį modernizavimo strategine perspektyva.

About the authors

Alvydas Raipa, prof. dr., Faculty of Social Sciences, Department of Public Administration, Kaunas University of Technology, Lithuania. E-mail.: alvydas.raipa@ktu.lt, tel.: 862077281. Research interests: methodology problems of public governance.

Eugenijus Skietrys, PG, Department of Public Administration, Kaunas University of Technology, Lithuania. E-mail.: eugenijus.skietrys@ktu.lt, tel.: 867777030. Research interests: methodology problems of public governance.

Inesa Voroncuk, Department of Public Administration, Faculty of Economics and Management, University of Latvia., tel. +3712917033. Research interests: methodology problems of public governance.

CONVERGENCE PERSPECTIVES OF GOODS AND SERVICE MARKETING

Jolita Rakickaitė
Kaunas University of Technology, Lithuania

Abstract

Having highlighted the specifics of goods and services characteristics, the peculiarity of goods and services production and consumption processes will be discussed the convergence perspectives of goods and service marketing. For a long time, service marketing was seen as exception in marketing discipline. Separation of goods and service marketing was based on differences of goods and services characteristics, the peculiarity of goods and service production and consumption process. However, goods creation and consumption processes show resemblance to service creation and consumption processes. Four services' characteristics are criticized. These characteristics are not inherent just to services. These characteristics are appropriate to goods too. Validity of separation of goods and service marketing should be reconsidered more.

Introduction

Permanent shift is typical for such applied discipline as marketing. The changes in technological, economical and competition environment determine the shift of marketing activities and purposes. Technological advances (especially progress of information and communication technology) and globalization had determined shifts in the economy, industries, markets, customers' behaviour and so on (Gupta and Thomas, 2005; Lambin, 2007). Under the influence of aforesaid changes the connected knowledge economy, globalizing, converging and consolidating industries, fragmenting and frictionless markets are developing. Customers become more active, connected, informed and demanding (Gupta and Thomas, 2005). Different industries (activities) are more connected than ever before. Connections between industries highlight the approach between goods and services. Naturally, that marketing activity is influenced by the changes in the market.

For many a long day being dominated transaction marketing was changed by relationship marketing. Transaction marketing is said to be oriented towards product features with low service emphasis, and involves moderate customer contact and limited customer commitment. In contrast, relationship marketing emphasizes product benefits with high service, customer contact, and customer commitment (Brodie and Coviello, 2001). Various other forms of marketing were built up. Separate directions of goods (transaction) and services (relationship) marketing has formed in connection with different characteristics of goods and services. It was of the opinion that the goods' production and consumption processes are absolutely different from the services' production and consumption processes. It was taken the view that goods and services are distinct by processes and characteristics. Is it really true? How much are the goods and services distinct? What are the possibilities of goods and service marketing convergence?

The aim of paper – discuss the convergence perspectives of goods' and services' marketing.

The method of research is the comparative analysis of scientific literature.

Goods' and services' production and consumption processes

Edvardsson et al. (2005) maintained that service experts mentioned performance, processes and deeds as key words defining services. Gronroos (2006) maintains that the only aspect of services that clearly distinguishes them from physical goods is their process nature.

Services emerge in "open" processes where the customers participate as co-producers and hence can be directly influenced by the progress of these processes. Production and consumption of services passes at the same time. It means that service supplier takes part in service consumption process partly. Customers are involved in the service production process (Lovelock and Wright, 1998). Traditionally, physical goods are produced in "closed" production processes where the customer only perceives the goods as outcomes of the process. Consumption is a black box for the goods' marketers. They do not know what the customer is doing with the goods (Gronroos, 2006). The process nature and the fact that customers consume the service while it is produced and hence are involved in the service production process – have had a profound impact on the concepts and models of service marketing (Gronroos, 2006).

However, customers don't want to consume made-up goods more. They strive to participate actively in goods' production with producer and increase the value. These processes are apparent in the industry's expositions. Enterprises exhibit they researches' results and development perspectives. Companies don't try to attract customers' attention to the goods of present-day. Customers want to intercept suppliers' know-how, support for they activities and involvement in specialized innovation (Gibbert and Golfetto, 2006). The customers take part in production process actively. It means that at the beginning of contacts producers as service providers supply a promise. Consequently, the evaluation of goods becomes more complicated as it is in the case of most services. Customers have trust in producer's competence to find the best decision and solve their problem. Suppliers are involved into the consumption process too (examples of suppliers' and customers' contacts are

information services, call centres, repair and maintenance services and so on).

Not only the customers but also producers were interested to maintain close contacts with customers. Lambin (2007) was of the opinion that as the market-driven business philosophy is gaining acceptance in industry, many product companies have tried to partner with their customers and other market players to become a solution provider. Solution is a unique combination of products and services components – rather than mere products – that could solve a customer's problem (Lambin, 2007). Solution providing is related to longer contact between enterprise and customer. The solution provider is a business partner that helps customer at every stage (Lambin, 2007). Solution providing discloses relationship perspective. Obviously "open" process become more apparent for manufacture especially in knowledge-intensive industries. The manufacture enterprises and customers are in the closer contacts than ever before. It's hardly surprising that knowledge of service marketing becomes more and more applicable to goods' marketing.

Management literature is almost unanimous in suggesting to product manufacturers to integrate services into their core product offerings (Kallenberg and Oliva, 2003). Gronroos (2006) underlines that the goods logic tends to ignore the value support of the wide range of elements of the customer contacts and firm–customer interactions. Instead it connects the core value and sometimes all value on offer for customers with the physical product and the price paid for it alone (Gronroos, 2006). However, not just good itself, but many other elements (delivery at door, repair and maintenance and so on) influence the consumption process and create value for customer. When exchange is considered the central concept in marketing, the value for customers has inevitably to be embedded in what is exchanged, in other worlds, in the product itself (Gronroos, 2006). Lusch and Vargo (2004, 14) emphasize that the goods-dominant logic focused on tangible resources, embedded value in transactions should be changed into service-dominant logic. The latter logic is focused on intangible resources, the co-creation of value, and relationships.

Lusch and Vargo (2006) present the shifts from a goods-centred view to a service-centred view. The change of view is a challenge for manufacturers. First, a manufacturer should focus in the process of serving rather than the creation of goods. It means the change in business philosophy. The process of goods production and consumption should be perceived as more "open" than ever before. Also, meaningful shift to the primacy if intangibles rather than tangibles. Equally important a shift to conversation and dialog as opposed to propaganda. The "open" process of goods production and consumption, value co-creation is based on producers' and customers' cooperation. While the cooperation impossible without conversation and dialog. Lusch and Vargo (2006) point an understanding that the firm can only make and follow through on value propositions rather than create or add value. According to a more recent view in the literature of how value for customers emerges, value is created when products, goods or services are used by customers. Before this happens, only potential value exists (Lapierre, 1997; Gronroos, 2006).

Enterprises have to realize that goods haven't whole value inwardly (to be precise potential value), but the part of value is created by additional services, the relationship support with customers and so on. Like in services, informed, networked, empowered, and active consumers are increasingly co-creating value with the firm (Prahalad and Ramaswamy, 2004; Gupta and Thomas, 2005). As Hearn and Pace (2006) state, the enterprises should think about consumers as co-creators of value. Having more knowledge about value creation for a customer producer could accept service-dominant logic easer. A shift in focus to relational rather than transactional exchange mentioned above is concurrent to the service-dominant logic. Lusch and Vargo accepted the service-dominant logic as the future marketing's logic.

Gronroos, Lusch and Vargo, Lambin made a point that customers strive to cooperate with suppliers and suppliers have to come into contact with customers and to co-create value. Cooperation between supplier and customer is matter-of-course in services; however the same processes become more usual in manufacture. Suppliers and customers communicate and discuss instead of pressing supplier's opinion on customer. Relations become essential in exchange process. The object of exchange has more intangible features than ever before. The exchange becomes more social than economical process (Lusch and Vargo, 2004, 14).

For many a long day the objective of marketing was exchange facilitating. Marketing was preoccupied with persuading customers to buy. What happens after the purchase during the consumption process has been outside the scope of marketing (Gronroos, 2006). The customers aim to participate in production process and communicate with producer during consumption shifts the objectives of goods' marketing. Therefore, goods' marketers should be interested in relationships management, customer problem solving and value co-creation. All these aspects are typical for service marketing.

However, not only the processes of goods and service production and consumption become similar. Scientists are criticizing the characteristics of services intensively. Their state the same characteristics are appropriate for goods too.

Are the goods and services really different?

Gummesson and Lovelock (2004), Lusch and Vargo (2004, 14) criticize an accepted paradigm of service marketing; the assertion that four specific characteristics — intangibility, heterogeneity, inseparability, and perishability — make services uniquely different from goods.

According to Gummesson and Lovelock (2004), intangibility is associated with prepurchase activities where customers have no prior experience with the service — a situation that is equally valid for some goods (for example, goods under individual order). Many services involve tangible performance activities that customers experience during delivery through one or more of their five senses (services such as surgery, haircuts, health clubs, cleaning). The customers' key goals are to obtain tangible changes in themselves or their

possessions. Gummesson and Lovelock (2004) conclude that intangibility is not a universally applicable characteristic of all services during all stages from prepurchase through delivery, consumption, and output. According to Lusch and Vargo (2004) all goods have a service component and essentially all services have some form of tangible representation. Obviously intangibility is not appropriate characteristic only for services. Intangibility is inherent for physical goods too.

Heterogeneity is an inherent characteristic of labour-intensive services, but no consensus is variability appropriate for machine-intensive service operations (Gummesson and Lovelock, 2004). In Lusch and Vargo (2004) opinion, human factor is significant not only in service supplying, but also in production of physical goods. Are the tangible goods more homogeneous than services? Human factor is common and not different characteristic of goods and services. As Gummesson and Lovelock (2004) state, that in manufacturing industries, despite efforts to improve physical product quality, variability is evidenced by consumer complaint data, product recalls, and negative product evaluations from testing organizations. Variability also remains an ongoing problem for food and other products subject to rapid physical deterioration (Gummesson and Lovelock, 2004). Heterogeneity isn't a distinctive characteristic that could be attributed to all services and goods.

Inseparability of production and consumption is a distinctive characteristic for inseparable services, however, there are far too many separable services (for example, laundering clothes, maintenance on a wide array of equipment and facilities) to justify the generalization that inseparability is a distinctive characteristic of all services (Gummesson and Lovelock, 2004; Lusch and Vargo, 2004, 16).

The characteristic of perish ability is closely linked to the characteristic of tangibility and is intended to imply that because services are not tangible, unlike goods, they can not be produced at one point in time, inventoried, and then sold at a later time when demanded (Lusch and Vargo, 2004, 16). As Lusch and Vargo (2004, 16) maintain, tangible goods are perishable, some of them highly so (for example, food). Gummesson and Lovelock (2004) consider that perishability is a multidimensional concept encompassing productive capacity, the producer's output, the performance experienced by customers, and the output they obtain from the service. Productive capacity is perishable in both manufacturing and service businesses and in both instances is wasted if unused. From the customer's perspective, some service output is durable and may even be irreversible (Gummesson and Lovelock, 2004). The characteristic of perishability has so many exceptions and is suitable to define both physical goods and services.

Gummesson and Lovelock (2004) contend that the claim that services are uniquely different from goods on the four specific characteristics is not supported by the evidence; it was only true for certain types of services, as it was for some goods. As we could expect the claim is even less valid now than when services marketing was in its infancy (Gummesson and Lovelock, 2004). Validity of the four specific characteristics was influenced by the changes in technological, economical and other

environments. Replacement of human inputs by automation and rigorous application of quality improvement procedures have substantially reduced heterogeneity of output in numerous service industries (Gummesson and Lovelock, 2004). The quantity of separable services has greatly expanded. The advances in information technology and telecommunications have made it possible to separate customers and suppliers in both time and space sense. Thus, in the course of time characteristics of physical goods and services converge.

Obviously the accepted four specific characteristics don't distinguish services and physical goods. Goods, like tangible objects, have more and more intangible features. The processes of goods production and consumption become more similar to the production and consumption of services. Services and goods have more common features than differences. This is demonstrating the similarity of services and goods over again. Namely differences between goods and services characteristics were the reason to separate goods and service marketing. Similarities of goods and services could be assumption for search of new suitable marketing logic.

According to Gronroos (2006), the service logic fits best the context of most goods producing businesses today. The demarcation of manufacturing and services is becoming particularly blurred (Fisk et al, 2003). In scientists opinion, the further studies should highlight how enterprises move from defining themselves as manufacturing organizations to defining themselves as "solution providers" that offer products, services or both to meet their customers' needs (Fisk et al, 2003). It is evident that these alterations could be an assumption to integrate goods and service marketing. Gummesson and Lovelock (2004) see the possibility to abandon the field of services marketing and integrate it with general marketing and management. Lusch and Vargo (2004, 16) state that instead of service marketing breaking free from goods marketing, it is all of marketing that needs to break free from the manufacturing-based model of the exchange of output.

It should be noted that goods' marketing couldn't be replaced by service marketing. Marketing as applied discipline should reflect the shifts on goods and services concepts and suggest new suitable marketing logic. However traditional goods' and service marketing will stay relevant for some industries or products.

As scientists noted, value creation is based on intangible resources more and more often (Slater, 1997; Bean and Jr, 2002). As was mentioned above, intangibility is appropriate both goods and services. It seems likely that integrated goods and service marketing to be developed, considering if creation of a product (good or service) is based on intangible resources. Intangible resources consist of immaterial asset and competences (Sekliuckiene, 2006). Competence based on goods and service marketing could be one of the several perspectives of marketing development.

Conclusions

Goods' marketing (transactional marketing) for many a long day has dominated in respect of service marketing. Nowadays goods' marketing becomes less relevant

meanwhile service marketing is applied more frequently. It happens for several reasons.

Firstly, the scope of service economy grows the world over. Existing services are developed and new services emerge. Services are integrated into core product offerings in a manufacture.

Secondly, the processes of goods production and consumption show resemblance to the processes of service production and consumption. Active customers are trying to take part in a goods production process. They contact with manufacturers and try to get more customised product. Suppliers are interested in goods' consumption process and expect a feedback.

Thirdly, four specific characteristics — intangibility, heterogeneity, inseparability and perishability — don't make services uniquely different from goods. These characteristics are appropriate both goods and services.

In prospect goods and service marketing could be integrated, because goods and services have many common features. Exactly the differences between goods and services were the reason to develop service marketing as sub-category of goods' marketing. Marketing couldn't be divided into goods or service marketing more, because the demarcation of manufacturing and services is becoming particularly blurred. Today marketing should be in search of foundation to the new suitable marketing logic.

References

1. Bean, C.J. & Jr, L.R. Marketing's role in the knowledge economy. Journal of Business & Industrial Marketing, Vol. 17, No. 2/3, 2002, p. 204-214.
2. Brodie, R.J. & Coviello, N.E. Contemporary marketing practices of consumer and business-to-business firms: how different are they? Journal of Business & Industrial Marketing, Vol. 16, No. 5, 2001, p. 382-400.
3. Edvardsson, B, Gustafsson, A. & Roos, I. Service portraits in service research: a critical review. International Journal of Service Industry Management, Vol. 16, No. 1, 2005, p. 107-161.
4. Fisk, R.P., Gove, S.J. & John, J. The future of services marketing: forecasts from ten services experts. Journal of Services Marketing, Vol. 17, No. 2, 2003, p. 107-161.
5. Gibbert, M., & Golfetto, F. Marketing competencies and the sources of customer value in business markets. Industrial Marketing Management, Vol. 35, 2006, p. 904-916.
6. Gronroos, Ch. Adopting a service logic for marketing. Marketing Theory, Vol. 6, No. 3, 2006, p. 317-333.
7. Gummesson, E, & Lovelock, Ch. Whither Services marketing? In Search of a New Paradigm and Fresh Perspectives. Journal of Service Research, Vol. 7, No. 1, 2004, p. 20-41.
8. Gupta, R.K. & Thomas, J. Marketing Theory and Practice: Evolving through Turbulent Times. Global Business Review, Vol. 6, No. 1, 2005, p. 95-146.
9. Hearn, G. & Pace, C. Value-creating ecologies: understanding next generation business systems. Vol. 8, No. 1, 2006, p. 55-65.
10. Kallenberg, R. & Oliva, R. Managing the transition from products to services. International Journal of Service Industry management. Vol. 14, No. 2, 2003, p.160-172.
11. Lambin, J-J., Chumpitaz, R. & Schuiling, I. Market-driven management: strategic and operational marketing. Basingstoke: Palgrave Macmillan, 2007. 477 p.
12. Lapierre, J. What does value mean in business-to-business professional services? International Journal of Service Industry Management, Vol. 8, No. 5, 1997, p. 377-397.
13. Lovelock, Ch. & Wright, L. Principles of service marketing and management. Upper Saddle River, N.J.: Prentice-Hall, 2002, p. 414.
14. Lusch, R.F. & Vargo, S.L. Evolving to a New Dominant Logic for Marketing. Journal of Marketing, Vol. 68, 2004, p. 1-17.
15. Lusch, R.F. & Vargo, S.L. Marketing as Service-Exchange: Taking a Leadership Role in Global Marketing Management. Organizational Dynamics, Vol. 35, No. 3, 2006, p. 264-278.
16. Lusch, R.F. & Vargo, S.L. The Four Service Marketing Myths: Remnants of a Goods-Based, Manufacturing Model. Journal of Service Research, Vol. 6, No. 4, 2004, p. 324-335.
17. Prahalad, C.K. & Ramaswamy, V. Co-creation Experiences: The Next Practice in Value Creation. Journal of Interactive Marketing, Vol. 18, No. 3, 2004, p. 5-14.
18. Sekliuckiene, J. Organizacijos išteklių įveiklinimo siekiant konkurencinio pranašumo modelis: daktaro disertacija: socialiniai mokslai, vadyba ir administravimas (03S). Kauno technologijos universitetas, 2006, p. 160.
19. Slater, S.F. Developing a Customer Value-Based Theory of the Firm. Journal of Academy of Marketing Science, Vol. 25, No. 2, 1997, p. 162-167.

Jolita Rakickaitė

Prekių ir paslaugų marketingo susiliejimo perspektyvos

Santrauka

Šiame spraipsnyje, remiantis prekių ir paslaugų savybėmis, jų kūrimo ir vartojimo proceso ypatumais, bus aptartos prekių ir paslaugų marketingo susiliejimo perspektyvos. Ilgą laiką, į paslaugų marketingą buvo žiūrima kaip į išimtį marketingo disciplinoje. Prekių ir paslaugų savybės, prekių ir paslaugų kūrimo bei vartojimo proceso skirtumai lėmė paslaugų marketingo atsiskyrimą nuo prekių marketingo.Tačiau, prekių ir paslaugų kūrimo ir vartojimo procesai panašėja. Paslaugoms būdingos keturios savybės yra itin kritikuojamos, nes šios savybės nėra būdingos tik paslaugoms, šiomis savybėmis pasižymi ir prekės. Reikia iš naujo persvartyti prekių ir paslaugų marketingo atskyrimo pagrįstumą ir ieškoti galimybių kurti integruotą prekių ir paslaugų marketingą.

About the author

Jolita Rakickaitė, PhD student, Kaunas university of technology, Department of strategic management, jolita.rakickaite@ktu.lt, 837300104, professional service marketing.

HIGHER SCHOOL STUDENTS APPROACH TO INTERNAL MIGRATION: PRACTICAL ASPECT

Aušra Repečkienė, Renata Žvirelienė, Nida Kvedaraitė
Kaunas University of Technology, Lithuania

Abstract

The article introduces theoretical migration aspects and research data on empirical internal migration attitude of higher-school students. Empirical part reveals research target group's (Panevezys city higher-school students of fourth course) preferences to internal migration: students' intentions to stay for work in Panevezys city and/or region; students intention to leave Panevezys city and/or region for work. Using factorial research analysis reasons due to internal migration (cultural, political, economical, professional, personal and family) were identified.

Keywords

Students, higher school, migration, internal migration, attitudes, causes.

Introduction

Social, economical, political and cultural characteristics, working environment and personal factors in a native country determine person's decision to migrate, which is mainly influenced by person's education, professional qualification and skills, and also opportunities of international mobility. All these points determine a discussion of researchers and practitioners, who are trying to get answers to such questions, as: Does a well-educated and highly professionally competent person more often tend to change his working and living environment? Does the loss of such persons internationally determine country's political-economical-social compatibility?

Lithuanian researchers, together with practitioners, pay considerable amount of attention for migration analysis and research: brain drain was studied and its main "drain" reasons were set in the country, suggestions were offered to solve the problem (Jucevičienė *et al.*, 2004; Mockaitis & Šalčiuvienė, 2005; Kazlauskienė & Rinkevičius, 2006; Aidis *et al.*, 2006; Merkys *et al.*, 2006; Glinskienė & Petuškienė, 2009; Čekanavičius & Kasnauskienė, 2009).

Not only emigration of young Lithuanians but also migration in the country causes great concern. They migrate from peripheral region centres to bigger towns, most of them due to economic reasons, or because they are not valued as specialists locally. The data registered by Statistics Department reflect only quantitative characteristics of external migration; however, no registered information regarding the reasons of their behaviour, motivation, attitude or plans connected with migration is noticed. Youth internal migration gets less and less attention; its reasons are not identified according to age, education, speciality or working activity area. Besides, internal migration has activated lately and it conditions depopulation of certain areas of the country, reducing regional potential and compatibility. Such regions are forced to compete for qualified work force with bigger towns of the country.

Having evaluated all a **scientific problem** comes up: what reasons condition higher school students' internal migration.

In the scientific context internal migration of qualified specialists, higher school staff as well as academic youth is seen as a complicated and complex problem. Besides, internal migration of higher school students is hardly ever analysed in the research field of Lithuania, so as the **research object** higher school students have been chosen. In order to evaluate their point-of-view toward internal migration and its reasons the research has been conducted regarding Panevezys higher school students' opinion.

The **research aims** at identification of reasons causing Panevezys higher school students to migrate inside the country.

The **research methods** used are: non-fiction analysis, questionnaire, statistic data analysis.

Theoretical migration process aspects

Migration is a dynamic phenomenon, which can be considered from different perspectives of scientific research, its situation today being far more complex so its effects have been attracting a significant and growing attention of scientists. The nature of migration process and its flows are interpreted using various theories (neoclassical economics, two labour markets, world systems, etc.) and different levels (individual, country, and global); besides, various forces are influencing migration process (Massey, 1993). Driven by a multitude of possible reasons, migrants may move temporarily or permanently, transnationally and nationally, individually or in groups, return to their countries of origin or migrate to another country, or move between two or more countries in a circular way or migrate within a country.

L. Čekanavičius, G. Kasnauskienė (2009) cited negative impacts of emigration as: depletion of country's human capital assets which leads to lower productivity and retarded development; smaller tax base; loss of return on investment in education; larger poverty and inequality in donor country. Y. Weiss, R.M. Sauer, M. Gotlibovski (2004) research results imply that, on average, immigrants can expect lifetime earnings to fall short of the lifetime earnings of comparable natives. M. Leon Ledesma, M. Piracha (2004) show that the impact of remittances on unemployment depends on its effect on productivity growth and investment. Thus, factors (economic, political, demographic, social, psychological,

etc.) influence a person's decision to migrate is differently important to each individual and change in time. Most surveys showed that in work force migration economical factors are of greatest influence. Otherwise Kimberly M. Oman, R. Moulds, K. Usher (2009) research results indicated that decisions to leave the country (or public /private sector) are complex, with concerns about political instability and family welfare also working conditions.

A. White (2007) concludes that today labour migration is the most significant type of internal migration. Most migrants move from the provinces into a capital of country due several times higher wages. This often implies the temporary labour migration individuals from small-town and rural households. Besides, successful migration of students is still highly dependent on personal connections (A. White, 2009).

According to J. Scheurle, R. Seydel (2000) students' migration is related to the size of the market, and to psychological effects. O. Duke-Williams (2009) students' migration within country has associated with major migration flows into and out of studentified parts of cities. International education also named as an important channel of labour migration for students which have different qualifications, interests, and motivations for migrating (G. Liu-Farrer, 2009). Findings by Y. K. Kodrzycki (2001) shows that majority of moves are made to states with stronger economies or more attractive characteristics, as measured by such factors as higher employment growth, lower unemployment, higher pay, lower housing costs, or better amenities.

Up-to-dating the topic in Lithuania a few researchers (Jucevičienė *et al.*, 2004; Mockaitis & Šalčiuvienė, 2005; Aidis *et al.*, 2006; Merkys *et al.*, 2006; Rinkevičius & Kazlauskienė, 2006; Glinskienė & Petuškienė, 2009; Čekanavičius & Kasnauskienė, 2009) relate migration with economic needs and emphasize the influence of different factors, which either push or pull and at the same time form the migration attitudes of contemporary society:

  o political, social-economical (wage level, unemployment, lack of balance between demand and supply of unqualified workforce, social security, small and average business situation) processes;

  o cultural (country's political-cultural-juridical environment, infrastructure) processes;

  o demographic (population and birth rate, able-bodied population, migration of workforce) processes;

  o personal factors (professional improvement, self-realization, career opportunities, relations with family members, marriages to foreigners, material conditions of life).

While analysing migration process one more aspect is raised due to migrating individuals groups. Migration of higher-school students and students as well as information technologies specialists', health care specialists and employees of higher educational institutions (Mockaitis & Šalčiuvienė, 2005; Kazlauskienė & Rinkevičius, 2006; Labanauskas, 2006; Aidis *et al.*, 2006; Merkys *et al.*, 2006; Glinskienė & Petuškienė, 2009; Čekanavičius & Kasnauskienė, 2009) is worded as a complex problem as its extent and

directions are qualitatively or quantitatively tangible because of lack of statistic data and different research methods used. Understanding the causes and effects of migration flows requires a sound and in-depth analysis.

Generalizing theoretical aspects of migration process it could be stated that current migration being highly influenced by political – economical changes in the country, is changing its character, directions and structure. More and more people get involved into migration, especially higher-school students. Its qualitative or quantitative current process evaluation is missing. It would only allow identifying push and pulling factors as well as its determining reasons.

Research methodological provisions. Striving to identify causes, determining higher-school students' internal migration, as a *target group* was selected Kaunas University of Technology (KTU) Panevezys Institute Management and Administration faculty Management and Business Administration speciality students as well as Panevezys College Business and Technological Faculty Management speciality students. The research entirety included 338 students of the fourth studies year, in the research participated 272 students. The research was conducted in the second quarter of 2008

Research aim - to empirically identify causes, determining Panevezys city higher-school students' internal migration.

As a means to implement the aim a research instrument i.e. questionnaire was used. It reflects the following research variable criteria in the context of internal migration:

  o students' intentions to stay for work in Panevezys city and/or region (reasons, determining students intention to stay in Panevezys for work);

  o students' intention to leave Panevezys city and/or region for work (reasons, determining students' intention to leave Panevezys city and/or region; completed activities during planning to leave and desired job and city).

For research results statistic analysis statistic data packet SPSS 16, 0 versions were used. Also *descriptive statistics method* was applied for primary quantitative data processing calculating averages and per cent. *Factorial analysis method* was used to examine research variables intrinsic structure, also the Principal components method was used and *VARIMAX* rotation, *KMO* and *Cronbach a* coefficients applied.

Respondents sociodemographic data indicated that majority of respondents were young women 21-23 years of age, studying in administration studies at Panevezys higher school and residing and working in Panevezys city too.

Panevezys Higher school students attitude to internal migration

Reasons, determining students' preferences to stay for work in Panevezys and/or its region. While research analysis of Panevezys higher-school students attitude to the decision to stay for work in Panevezys and/or its region has showed that majority (74 per cent) of respondents do not intend to leave Panevezys and/or its region for work to other bigger towns and/or their regions, as majority of them (84 per cent) are engaged in

Panevezys labour market. Among those, intending to stay various age groups were identified, however, majority (37 per cent) are between 21 – 23 years of age, meanwhile other respondents in age groups (24 – 26 and 27 - 30) make 24 per cent respectively.

Analysing Panevezys higher-school students attitude regarding their stay to work in Panevezys and/or region and its defining reasons, factorial analysis results revealed that the variable criteria consisted of four dimensions: cultural-political, economical-social, personal reasons, and extended studies. Factorial analysis resulted in the fact that the latter reasons determining students' decision to stay and work in Panevezys and/or region are neither meaningful nor significant enough (cultural-political reasons 29,6 per cent answer dispersion; economical – social 17,1 per cent dispersion; personal reasons - 11,9 answer dispersion; continuous studies – 8,3 per cent answer dispersion). This justifies the analysis relevant KMO coefficient 0,77 (Table 1) confirming reliability. Panevezys city higher-school students attitude regarding their stay to work in Panevezys and/or region and its defining reasons factorial analysis internal consistence Coefficient Cronbach - α equals 0,79, which shows the scale's sufficient reliability.

Table 1

Causes determining students' decision to stay for work in Panevežys city and/or region

Structural components	L	%
Students attitudes to city cultural-political causes		
City's geopolitical situation	0,846	
City's security	0,829	29,6
City's cultural life	0,815	
City's infrastructure	0,785	
Students attitudes to economic-social causes		
Wages	0,692	
Professional realization	0,735	
Professional negotiability	0,623	17,1
Material living conditions	0,612	
Career Prospects	0,783	
Students attitudes to personal causes		
Friends	0,849	
Colleagues	0,808	11,9
Relatives	0,806	
Family	0,547	
Students attitudes to family reasons		
Continuing studies	0,876	8,3

Note: KMO = 0,77. Principal component method, rotation Varimax with Kaiser's normalization converged with 5 iterations. 5 point scale was used where point 1 indicates "no influence" and 5 – "the highest influence". Cronbach α = 0,79.

Factorial analysis highlighted the most important group of causes, which determine students' decision to stay and work in Panevezys and/or its region, i.e. the town's cultural-economical group. The group is characterized by such factors: the town's geopolitical location (L = 0,846), its safety (L = 0,829), and cultural life (L = 0,815). From the second highlighted group (economical and social) of causes the most significant factor appeared to be career perspectives (L = 0,783), from the third group (personal causes) – friends (L = 0,849). During the factorial analysis a fourth group was highlighted, this one being

least significant – continuous studies; it had a single factor.

As the research results showed, higher-school students preferences to stay and work in Panevezys and/or its region are determined not only by economical-social and personal causes, but also by cultural aspect, that presents Panevezys as an attractive centre for work as well as culture.

Causes determining students' preferences to move from Panevezys and/or region for work. While analysing respondents' attitude toward internal migration it was observed that 26 per cent of all respondents plan to leave Panevezys for another town or city in Lithuania (19 per cent for over a year, 7 per cent under a year). The most vulnerable group for internal migration is 21-26 year old working students. Majority of respondents (46 per cent) intend to move to Vilnius and/or its region, while labour markets of Kaunas and Klaipeda including their regions seem to be less attractive (15 and 20 per cent respectively). The research also showed that as many as 74 per cent of respondents would gladly work in another towns or regions if there were opportunities for self-realization professionally.

Panevezys higher-school students' attitude towards internal migration and its causes, and the results of factorial analysis revealed that this variable criterion was also divided into five parts reflecting dimensions (students' attitude to such causes as cultural-political, economical, professional, personal, and family).

On the basis respondents' opinion factorial analysis results showed that the most significant causes determining students decision to leave for another town or city within Lithuania are cultural-political (30,3 per cent of variance), while economical (15,6 per cent), professional (12,5 per cent), personal (9,9 per cent) and family (7,5 per cent) causes are neither very significant nor meaningful. This fact is based by analysis reliability confirming KMO coefficient 0,62. Panevezys higher-school students attitude towards internal migration and its causes factorial analysis internal consistence coefficient Cronbach α equals to 0,72, which proves to be credible and applied in statistic analysis (Table 2).

Table 2

Causes determining students' decision to move for work to other towns and/or regions of Lithuania

Structural components	L	%
Students attitudes to city cultural-political causes		
City's geopolitical situation	0,910	
City's security	0,857	30,3
City's cultural life	0,844	
City's infrastructure	0,835	
Students attitudes to economic causes		
Wages	0,870	
Material living conditions	0,742	15,6
Career Prospects	0,678	
Students attitudes to professional causes		
Professional demand	0,831	
Continuing studies	0,658	12,5
Professional realization	0,587	
Students attitudes to personal causes		
Friends	0,837	
Colleagues	0,817	9,9
Relatives	0,574	

Students attitudes to family causes		
Family	0,955	7,5

Note: KMO = 0,62. Principal component method, rotation Varimax with Kaiser's normalization converged with 6 iterations. 5 point scale was used where point 1 indicates "no influence and 5 – "the highest influence. Cronbach α = 0,72.

Students attitudes towards city cultural-political causes in the context of internal migration are best conditioned by the following factors: city geopolitical situation (L = 0,910), city safety (L = 0,857) and city cultural life (L = 0,844). Meanwhile city infrastructure is the least emphasized factor among all respondents (L = 0,835). Out of economic causes the most important factor appears to be salary (L = 0,870), out of professional ones - profession request (L = 0,831), out of personal ones – friends (L = 0,837). During factorial analysis a group of family reasons was singled out and the only significant enough factor mentioned was family (L = 0,955).

The research results proved that salary are becoming one of the most significant factors of internal migration. This allows assuming that Panevezys higher-school students'

decision to leave Panevezys is greatly influenced by economical reasons, though political-cultural, personal and family reasons are important in naming their preferences. So it could be stated that absolute majority of young people migrate because of economic motives seeking for higher salaries, better and more stable life and work conditions.

Summarising Panevezys higher-school students attitude to stay for work in Panevezys and/or its region's labour market, an assumption could be made that active, qualified and possessing higher education young people's migration to major towns could become a potential threat for preserving intellectual capital in the town and/or its region, though the research results did not identify it. Noteworthy that not in all cases declared actions coincide with the reality or planned ones; due to their expressed attitude not to migrate it would be incorrect to judge contrarily. So the respondents' attitude in the long run can change because of different reasons, initiated by the changes in the environment, not necessarily by the individuals themselves.

References

1. Aidis, R., Krupickaitė, D., Binstrubaitė, L. (2006) Lietuvos universitetų studentai: nuostatos emigruoti // Emigracija iš Lietuvos: padėtis, problemos, galimi sprendimo būdai. Konferencijos medžiaga. Vilnius: Lietuvos Respublikos Seimas, p. 76-79.
2. Čekanavičius, L., Kasnauskienė, G. (2009) Too High or Just Right? Cost-Benefit Approach to Emigration Question. Engineering Economics, 1 (61), p. 28-36.
3. Duke-Williams, O. (2009) The geographies of student migration in the UK. Environment and Planning, 41 (8), p. 1826-1848.
4. Jucevičienė, P. Viržintaitė, R., Jucevičius, G. (2004) "Brain Drain" in Country In-Transition: Paradox of Higher Education. Social Sciences, 2 (44), p. 45-55.
5. Kazlauskienė, A., Rinkevičius, L. (2006). Lithuania "Brain Drain" Causes: Push and Pull Factors. Engineering Economics, 1 (46), p. 27-37.
6. Kodrzycki Y. K. (2001) Migration of Recent College Graduates: Evidence from the National Longitudinal Survey of Youth. New England Economic Review, p. 13-34. Open access via internet: http://www.bos.frb.org/economic/neer/neer2001/neer101b.pdf.
7. Labanauskas, L (2006) „Protų nutekėjimo" problema Lietuvoje: medikų emigracija („Brain drain" Phenomenon in Lithuania: Emigration of Medical Professionals). Filosofija. Sociologija. 2, p. 27-34.
8. Ledesma, M. L., Piracha, M. (2004) International Migration and the Role of Remittances in Eastern Europe. International Migration, 42 (4), p. 65-83.
9. Liu-Farrer, G., (2009) Educationally Channeled International Labor Mobility: Contemporary Student Migration from China to Japan. International migration Review, 43 (1), p. 178-204.
10. Massey, D. S. (1993) Theories of International Migration: A Review and Appraisal. Population and Development Review, 19, p. 431-466.
11. Merkys, G., Baršauskienė, V., Antininė, D. (2006) Lietuvos studentų emigracinės nuostatos ir jas lemiantys veiksniai (Emigration Attitudes of Lithuanian Students and the Factors Influencing them). Ugdymas. Kūno kultūra. Sportas, 3 (62), p. 36-42.
12. Mockaitis, A. I., Šalčiuvienė L. (2005) Protų nutekėjimas iš Lietuvos – reali grėsmė ar išpūstas burbulas (Brain Drain from Lithuania: a Realistic Threat or an Exaggeration?). Tiltai (Brizges), 4, p. 51-58.
13. Oman, K. M., Moulds, R., Usher, K. (2009) Specialist Training in Fiji: Why Do Graduates Migrate, and Why Do they Remain? A Qualitative Study. Human Resources for Health, 7:9. doi: 10.1186/1478-4491-7-9. Open access via internet: http://www.human-resources-health.com/content/7/1/9.
14. Scheurle, J., Seydel, R. (2000) A Model of Student Migration. International Journal of Bifurcation and Chaos, 10 (2), p. 447-480.
15. Weiss, Y., Sauer, R. M., Gotlibovski, M. (2003) Immigration, Search, and Loss of skill. Journal of Labor Economics, 21 (3), p. 557-597.
16. White, A. (2007) Internal Migration Trends in Soviet and post-Soviet European Russia. Europe-Asia Studies, 59 (6), p. 887-911.
17. White, A. (2009) Internal Migration, Identity and Livelihood Strategies in Contemporary Russia. Journal of Ethnic and Migration Studies, 35 (4), p. 555-573.
18. Glinskienė, R., Petuškienė, E. (2009) Pasaulinės ekonominės krizės poveikis Lietuvių reemigracijos ir protų nutekėjimo procesams (The Global Economical Crisis Impact on the Process of Lithuanian Reemigration and "Brain Drain"). Ekonomika ir vadyba (Economics and management), 14, p. 763-771.

Aušra Repečkienė, Renata Žvirelienė, Nida Kvedaraitė

Aukštųjų mokyklų studentų požiūris į vidinę migraciją: praktinis aspektas

Santrauka

Migracija – tai sudėtingas, daugiamatis socialinis procesas, atliekantis svarbų vaidmenį žmonijos vystimesi. Lietuvos mokslininkai pastarąjį dešimtmetį emigracijos reiškinio analizei ir tyrimams skyrė pakankamai daug dėmesio: daugiausia nagrinėjo „protų nutekėjimą" ir pagrindinės jų „nutekėjimo" iš Lietuvos priežastis, formulavo pasiūlymus šios problemos sprendimui. Didelį susirūpinimą kelia ne tik Lietuvos jaunų žmonių emigracija, bet ir jų migracija šalies viduje, kuriai skiriamas dar mažesnis dėmesys, neidentifikuojamos to priežastys pagal jų amžių, išsilavinimą ir įgytą specialybę ar darbinę veiklos sritį. Analizuojant respondentų nuostatas į vidinę migraciją, pastebėta, kad išvykti dirbti iš Panevėžio miesto ir/ar rajono į kitą Lietuvos miestą ar rajoną ketina tik ketvirtadalis visų apklaustųjų. Svarbiausios priežastys, lemiančios studentų apsisprendimą vykti dirbti į kitą Lietuvos miestą ir/ar rajoną, yra kultūrinės – politinės, tuo tarpu ekonominės, profesinės, asmeninės ir šeiminės priežastys nėra pakankamai svarbios ir reikšmingos.

About the author

Dr. Aušra Repečkienė, assoc. prof., Kaunas University of Technology Panevėžys Institute, Faculty of Management and Administration (Lithuania), e-mail: ausra.repeckiene@ktu.lt. Scientific interests: human resource management, cross-cultural studies.

Dr. Renata Žvirelienė, assoc. prof., Kaunas University of Technology Panevėžys Institute, Faculty of Management and Administration (Lithuania), e-mail: renata.zvireliene@ktu.lt. Scientific interests: marketing, relationship marketing.

Dr. Nida Kvedaraitė, lecturer at Kaunas University of Technology Panevezys Institute, Faculty of Management and Administration (Lithuania), e-mail: nida.kudokiene@ktu.lt Scientific interests: learning school and its culture management.

THE CHANGES OF LITHUANIAN EXPORT SPECIALIZATION IN THE COMPETITIVE MARKET CONDITIONS

Asta Sabonienė, Žaneta Karazijienė
Kaunas University of Technology, Lithuania

Abstract

The competitiveness achieved by industrial sector in international markets is reflected by the results of foreign trade, while evaluating the indexes of export and import of groups of commodities. Nowadays the results, changes and dynamics of foreign trade are best indices to evaluate capabilities of national companies to compete in open global economy. The analysis of changes of export specialization and estimation of export competitiveness in the competitive market conditions is a significant scientific problem. The most widely used indicator to measure the export specialization of industry is index of revealed comparative advantage (RCA). This paper analyses the changes in the pattern of Lithuanian export specialization and using RCA indexes provides an analysis of the shifting export specialization at product category level and links this analysis to the export potential.

Keywords
Export specialization, export competitiveness.

Introduction

The period of economic system transformation, economic integration to the European Union and globalization has changed Lithuanian trading patterns, as well as the measures employed by country to compete in the world where trade is being liberalized. Significant aims of foreign trade policy were integration into the international trading system, development of free trade agreements and trade liberalization.

The process of economic integration and globalization strengthens export development, so more attention is now being placed on analysis of exports results, exports pattern and competitiveness. The export is a primary source of foreign exchange for small and vulnerable economies, so its long term survival is dependent upon its ability to compete with exports of similar products from other countries in the international market (Prasad, 2000). Growing share of export in total output causes higher productivity growth rate, and growing share of imports in total output indicates a bigger degree of specialization and competition (Ciburienė, Zaharieva, 2006). From an individual state's perspective it is important to identify the modifications in the trade pattern because they may provide insights on the underlying structural changes in the economy, namely in its structure of production. The magnitude and the pace of such changes is an indirect indicator of the flexibility of the economy in allocating between sectors.

In considering results of restructuring of industry, the most common approach is to evaluate the degree of export specialization of the country and main changes of export volumes. Lithuania has been faced with problems such as restructuring of economic system, changing trade markets and patterns, declining of domestic demand of most merchandise, reduction of competitive ability, narrow export base and lower economies of scale. Lithuania does not own strategically important natural resources; therefore, it is essential that the state identifies its comparative advantage in products of traditional branches of industry. The evolution of the specialization of Lithuanian exports naturally depends on aspects that are well identified in international trade theory, such as factor of market structures, geographical factors, technologies, consumer preferences.

The problem of export competitiveness has attracted a lot of attention, as a result of the increasing size of international trade, led by the integration and globalization. The concept of competitiveness covers a lot of aspects, from production costs, product differentiation, parameters of quality to exchange rates. The results of research of Lithuanian international competitiveness were presented by Snieska (2008), Purlys (2007), Bruneckienė, Snieska (2009) and others. The theoretical issues of competitiveness and problems of industrial enterprises were presented by Rutkauskas (2008), Navickas, Malakauskaitė (2009), Kubrak, Koval, Kavaliauskas, Sakalas (2007). The results of export performance were presented by Bernatonyte, Normandiene (2009), Jakutis, Liukaitis, Samulevičius (2007).

Nevertheless, after performing the analysis of scientific literature it became evident that there has been limited research carried out on Lithuanian export specialization and competitiveness, that the results of foreign trade by using RCA indexes had not been analyzed profoundly yet. This paper tries to measure Lithuanian export specialization and competitiveness in 2005 - 2008 in order to indicate the main changes that were forced by competition increasing in comparing with previous periods. There are many definitions and different measures to assess export specialization and competitiveness, so this paper uses modified revealed comparative advantage (RCA*) index to measure the changes of Lithuanian export results.

The analysis of changes of export specialization and estimation of export competitiveness is a significant scientific problem. The paper is targeted towards solving this problem and it is considered to analyses the changes of specialization of Lithuanian export in the changing economic conditions in Lithuania. Thus, the focus of this paper is export specialization and competitiveness.

Object of scientific research – export specialization and competitiveness.

The main aim of this paper is to reveal the analysis of changes of export specialization and to present the

analysis of the comparative advantage indices of commodities groups of Lithuanian industry during 2005-2008.

Research tasks of the paper are to analyze the conceptions and main issues of measuring export specialization and competitiveness on the basis of contemporary theories, to perform the analysis of and modified revealed comparative advantage (RCA*) indexes of industries of Lithuanian industries merchandises during 2005-2008.

Methods of the scientific research that have been employed in the paper are scientific analysis and summarizing of literature, mathematic calculations, comparative analysis of statistic indexes.

The paper is organized as follows: the first outlines the theoretical basis of the RCA index and also provides a brief literature survey. The results of the selected indices are presented in the second part. Lithuanian RCA* indices are analyzed over the study period to compare the results of export performance and to analyze the main changes.

The conceptions of export specialization and competitiveness

For small economies export is substantial in sustaining growth and vitality. Export development has contributed significantly in terms of capital inflows, employment, expansion of industry and widening the production base. Export has also allowed domestic industries to achieve some economies of scale, which otherwise would not have been possible due to the limited domestic market size.

The trade theory suggests several methods to evaluate the trade specialization of a given country, most of them aiming at identifying the comparative advantages revealed past trade data. In considering changes in industry structure, the most common approach is to evaluate the degree of specialization of a country, or region, in trade of output generated within a particular industry (Tikhomirova, 1997). This approach can be applied by considering shares of merchandise exports and imports.

The methods solely based on trade flows can be divided in two groups:

   ✓ the first group of indices only uses export data;
   ✓ the second group of indices uses both export and import data.

The most widely used indicator to measure the export specialization of industry in the first group is the Balassa index, suggested by Balassa (1965), which represents foreign trade relative prices and prevailing factor as well product market distortions. The most popular in the second group is the Lafay index, suggested by Lafay (1992). Several modified indices are presented in modern theories to determine the product's comparative share of international trade among other products.

Balassa (1965) outlined that it is difficult to measure competitiveness due to the lack of comprehensive data on factor costs, so the most widely accepted indirect approach is the revealed comparative advantage (RCA) index, which reveals the specialization of export from its past trade data.

RCA index represent post trade relative prices and a prevailing factor as well as product market distortions.
The RCA index, known as the Balassa index, is defined using only export data:

$$RCA_i^A = (x_i^A/X^A) \, / \, (x_i^w/X^w)$$

Where:
x_i^A – Country A exports of product i;
X^A – Total exports of country A;
x_i^w – World exports of product i;
X^w – Total world exports;

The index reveals a comparative advantage in export of commodity *i* by country *A* if the index's value is greater than one, and disadvantage if the index's value is less than one, with respect to the world or a set of reference countries, so a set of reference can also be used as the denominator, especially for cross country comparison. Measures of revealed comparative advantage (RCA) have been used to assess a country's export potential. The RCA indicates whether a country is in the process of extending the products in which it has a trade potential, as opposed to situations in which the number of products that can be competitively exported is static. It can also provide useful information about potential trade prospects with new partners. RCA measures, if estimated at high levels of product differentiation, can focus attention on other non-traditional products that might be successfully exported. The RCA index is often measured by the product's share in the country's exports in relation to its share in the world trade. A value of less than unity implies that the country has a revealed comparative disadvantage in the product. Similarly, if the index exceeds unity, the country is said to have a revealed comparative advantage in the product.

Laursen (1998) outlined that major problem with the RCA index is that large differences in country sizes can cause problems when applying the RCA across countries. For instance, if export of certain commodity forms a large share of total domestic export, but forms a very small component of total world export, extremely high indicator values will be recorded (Mlangeni, 2000). This problem RCA index makes cross country comparison difficult.

Moreover, Balassa (1965) maintained that the use of export and import ratios would account for the imported intermediate goods used for production of export commodities, and thus reveal the real comparative advantage of a nation.

The RCA results are useful indicators in measuring export competitiveness, especially when used with other related indices to overcome some of the limitations of the RCA index.

At any point in time, the cross-country differences of export specialization can be further examined by decomposing of the Balassa indices in each broad technological category in the following way:

$$(RCA_S^A - RCA_S^{J}) = \sum \alpha_s (RCA_S^A - RCA_S^{J})$$

Where $\alpha_s = (x_S^w/X^w)$ and $\sum \alpha_s = 1$

Where:
RCA_S^A – Country A RCA index of sector S (high-tech, medium-high-tech, low-tech or medium-low-tech);

RCA_S^J – The other countries RCA index of sector S (high-tech, medium-high-tech, low-tech or medium-low-tech)

α_s – weight of sector S;

The RCA index has been applied to numerous academic publications (Lee, 1995, Maule, 1996, Rana, 1988, Amir, 2000).

The Lafay (1992) index LFI takes imports into account in measuring specialization of export and is represented as a modified version of international trade specialization, and the competitiveness structure of the domestic manufacturing sector, measured by a set of industry and country-specific variables. LFI determines the comparative share of product's international trade among other products. Branch receives the net export earnings, if the indicator value is greater than zero.

$$LFI = 100 * \left(\frac{X_i - M_i}{X_i + M_i} - \frac{\sum (X_j - M_j)}{\sum (X_j + M_j)} \right) \frac{X_i + M_i}{\sum (X_i + M_i)}$$

Where:

X_i - Country A exports of product i;

M_i - Country A imports of product i;

X_j - Country A exports of all others products except i (j =1 to n and $j \neq i$);

M_j - Country A imports of all others products except i (j =1 to n and $j \neq i$);

The OECD uses modified RCA* index, which is modified as follow:

$$RC\breve{A}_i = \left(\frac{X_i - M_i}{X_i + M_i} - \frac{\sum (X_j - M_j)}{\sum (X_j + M_j)} \right) * \frac{100}{1 - \frac{\sum (X_j - M_j)}{\sum (X_j + M_j)}}$$

if $\frac{X_i - M_i}{X_i + M_i} > \frac{\sum (X_j - M_j)}{\sum (X_j + M_j)}$ and

$$RC\breve{A}_i = \left(\frac{X_i - M_i}{X_i + M_i} - \frac{\sum (X_j - M_j)}{\sum (X_j + M_j)} \right) * \frac{100}{1 + \frac{\sum (X_j - M_j)}{\sum (X_j + M_j)}}$$

if $\frac{X_i - M_i}{X_i + M_i} < \frac{\sum (X_j - M_j)}{\sum (X_j + M_j)}$.

The values of RCA* index indicate comparative disadvantage when it is between –100 and 0; when the value is between 0 and +100, it illustrates a specialization and comparative advantage, if it is equal to 0, it indicates that export and import of a particular product are equal.

This paper uses the RCA* indices to explicitly assess Lithuanian export specialization.

The changes of Lithuanian export specialization and competitiveness

The country's development level is evaluated by manufacturing industry part in the overall economic structure, a particular emphasis on high-technology industries. International competitiveness is achieved when the manufactured products meet the requirements of the global market, so foreign trade results indicates the possibilities to compete in international market.

Lithuanian industry does not have higher technologies in such level as developed countries. The significance of low value-added industries in Lithuania is obvious. Nevertheless, performance of relatively high-value added productions is important for improving export development in the future.

The analysis included in this article is based estimation of RCA* indexes during study period 2005-2008. The commodity groups are grouped in accordance with their technological intensity, following the OECD classification of R&D intensities (OECD, 2005). This technological classification includes four main sectors: high-technology, medium-high-technology, medium-low-technology and low-technology. This standard classification can bring important insights on the evolution of export patterns over the last years.

While evaluating the competitive abilities of Lithuanian industry, it is relevant to analyze the structure of Lithuanian industry according to the level of technologies.The analysis of changes of Lithuanian industry in accordance with the level of technological developments had showed that gradually grows medium-high-technology industries, but the parts of high-technology and low-technology industries decline in general industrial structure (Table 1). The traditional industrial branches with low-technological susceptibility prevail in Lithuania, where 68 percent of all manufacture production is made; in the sectors medium-low-technologies – 15.5 percent, medium-high – 14.3 percent and industries of high-technologies constitute only 2.2 percent of total manufacture production in 2008.

According to classification of industries based on technology, the industry of office equipment and computers, assigned to the group of high-technologies, in 2008 aggregated only 0.4 of all sold industry production; industry of electronic communication means (industry of radio, television and communicational equipment and apparatus) – 0.9 percent (2003 - 3.9 percent), industry of medical, precise and optic equipment – 0.8 percent.

Table 1

Lithuanian industry structure in accordance with the level of technology and science-intensive 2005-2008

	2005	2006	2007	2008
High-technology products	3.5	3.0	2.5	2.2
Medium-high-technology products	8.5	9.6	14.1	14.3
Medium-low-technology products	16.0	17.7	19.5	15.5
Low-technology products	72.0	69.7	63.9	68.0

Source: calculated by the author according to the OECD science-intensive industries classification.

Industry of chemistry and chemicals, assigned to the sector of medium-high-technologies is taking a significant comparative portion in the structure of industry, its production share makes 12 percent in 2008. The industry of engine vehicles, trailers makes 1.0 percents of all the production of manufacture in 2008.

The most significant part of sold production of manufacturing consists of food and beverage industries (17.8 precent), but its part is decreasing. Wearing apparel and dressing industry decreased from 11.5 percent (1999) to 2.6 in 2008. Textile products (2.1 percent - 2008), wood, wooden products (4.5 percent) and furniture (5.1 percent) have gradually decreasing parts of industrial structure during 2005-2008.

While analyzing the possibilities for groups of commodities to participate in foreign markets, the trade balance results and the export specialization are evaluated. The estimation of Lithuania RCA* indices (Table 2) shows that during the study period (2005-2008) Lithuanian export specialization has achieved in several export categories.

The ships, boats and floating structures had achieved high results of RCA* and that shows strong specialization of this industry in medium-high-technologies sector. The products of the chemical industry (inorganic chemicals, fertilizers), remained positive value of RCA* in 2008.

The potential possibilities to compete in international market have optical, measuring, checking, precision, medical or surgical instruments and apparatus, produced in Lithuania, their RCA* indices significant increased in 2008. The export volumes also increased in the group of machinery and mechanical appliances, electrical equipment parts thereof, but remains negative RCA* value.

Table 2

Relative Lithuanian export specialization according RCA* indexes of commodity groups 2005-2008

Commodity list	2005	2006	2007	2008
High-technology products				
Aircraft, spacecraft, and parts thereof	-0.6	**2.6**	-33.6	-2.8
Pharmaceutical products	-46.8	-44.0	-39.2	-38.9
Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	-13.7	-5.9	**7.5**	**24.6**
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers and parts	-3.6	-8.2	-9.1	-10.6
Medium-high-technology products				
Railway or tramway locomotives, rolling-stock and parts thereof; railway or tramway track fixtures and fittings and parts thereof; mechanical (including electro-mechanical)	-47.9	-65.9	-54.8	-69.9
Vehicles other than railway or tramway rolling-stock, and parts and accessories thereof	-26.8	-20.0	-24.8	-18.9
Ships, boats and floating structures	**54.8**	**34.0**	**63.7**	**72.3**
Products of the chemical or allied industries	-4.1	-11.1	-8.5	**3.4**
Medium-low-technology products				
Mineral products	-0.1	**1.0**	-11.0	-10.5
Plastics and articles thereof; rubber and articles thereof	-19.8	**0.1**	**19.3**	**16.0**
Base metals and articles of base metal	-21.1	-18.8	-17.4	-11.3
Articles of stone, plaster, cement, asbestos, mica	-25.1	-20.1	-20.6	-17.2
Arms and ammunition; parts and accessories thereof	-33.6	-10.6	-19.8	**12.5**
Low-technology products				
Live animals; animal products	**31.1**	**34.7**	**36.6**	**23.8**
Vegetable products	**13.5**	**10.3**	**23.6**	**21.4**
Animal or vegetable fats and oils	-32.7	-26.2	-18.2	-22.5
Prepared foodstuffs; beverages,	**14.5**	**16.1**	**17.1**	**10.5**
Raw hides and skins, leather and articles thereof	-1.3	-2.0	-8.0	-3.2
Wood and articles of wood; wood charcoal; cork	**35.2**	**34.4**	**32.0**	**29.7**
Pulp of wood or of other fibrous cellulose material	-20.1	-12.1	-9.2	-13.4
Textiles and textile articles	**23.2**	**22.8**	**19.7**	**14.3**
Footwear, headgear, umbrellas, walking sticks,	-43.5	-39.7	-39.7	-44.3
Miscellaneous manufactured articles	**53.9**	**52.6**	**50.7**	**49.0**

Source: calculated by the author according to the data of The Department of Statistics to the Government of the Republic of Lithuania.

Table 3

RCA* Ranking of commodities of Lithuanian Industry 2005-2008

Rank Value	2005	2006	2007	2008
1	Cereals (RCA*=79.1)	Fertilizers (RCA*=72.1)	Lead and articles (RCA*=79.7)	Fertilizers (RCA*=74.8)
2	Dairy produce; birds' eggs; natural honey (RCA*=77.7)	Dairy produce; birds' eggs; natural honey (RCA*=70.9)	Fertilizers (RCA*=77.9)	Lead and articles thereof (RCA*=74.2)
3	Lead and articles thereof (RCA*=76.1)	Lead and articles thereof (RCA*=70.8)	Dairy produce; birds' eggs; natural honey (RCA*=71.1)	Ships, boats and floating structures (RCA*=72.3)
4	Vegetable plaiting materials (RCA*=73.7)	*Furniture; bedding and similar furnishings (RCA*=63)*	Cereals (RCA*=64.5)	Nickel and articles thereof (RCA*=70.8)
5	Fertilizers (RCA*=72.6)	Articles of apparel and clothing accessories, not knitted or crocheted (RCA*=58.3)	Ships, boats and floating structures (RCA*=63.7)	Cereals (RCA*=67.1)
6	Articles of apparel and clothing accessories, not knitted or crocheted (RCA*=67.6)	Cereals (RCA*=58.2)	Nickel and articles thereof (RCA*=61)	Live animals (RCA*=61.2)

7	Furniture; bedding and similar stuffed furnishings (RCA*=64.4)	Live animals (RCA*=53.3)	Furniture; bedding and similar stuffed furnishings RCA*=58.9)	Dairy produce; birds' eggs; natural honey (RCA*=60.4)
8	Articles of apparel and clothing accessories, knitted or crocheted (RCA*=57.8)	Preparations of meat, of fish (RCA*=50.9)	Live animals (RCA*=58.4)	Products of the milling industry (RCA*=58.4)
9	Ships, boats and floating structures (RCA*=54.8)	Articles of apparel and clothing accessories, knitted or crocheted (RCA*=48)	Products of the milling industry (RCA*=44.7)	Furniture; bedding and similar stuffed furnishings (RCA*=57.1)
10	Preparations of meat, of fish (RCA*=54.4)	Other made - up textile articles (RCA*=41.7)	Prepared animal fodder (RCA*=43.2)	Preparations of meat, of fish (RCA*=45.2)
11	Other made - up textile articles (RCA*=45.3)	Prepared animal fodder (RCA*=41.5)	Articles of apparel and clothing accessories, not knitted or crocheted (RCA*=43.1)	*Fur skins and artificial fur (RCA*=34.8)*
12	Live animals (RCA*=42.3)	*Manufactures of straw, of esparto or of other plaiting materials (RCA*=39.9)*	*Articles of apparel and clothing accessories, knitted or crocheted (RCA*=40.7)*	Prepared animal fodder (RCA*=34.6)

Source: calculated by the author according to the data of The Department of Statistics to the Government of the Republic of Lithuania.

The main broad export categories in low-technologies and medium-low-technologies sector are: live animals and animal products, vegetable products, prepared foodstuffs, wood and articles of wood, textile articles, miscellaneous manufactured articles, plastics and articles thereof, nickel, lead and article thereof.

The study of the RCA* indices changes showed that the RCA* index decreased in traditional industries, which were described as strong trade groups in the aspect of export. We see that no less important is the development of traditional industries, concentrating their efforts on innovation – improving already manufactured products and technologies, focusing on the industry, creating higher added value. An important strategic orientation received both advanced industries and traditional industries, generating high added value and recognized as a relatively competitive international market.

The commodities, which RCA* indicates during 2005-2008 were highest, represented in Table 3. In the groups of live animals and animal products the strong specialization of Lithuanian export is obvious of live animals and milk and diary products. The cereals and products of milling industry have strong export specialization in the group of vegetable products. In the group of prepared foodstuffs the strong competitive abilities in the international market are shown by Lithuanian RCA* indexes of meat and fish products.

Export of wood and articles of wood significantly surpass the import in Lithuania, but indexes have a tendency of decline, so in 2005-2008 RCA* decreased, so the export positions are weakening. The analysis reveals the export specialization of furniture industry, the RCA* rate during the period was high.

In the group of textile and textile articles strong competitive abilities in the international market are characteristic to articles of apparel and clothing accessories. During 2005-2008 the RCA* index had a downward trend.

Although Lithuanian chemical production group reached positive RCA* indexes, the strong export specialization of fertilizers is obvious and provide possible avenues for increasing export earnings.

Overall, Lithuanian export specialization is restricted comparatively to a narrow range of export commodities of traditional branches, but the study shows that in 2005-2008 the indicators of traditional industries had a decreasing tendency. However, ships, boats and floating structures, optical, measuring, medical or surgical instruments and apparatus, fertilizers have good position of export results and development of this sector is actual problem. Changing the steady industrial structure by increasing the export shares of high-technologies industries is not simple, so there weren't significant changes in commodities export patterns during the study period.

Conclusions

Over the last decade Lithuania has significantly increased its trade openness, this forced changes of export pattern in the competitive international market conditions. The aggregation of manufacturing products into broad categories with distinct technological intensities reveals important insights on the structure and changes of export specialization over the last years.

The analysis of exports specialization by using modified comparative advantage indices showed that Lithuanian export is largely reliant on the export commodities of traditional industries with low-technological susceptibility. However low-tech industries part gradually decreasing. The part of high-technology industries declined in general industrial structure from 3.5 in 2005 to 2.2 percent in 2008. Significantly increased part of medium-high-technology industries from 8.5 in 2005 to 14.3 percent in 2008.

The RCA* indices are useful in indicating the weak and strong sectors, and a structural shift in export patterns of an economy. The analysis presented in this paper revealed, that major domestic commodity groups such as animal products, prepared foodstuffs, wood and wood articles, textile articles and furniture maintained positive RCA* values in 2008, so these products have sufficiently good export positions. However the RCA* index decreased in industries, which were described as strong trade groups in the aspect of export, so, we see that export specialization weakened. The decline of the export results of these commodity groups reflects the increased competition in competitive the EU market. In spite of the decrease, these groups are still important in Lithuanian manufacturing exports.

The specialization of export during the analyzed period increased in the group of boats and floating constructions,

optical, measuring, medical instruments and apparatus, aircrafts, spaceships and vessels. The development of medium-high and high-technology industries is actual challenge for small economy. The analysis of RCA* of particular commodities revealed the products with highest indices, as cereals, fertilizers, lead and articles, dairy products, furniture, articles of apparel and clothing, live animals, ships, boats and floating structures.

The development level of particular economy is evaluated by manufacturing industry part in the overall economic structure and manufacturing exports results, a particular emphasis on high-technology industries. In the aspects of high-technology industries the significant changes during the study period were not observed but increasing of medium-high-technology industries reflected positive changes of export specialization.

References

1. Amir, M. (2000). Export Specialization and Competitiveness of the Malaysian Manufacturing. Trends, Challenges and Prospects; Conference on International Trade Education and Research, Melbourne.
2. Balassa, B. (1965). Trade Liberalization and Revealed Comparative Advantage. The Manchester School of Economic and Social Studies, 1965, Vol. 119, 93-123.
3. Balassa, B. (1986). Comparative Advantage in Manufactured Goods: A Reappraisal. Review of Economics and Statistics, 68 (2) May, 315-319.
4. Bernatonyte, D., & Normandiene, A. (2009). Estimation of trade specialization: the case of Baltic states. *Inzinerine Ekonomika-Engineering Economics*(2), 7-17.
5. Ciburiene, J., & Zaharieva, G. (2006). International Trade as a factor of competitiveness: comparison of Lithuanian and Bulgarian cases. *Inzinerine Ekonomika-Engineering Economics*(4), 48-56.
6. Jakutis, A., Liukaitis, R., & Samulevicius, J. (2007). Analysis of factors of export development of Lithuania. *Technological and Economic Development of Economy, 13*(4), 272-279.
7. Kubrak, A., Koval, A., Kavaliauskas, V., & Sakalas, A. (2007). Organizational Structure forming problems in modern industrial enterprise. *Inzinerine Ekonomika-Engineering Economics*(1), 103-109.
8. Laursen, K. (1998). Revealed Comparative Advantage and the alternatives as Measure of International Specialization, Danish Research Unit for Industrial Dynamics, Working Paper 30, Copenhagen, Denmark.
9. Lafay, G. (1992). The measurement of reveal comparative advantages. International Trade Modelling, Chapman & Hall, 209-234.
10. Lee, J. (1995). Comparative Advantage in Manufacturing as Determinant of Industrialization: The Korean Case. World Development, Vol. 23, No. 7, 1195-1214.
11. Maule, A. (1996). Some Implications of AFTA for Thailand: A Revealed Comparative Advantage Approach. ASEAN Economic Bulletin, Vol. 13, No 1, 14-38.
12. Mlangeni, T. (2000). Revealed Comparative Advantage in SADC Economies, South African Update. Trade and Industrial Policy Secretariat (TIPS), Vol. 5.
13. Navickas, V., & Malakauskaite, A. (2009). The possibilities for the identification and evaluation of tourism sector competitiveness factors. *Inzinerine Ekonomika-Engineering Economics*(1), 37-44.
14. OECD (2005). OECD Science, Technology and Industry Scoreboard 2005, OECD.
15. Prasad, R. N. (2004). Fiji's export competitiveness: a comparison with selected small island developing states. Reserve Bank of Fiji, Working Pp.
16. Prasad, S. (2000). Determinants of Exports in Fiji, Reserve Bank of Fiji, Working Paper.
17. Purlys, C. (2007). The main strategic directions in improving of export development in Lithuania. *Inzinerine Ekonomika-Engineering Economics*(1), 29-35.
18. Rana, P. B. (1988). Shifting Revealed Comparative Advantage: Experiences of Asian and Pacific Developing Countries, Asian Development Bank, Report No. 42.
19. Rutkauskas, A. V. (2008). On the sustainability of regional competitiveness development considering risk. *Technological and Economic Development of Economy, 14*(1), 89-99.
20. Saboniene, A. (2009). Lithuanian Export Competitiveness: Comparison with other Baltic States. *Inzinerine Ekonomika-Engineering Economics*(2), 49-57.
21. Saboniene, A., & Karazijiene, Z. (2007). Government regulation of industry in European Union improving competitiveness in single market. Economics and Management – 2007. International conference proceedings, Kaunas, 19–20 April.
22. Snieska, V. (2008). Research into International Competitiveness in 2000-2008. *Inzinerine Ekonomika-Engineering Economics*(4), 29-41.
23. Snieska, V., & Bruneckiene, J. (2009). Measurement of Lithuanian Regions by regional competitiveness index. *Inzinerine Ekonomika-Engineering Economics*(1), 45-57.
24. Statistical Yearbook of Lithuania 2008. Vilnius: Lithuanian Statistics.
25. Tikhomirova, G. (1997). Analyzing changes in industrial structure. CSES Working Paper No. 11.
26. Yeats, A. J. (1985). On the Appropriate Interpretation of Revealed Comparative Advantage Index: Implications of a Methodology Based on Industry Sector Analysis, Weltwirtschaftliches Archiv, 61-73.

Asta Sabonienė, Žaneta Karazijienė

Lietuvos eksporto specializacijos pokyčiai konkurencinės rinkos sąlygomis

Santrauka

Pasiektą pramonės konkurencinį pranašumą tarptautinėse rinkose atspindi užsienio prekybos rezultatai, atskirų prekių grupių eksporto ir importo apimtys. Vieni iš dažniausių taikomų rodiklių eksporto specializacijai vertinti – tai Balassa (1965) pasiūlytas atskleisto konkurencinio pranašumo indeksas RCA, atskleidžiantis, kokios prekių grupės yra svarbiausios eksporte; ir Lafay (1992) papildytas rodiklis, įvertintantis importo prasiskverbimo vietinėje rinkoje lygį ir identifikuojantis tarptautinėse rinkose sėkmingiausiai konkuruojančias prekių grupes.

Straipsnyje analizuojama Lietuvos eksporto spacializacija bei pokyčiai konkurencinės rinkos sąlygomis, panaudojant modifikuotus atskleisto konkurencinio pranašumo rodiklius 2005–2008 m. laikotarpiu. Šių pokyčių įvertinimas didėjant prekybos liberalizacijai ir keičiantis prekybos sąlygoms ES formuojant eksporto rėmimo politiką yra aktuali mokslinė problema. Straipsnis skiriamas šioms problemoms nagrinėti.

About the authors

Asta Sabonienė, assoc. prof., dr. of Social Sciences, Kaunas University of Technology, Faculty of Management and Economics, Department of Economical and International Trade, Lithuania. E-mail.:asta.saboniene@ktu.lt. Research interests: industry, export, competitive advantages, industry's politics.

Žaneta Karazijienė, assoc. prof., dr. of Social Sciences, Kaunas University of Technology, Faculty of Management and Economics, Department of Companies' Economy, Lithuania. E-mail.:zaneta.karazijiene@ktu.lt. Research interests: state's credit, governmental regulation of trade market.

EFFICIENCY AND VALUE OF BUSINESS PLANS

Gediminas Sargūnas, Dalia Susnienė

Kaunas University of Technology, Lithuania

Abstract

Planning plays an important role in determining the degree of success by a new or small business. Essential elements to business success are identification of goals, followed by development of strategies to meet these goals. A business plan is an effective tools used by businesses to organize these goals and objectives into coherent format. No matter the size or stage of development, companies use business plans to improve internal operations and to describe and market the business to potential outside financiers. A business plan should not only reflect individuality of the new business but should also follow a standard format. The paper seeks to discuss the format and efficiency of a business plan.

Keywords

Business plan, value, efficiency, format of a business plan, competence.

Introduction

Business planning can be considered to be one of the most widely regarded aspects of pre-startup planning. We define a business plan as a written document that describes the current state and the presupposed future of an organization. Despite their ubiquity, a serious research gap exists regarding why new organizations write business plans and what consequences result from them (Castrogiovanni, 1996). Business plans should yield more efficient and economically viable new firms. Plans are claimed to provide practical benefits to the new organizations, such as greater profits and other competitive advantages that may lead to a higher probability of long-term survivability (Honig and Karlsson, 2004). In the rational view, more successful firms will have been planning firms, and so they will signal to the market the positive attributes to be gained through effective planning. Empirical research on the economic outcomes of business planning has been inconclusive, with some maintaining that planning assists with the growth and success of new firms (Bracker, Keats & Pearson, 1998; Schwenk & Shraeder, 1993), and others failing to find any association (Boyd, 1991; Robinson & Pearce, 1983).

Problem: what benefit can be expected from a business plan.

Goals: to explore the value and usefulness of business plans; to highlight the underdeveloped value of competence in the planning process.

Research methods employed: comparative analysis of academic literature, review of published research and formulation of conclusions.

An evolutionary process of planning

The word planning is from the Latin word, *planum*, meaning a flat surface and was used to describe forms or maps produced on flat surfaces, therefore, 'long been associated with formalized documents' (Steiner, 1979). Large US corporations adopted formal planning approaches, and placed much effort and resource into production of plans (e.g. business, operational, strategic etc.). Certainly, through the two decades from the mid-1950s to the mid-1970s planning was hailed as the sure-fire formula for corporate success. As the importance of planning becomes the accepted wisdom in managing business development, large corporations have become increasingly reliant on the development and implementation of the plan (Hannon P.D. and A. Atherton, 1998). Investors and fund providers have also integrated the use of plans into their decision criteria for selecting proposals. Overall, planning and plans have penetrated to the heart of the management vernacular and become key phrases in the handbook of any successful manager.

Purpose of a business plan

Essential elements to business success are identification of goals, followed by development of strategies to meet those goals. A business plan is an effective tool used by businesses to organize these goals and objectives into a coherent format especially for new or small businesses (Hormozi et.al., 2002).

Who should write a business plan?

- new business owners;
- new business owner seeking outside financing for start-up;
- existing business owner seeking outside financing for expansion; and
- any business owner who wants to increase the success of their business.

The purpose of a business plan is to define the business and explain in as much detail as possible how the venture will operate in the current market. A business plan is used for both internal and external purposes (Hormozi et.al., 2002).

After implementation of the proposed strategies in business plan, the owner or manager can use the plan as a benchmark to identify both achievements of goals and areas that need improvement. However, a business plan should not be limited to a start-up tool, but, instead, used as a working document to continually re-evaluate progress and clarify goals for the future. While a good business plan will not guarantee success, it can go a long way toward reducing the odds of failure (Crawford-Lucas, 1992). The presence of a business plan is highly correlated with the performance of the business and contributes to the growth of the firm (Orser et al., 2000).

The writing of a business plan

Business plans tend to contain similar sections and follow an accepted format, but the length of the plan varies depending on the enterprise. A business plan should be long enough to contain the pertinent information, but not so long as to overwhelm the reader. A business plan should reflect the individuality of the new business but follow a standard format. Abundant literature on business plans gives different formats of a business plan, nevertheless every business plan includes sections about a company, and business and finance (see Table 1).

Table 1

Sections of a business plan

	according to the authors	according to A. M. Hormozi et. al.	
SUMMARY	Company references	Executive summary Management team	INTRODUCTION
	Profile of company activity		
	Management team, their experience and competence		
	Business idea		
	Funds needed, use and payback of funds		
	Key risk factors		
COMPANY ACTIVITY ANALYSIS	Branch of industry and its description	Business description	BUSINESS SECTION
	Company history, main achievements		
	Company activity direction and goals		
	Product (tangible/intangible)description		
	Available technologies, necessary supplies and raw materials		
	Employee qualification		
	Legal aspects (licences, patents, etc.)		
CORE OF THE PROJECT	Idea		
	Key parameters, necessary research		
MARKETING PLAN	Market analysis	The market Marketing plan Pricing	
	Marketing mix		
	Sales forecast (optimistic, pessimistic and most probable variant)		
PRODUCTION PLAN	Production process	The product or service	
	Technical equipment		
	Manufacturing capacity		
	Raw materials and other supplies		
	Inventory and warehouses		
ORGANIZATIONAL PLAN	Legal status	Management	
	Ownership structure		
	Organizational structure		
	Personnel		
FINANCIAL PLAN	Necessary fund and financing sources	Income statement Balance sheet Statement of cash flows	FINANCIAL STATEMENTS
	Income statement (profit account)		
	Balance sheet		
	Cash flow account		
	Identification of break-even point		
	Costs forecast (cost-price analysis)		
	Economic-financial indicators		
RISK EVALUATION	Internal and external risk factors		
LIST OF APPENDIXES	List of used documents	Appendix of a business plan	

It is much better and wiser to have more elaborated business plan with detailed sections and subsections. The structure and complexity of the business plans depend on the following factors:

- size of a company; scope of activity, complexity of product and service, extent of information and extent of carried analysis;
- legal status of a company; if it is individual, public limited liability or private limited liability company,

state company, etc. For example, individual enterprise may not include a balance list;

- nature of company activity; if its industrial, trade, service, agricultural, processing, transport or other type company. For example, trade company does not have to prepare production plan;
- if its nascent or already operating company. For example, nascent company cannot include company performance analysis, company history, product/service range or available technical equipment into a business plan;
- goals of a business plan. If a business plan is developed for external purposes, for example to get a loan, financial part of the plan will be more comprehensive and elaborate because this part is the most important to potential investors or partners. Financial part of the business plan for internal usage would be more concise.

The key points of a business plan without which it is impossible to forecast future results are as follows:

Marketing plan – assessment of potential customers and competitors, identification of market size and sales volume (income).

Production plan – it shows the balance between production volume and sales forecast, and helps to estimate production or service development costs.

Organizational plan – it frames organizational management structure with precise employee list and allows forecast (calculate) indirect costs of production or sale (service supply).

Financial plan – appraises all production and performance costs, calculates cost price of product or service; profit and loss statement reveals gross and net profit, balance sheet estimates the state of company assets, property and liabilities at a certain stages of company activity; cash flow statement shows incoming and out coming cash flow and available cash flow over a certain period. Derived financial indicators are calculated there too and define financial 'health' of a company from different aspects: indicators of profitability, ability to pay, liability, turnover, return on investment and other. After calculation of break-even point, minimal sales volume is obtained from which profit can be generated.

Debates on planning

There is an ongoing debate within the academic literature about the value of the business plan in the development of the small firm. On closer inspection of the research, there appear to be clear benefits in the use of business planning as a process within the smaller business. As a process, business planning can be both formal and informal. It is also focused on understanding and responding to the context within which the business operates.

But the value of plans and planning has been questioned from as long as the late 1970s and has gained momentum in the 1990s (see, for example, Mintsberg, 1994). This has generated a number of polarized positions supporting and opposing the use of business plans. Monroy (1997) argues that the written business plan is an inefficient and ineffective use of time, energy and resources. He identifies several key criticisms against the written business plan:

- they are very rarely referred to after preparation;
- they are written to impress not to accurately describe;
- 56 per cent of successful businesses have written plans, therefore 44 per cent have not; the benefit is marginal;
- there is no evidence of causality between business plan creation and successful venture management.

Kuratko (1995) however, argues that the writing of business plans should be taught because it is the 'starting point for business creation'. The benefits he has identified in support for the written business plan include:

- getting finances, especially economic downturns;
- writing plans forces a critical, objective, thorough review;
- examines operating strategies and expected results – goals/objectives are quantified.

Planning and performance

A review of research into the effectiveness of planning on firm performance identifies varying stances on the relationship (Hannon P.D. and A. Atherton, 1998). Several studies identify a consistently positive relationship between the extent of planning activities and firm performance (Baker et al., 1993) and firm growth (Bamberger, 1986). Specific studies of small businesses have also suggested that there is a correlation between planning and successful performance (Ogunmokum, 1990; Robinson and Pearce, 1984). Through meta-analysis by Schwenk and Shrader (1993) of research examining performance and its relationship with plan content and the planning process suggests that there is no clearly apparent relationship between planning and performance. Other papers have also suggested nil or negative relationships between planning and organizational performance as reported in eg. Grinyer and Norburn (1975), eg. Hayes (1985), Kallman and Shapiro (1978), Kudla (1980), Leontiades and Tezel (1980), Rue and Fulmer (1973). A study undertaken by Lyles et al. (1993) supports the finding that there are no significant differences between firms with or without formal planning procedures in respect to improved returns.

The relationship between business planning and survival of the nascent organization has implications for arguments based both on economic rationality and institutional theory. From an economic point of view, survival represents the success of the organization. Survival is a variable commonly used as a dependent variable when measuring performance in nascent organizations (Honig and Karlsson , 2004). His research showed that writing a formal business plan had a moderate coefficient increasing *survival* by 1.8, but failed to pass the $p < .05$ significance level. Thus, from an economic efficiency perspective, the writing of business plans in new organizations can be questioned. (Honig and Karlsson , 2004) also tested if producing of business plans positively correlates with the probability of a nascent organizations' reaching profitability. From this perspective, the business plan is a rational activity that assists the owners of new firms (entrepreneurs) to earn larger profits through efficiency gains and/or increased sales. Testing this variable relates this study to previous studies conducted about business planning and

performance (Boyd, 1991; Bracker et al., 1998; Rhyne, 1986; Schwenk and Shraeder, 1993). It was found that writing a business plan has no statistically significant effect on the profitability of the nascent organization (Honig and Karlsson , 2004).

Harrison et.al. (1994) states that it is important to distinguish the *ends* and *means* approaches to business planning, proposing that a means approach is required for success. First, managers frequently view the production of a business plan as an end rather than as a means. A great deal of effort is thus devoted to the writing of business plans and a sigh of relief can almost be heard from embattled managers when the task has been completed and the document produced. On the other hand, business planning as a means provides a focus for defining the organization and, as such, is the way in which commitment is secured throughout the enterprise. The two approaches to business planning, means and ends are shown in Table 2.

Table 2

Two approaches to business planning

	A "means" approach	An "ends" approach
Philosophy	A journey	A destination
Focus	A process	A task
Shaped by	Leadership	Direction
Driven by	Needs of the organization	Needs of leader
Orientation	Largely outward looking	Largely inward looking
Dominant medium	The spoken word	The written word
Involvement	Wide internal/external	Narrow and largely internal
Concerned with	Opportunities	Threats
Seeks	Success	To avoid failure
Utility	Central $\longrightarrow$ shapes action	Marginal $\longrightarrow$ archive

This debate among the scientists shows that positive effect of business plans could not be taken for granted and therefore there should be carried more research in this field.

But it is necessary to point out that efficiency of a business plan depends on several key factors as follows:

- quality of a business plan (closely correlates with competence of person/s who prepare/s it);
- understanding of a business owner about essence of a business plan and his active participation in devising a plan;
- exact formulation of proper business goals (external, internal) to people who prepare the plan;
- qualified presentation of a business plan to interested parties;

- maintenance of a business plan viability through periodical review and correction of input data and indicators of aspirations.

It is important to highlight that efficiency of well prepared plan and value of its usage are not identical dimensions and

these must be evaluated differently. It is evident that efficiency of a business plan determines the value obtained from its usage. It is also possible that efficient business plan will not produce positive effect (value) if it is used inadequately to formulate goals in a prepared plan. The efficiency of target business is reflected by financial and economic calculations and indicators that are presented in a financial part of a business plan. Other issue is how justified and exact are forecasts on the basis of which the calculations where carried out. Therefore efficiency criteria of a business plan must be taken into account, i.e. conformity of a business plan model to real business model. The closer correlation between these models the greater efficiency of a business plan.

Competences, knowledge and skills

Writing of business plans requires competences, knowledge and skills. Business plan is like a compass. It allows the skilled individual the opportunity to find a route that cannot be located by visual interpretation alone. The alternative for the orienteer (manager) is to try to reach the destination by trial and error, but this is a poor strategy when competing with other, competent individuals (Hannon P.D. and A. Atherton, 1998). With limited resources, an undirected approach can lead to failure or non-completion. Moreover it is not enough to read popular tips on 'how to prepare a business plan' for the preparation of qualitative and successful business plan. It is necessary to have know-how and skills in order to practically apply the knowledge you have in developing a business plan. It becomes apparent that orienteering or planning requires some core competencies, key knowledge, and critical 'how to' skills. Successful application of skills and knowledge enables the planner to traverse completely unfamiliar territory and to find the goal, even when it cannot be seen. Therefore it can be expected that new and young owner-managers would be trained in the understanding and application of the techniques of business planning.

Although many articles do not distinguish between plans and planning, some of those that do have concluded that the process of planning can lead to improved performance. There are, in other words, a set of competencies and capabilities related to the interaction between the small business and its environment that underpins the business planning activity within the small business. These competencies reflect the nature of the small business, i.e. its informality and centralized ownership and decision-making structure. The competences associated with planning tend to describe the personal skills and characteristics of the successful owner-manager. These have been summarized as follows in several studies:

- the planning firm is flexible in its consideration of the external environment;

- planning is based upon 'the role and capability of forecasting' in the small firm, and is strongly influenced by the degree of awareness of the environment perceived by the owner-manager (Gibb and Scott, 1985; Gibb et. Al 1978).

Successful management of business development is based upon strategic awareness capability – 'how one identifies and conceptualizes one's own world, recognizes events in this world, interprets these events, and makes decisions leading to appropriate action (Atherton and Hannon, 1996a).

Managers need to build a capability, not only to manage more efficiently what they currently do, but also know when to stop doing it and to try something different (Harrison et. al., 1994). Consequently a businessman who prepares a business plan should know:
- methods of market research and analysis (market segmentation, market size identification);
- principles of marketing activity (marketing mix);
- principles of pricing and methodology of setting a sales price;
- technology of product manufacturing (service supply) and principles of process organization and order.
- methodology and methods of calculation of product cost price;
- company management models and compensation rules;
- appraisal methods and ways of company's financial performance;
- principles of accounting and order of bookkeeping.

Therefore not every beginner in business (or person already in business) is able to prepare a proper business plan, even if he/she has excellent feel for business or good intentions. In that case hiring consultants/experts is a good idea. They can skilfully transfer the presented business idea into a business plan.

Accordingly it is difficult to agree with The American Woman's Economic Development Corporation (2002) arguments that business plan must be prepared by a businessman. It can be reasoned that without special background and knowledge to prepare a qualitative business plan is hardly possible. In that case a businessman has actively to take part in preparation of a business plan together with competent/qualified consultants.

Conclusions

In sum, we propose that new organizations plan because they are reacting to how they are expected to plan, because they imitate other successful organizations in their fields that plan, or because they are told to plan. In general, our findings regarding business plans and performance suggest that the efficiency of a business plan depends on customer and person who prepare it, in particular on their competence and quality of carried work. Whereas, value of an efficient business plan depends on how it is used and on "know-how" of person who uses it, i.e. knowledge how to maximally use all the chances that can be obtained from this business instrument. It is worth mentioning one more criterion of a business plan as a business instrument, i.e. its distinction or individuality. In every particular case business plan must reflect particular goals and objectives both in its form and in its content. The presented structure of a business plan can be regarded as a 'backbone' of a document which assures integrity of business planning and assessment, but it does not hinder to reflect individuality in the goals and objectives of business plans.

For future research, we challenge practitioners and academicians to get together and create practical documents that can be used as guidelines for entrepreneurs, managers to improve the understanding of how a business should operate. The relationship between planning and survival may be another fruitful subject for future research.

References

1. Atherton, A. and Hannon, P. D. (1995). Ways of Seeing: How a Small Firm's Perceptions of the External Environment Define Excellence in Management, 25th European Small Business Seminar Conference, Cyprus.
2. Baker, W.H., Addams, H. L. and Davis, B. (1993). Business Planning in Successful Small Firms, *Long Range Planning*, 26(6), pp. 82-88.
3. Bamberger, I. (1986). Values and Strategic Behaviour, *Management International Review*, 26(4), pp. 57-69.
4. Boyd, B. K. 1991. Strategic planning and financial performance: A meta-analytic review, *Journal of Management Studies*, 28, pp. 353–374.
5. Bracker, J. S., Pearson, J. N. (1996). Planning and Financing Performance of Small Mature forms, *Strategic Management Journal*, 7(4), pp. 503-522.
6. Bracker, J., Keats, B., & Pearson, J. (1998). Planning and financial performance among small firms in a growth industry, *Strategic Management Journal*, 19, pp.591–603.
7. Castrogiovanni, G. (1996). Pre-startup planning and the survival of new small businesses: Theoretical linkages, *Journal of Management*, 22, pp. 801–822.
8. Crawford-Lucas, P.A. (1992). Providing business plan assistance to small manufacturing companies, *Economic Development Review*, pp. 54-8.
9. Gibb, A. A. and Scott, M. (1985). Strategic Awareness, personal Commitment and Process of Planning in the Small Business, *Journal of Management Studies*, 22 (6).
10. Gibb, A. A. et al. (1978). Effects on Small Firms of Industrial Change in a Development Area, Report to the UK Social Science research Council, London.
11. Grinyer, P. H. and Norburn, D. (1975). Planning for Existing Markets: Perceptions of Executives and Financial Performance, *Journal of Royal Statistical Society*, 138, pp. 70-97.
12. Hannon P.D., A. Atherton (1998). Small firm success and the art of orienteering: the value of plans, planning, and strategic awareness in the competitive small firm. *Journal of Small Business and Enterprise Development*, vol. 5, no. 2, pp. 102-119.
13. Harrison, J, D. Thompson, H. Flanagan, P. Tonks (1994). Beyond the Business Plan. Journal of Management in Medicine, vol. 8 No. 1, pp. 38-45.
14. Hayes, R. H. (1985). Strategic Planning Forward in Reverse? *Harvard Business Review*.
15. Honig, B., T. Karlsson (2004). Institutional forces and the written business plan. *Journal of Management*, 30(1), pp. 29-48.
16. Hormozi, A. M., G. S. Sutton, R.D. McMinn, W. Lucio (2002). Business plans for new or small businesses: paving the path to success. *Management decision* 40/8, pp. 755-763.
17. Kallman, E. A. and Shapiro, H. J. (1978). The Motor Freight Industru – A Case Against Planning, *Long Range Planning*, 11 (1), pp. 81-86.

18. Kudla, R. J. (1980). The Effects of Strategic Planning on Common Stock Returns, *Academy of Management Journal*, 23, pp. 5-20.
19. Leontades, M. and Tezel, A. (1980). Planning Perceptions and Planning Results, Strategic Management Journal, 1 (1), pp. 63-75.
20. Mintzberg, H. (1994). The Rise and Fall of Strategic Planning. Prentice-Hall International (UK) Ltd.
21. Monroy, H. (1997). Are Stretegic Plans More Trouble Than They're Worth? *PC Week*, 14(13), p. 136.
22. Ogunmokum, G. O. (1990). A Study of the Strategic Planning Practices in Australian Small Business Organizations, unpublished Doctoral Dissertation, Monash University, cited in Foster.
23. Orser, B.J., Hogarth-Scott, S. and Riding, A.L. (2000), ``Performance, firm size, and management problem solving'', *Journal of Small Business Management*, pp. 42-58.
24. Rhyne, L. (1986). The relationship of strategic planning to financial performance. *Strategic Management Journal*, 7, pp. 423–436.
25. Robinson, R., and Pearce, J. (1983). The impact of formalized strategic planning on financial performance in small organizations, *Strategic Management Journal*, 4, pp. 197–207.
26. Robinson, R., and Pearce, J. (1984). Research Thrusts in Small firm Strategic Planning, *Academy of Management Review*, 9, pp. 128-137.
27. Rue, L. W. and Fulmer, R. M. (1973). Is Long Range Planing Profitable? *Academy of Management Proceedings*, Boston.
28. SBA (2001), ``North Dakota small business resource guide'', Small Business Administration available at: www.sba.gov/nd/ndguide11.html (accessed 5 May, 2009).
29. SBA Online Women's Center ± American Woman's Economic Development Corporation (1997), ``General guidelines for developing your business plan'', *Small Business Administration*, June, available at: www.onlinewbc.gov/DOCS/starting/ bp_sample.html (accessed 7 March, 2009).
30. Schwenk, C. R., & Shraeder, C. B. (1993). Effects of formal strategic planning on financial performance in small firms: A meta analysis, *Entrepreneurship Theory and Practice*, 17(3), pp. 53–62.
31. Steiner, G.A. (1979). Strategic Planning: What Every Manager Must Know. Free Press, New York.

Gediminas Sargūnas, Dalia Susnienė

Verslo planų efektyvumas ir vertė

Santrauka

Planavimas yra labai svarbus norint nustatyti kaip seksis ar sekasi įmonėms kurti ir plėtoti savo verslą. Būtina sąlyga verslo sėkmei yra tikslų numatymas, kuriuos seka strategijų kūrimas šiems tikslams įgyvendinti. Verslo planas yra veiksminga versle naudojama priemonė tikslams ir uždaviniams susisteminti į vientisą formatą. Nesvarbu kokio yra dydžio ar išsivystymo stadijos įmonė, verslo planą ji naudoja vidinei veiklai tobulinti ir apibūdinti bei ''parduoti'' savo verslą ar idėją potencialiems finansuotojams. Verslo planas ne tik turi pasižymėti verslo idėjos išskirtinumu, bet ir atitikti standartinį struktūrą. Straipsnyje aptariama verslo plano struktūra, tikslingumas, poveikis įmonės veiklai bei reikalingos žinios ir įgūdžiai efektyviam verslo planui sudaryti.

About the authors

Gediminas Sargunas, dr. of technical sciences, Kaunas University of Technology Panevėžys Institute Faculty of Management and Administration. Email: g_sargunas@panko.lt,. Research interests: business economics and administration, business organizational behaviour, environmental engineering.
Dalia Susnienė, assoc. prof., Kaunas University of Technology, Panevėžys Institute, Centre of Languages, dalia.susniene@ktu.lt, tel.8-45 596259, scientific research areas: translation, students' motivation, social language development.

THE CHANGING BUSINESS ENVIRONMENT AND THE INTERNET MEDIA AS A STAKEHOLDER GROUP

Muammer Sarikaya, Selim Özdemir

Yalova University, Turkey

Abstract

It's becoming more and more difficult to keep existence and survive in today's market place. One of the main reasons for it is the increasing range of stakeholders and the increasing pressure on firms resulting from improving communication and information technology which play a great role for it. Firms are struggling with so many stakeholders today. The interaction between the stakeholders leads to widening of the responsibility area. Media have become an influential actor in business world as well as in every part of society. Especially the Internet media which have spread more and more have created a new dimension in the firm-media relationship. The Internet media which have a significant impact on firms have become a stakeholder group to be taken into consideration because of their ability to broadcast 24 hours and immediately into a large area. In this study, the effect area of the Internet media in the firms and the responsibilities of the firms are examined.

Introduction

The management area and responsibilities of the firms are widening more and more. This situation requires a more sensitive and sustainable approach. In other words, this situation necessitates a precise analyses of stakeholders which affect the firms and which are influenced from the activities of firms, and it requires developing strategies accordingly. A stakeholder group which is not seen prior may impact the firm positively or negatively depending on the conjuncture, and the cost or added value of this might be to a large extent for the firm.

Media has a distinct structure and role from the other stakeholder groups. The media which may have a direct relationship with the firms might influence the perception of other stakeholders and initate interaction between these two parties. Media which is significant actor in the business world as well as in most other areas of the society are undergoing a change and transformation. In addition to written, visual, and radio the Internet media has become popular lately. The Internet media which differs from others in terms of structure and whose usage is increasing fast can reach more people in a shorter time. The Internet recieves greater attention because of its role and effect on the business world. It is seen that the Internet media consists of a large stakeholder group when the concept stakeholder is examined in a broader sense. That's why in this study the importance of the role and the impact of the Internet media and the relationship between the media and the firm are mentioned, and it's posited that more sensitive and comprehensive management approach should be displayed.

The Concept of Stakeholder

Stakeholders are the individuals and organizations which a firm has relationship and responsible for in the environment where it is doing activities (Logsdon, Lewellyn, 2000, p.419). In other words, stakeholders are individuals and organizations which are affected from the firms' applications, policies, decisions and activities, and impact them at the same time. That's why there is a two-way interaction between a firm and its stakeholders (Carroll, Buchholtz, 2000, pp.65-66). Stakeholders facilitate the firms to develop flexible and more efficient strategies and sustainable road maps (Waxenberger, Spence, 2003, p.247).

Defining the concept of stakeholders provides the firms to handle a firm's stakeholders and its responsibilites for these stakeholders in a wider perspective and answer the following questions (Miller, Lewis, 1991, p.56):
- Who are stakeholders ?
- How is stakeholders' interaction with the firm?
- How are stakeholders classified and the relationships among them?
- How is the nature of interaction between the firm and stakeholders, and what are the related subjects?
- What kind of a direction should management determine in the relationship with the firm and the organization?

Firms possess various stakeholder network according to the areas and societies. Classical management approach championed only the relationship between a firm and its stakeholder such as employees, stakeholder, suppliers, and customers. However, it's today accepted that the relationship between a firm and the stakeholder, and the relationships are not independent from each other. The increasing interaction among the stakeholders makes it necessary to take into consideration all the stakeholders who have shares of the firms. Media which are a part of the stakeholder groups have a significant place in the business life as well as in other areas. Media which is different from others have a power in the interaction among the stakeholders as well as on the firm.
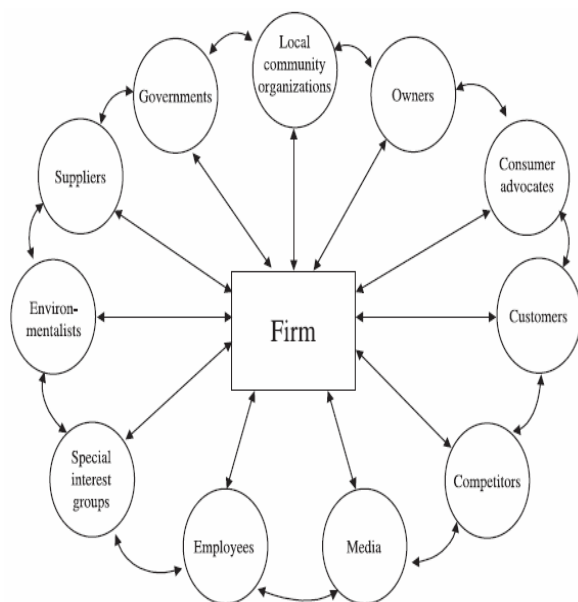
Figure 1. Stakeholders of Firm

Resource: Jhon F. Preble. (2005) "Toward a Comprehensive Model of Stakeholder Management", Business and Society Review, 110, 4, p.417.

The relationship between a firm and its stakeholders is developing day by day and has a significant role in terms of a firms' sustainability. Because the decisons a firm is making are a kind of a result of the effects of stakeholders on a firm. That's why the degree of the harmony of the decisions the firms are making displays, the sensitivity and the approach of a firm towards its stakeholders (Sarıkaya, (a) 2009, p.41).

A stakeholder group when it is considered within the framework of the stakeholder approach is not an alternative to another stakeholder group. Each stakeholder group has a distinct place on a firm's existence. In the business life which is not linear a firm must have healthy relationships and develop strategies to prevail these relationships. Namely, a firm should follow balanced policies about its stakeholders (Stern, 2008, p.52).

Firm-Media Relationship

Media have an important effect on the society. Stakeholders get the information about the firm through media to a large extent. In this respect, media has a strong impact on the reputation of firms. Investors take into consideration the suggestions of firms giving decisions about investment, customers attach importance to reputation of the firms in the press (Morsing, 1999, p.118), and governments may put regulations into effect according to the news.

Media are not the institution, which only presents firms' advertisement and give information about their actual activities but also shape this information and direct public's preference (Deephouse, 2000, p.1095). Media may affect stakeholders viewer about the firm negatively or positively and shape their perception about the firm. When it is accepted that the institutional reputation is a kind of the perception of stakeholders about the firm, it becomes clear that media are so much influenion on the firms' reputation (Dowling, Weeks, 2008, p. 28).

Media may affect internal stakeholders as well as external stakeholders The motivation of the employees of a firm whose reputation is disparaged and about whom negative news are made may be affected negatively as well. If we look from the reverse angel, being an employee of an organization which has respect of media and gains acceptance from the society will be the source of motivation itself (Morsing, 1999, p.118). Firm must act knowing that strategies to manage the relationship with the stakeholders will also affect the other stakeholders as well.

Media have a significant role on firms goals and communication in today's business life. Media are more effective and convincing than other communication tools. Furthermore, they can reach different masses in a shorter time. The relationship with media is among the issues a firm prioritize to remain standing in competition in a competitive environment. That's why it should be handled in a management approach (Besler, Sarıkaya, 2008, p.148).

The increasing number of news channel broadcasting 24 hours and the medias' widening affect area rise the strength of media and its effect in the business life. That's why it's important for a firm to inform its stakeholders continuously and systematically with a transparent management approach and manage its relationship with the media (Sarıkaya, (b) 2009, p.168).

Jeanette Smith (1995) explains the responsibilities that must exist in the relationship with its partners with the rules below (Smith, 1995, p.3):

- Correct information about the institutions should be provided to the media,
- Firms should act quickly while informing the media,
- Firms should be ready to inform media when asked,
- Information should be given to the media before the delivery time,
- The institution should be aware of its structure and employees in order to introduce itself,
- The firm should be honest with the relationship with its stakeholder.

The firms who are aware of the importance of their relationship with stakeholder use the web sites to provide the media with information. In this respect, most firms have media relationship link on their web sites and it is aimed that media can easily put information about the firm (Callison, 2003, pp 24-25). Nevertheless, when the web sites of firms in Turkey are examined it's seen that media relationship links are not comprensive and they don't satisfy the needs.

Internet-Media and Their Effect on Firms

The use of Internet is increasing day by day and it occupies an important place in every corner of our lives. Especially, young people get their needs through the Internet. The dependence on the internet has resulted the forthcoming of the internet lately. The internet with the feature of being interactive has the qualification which responds to the demand in today's world. Thus, individuals give importance to the Internet as they can reach the information immediately and give necessary reply.
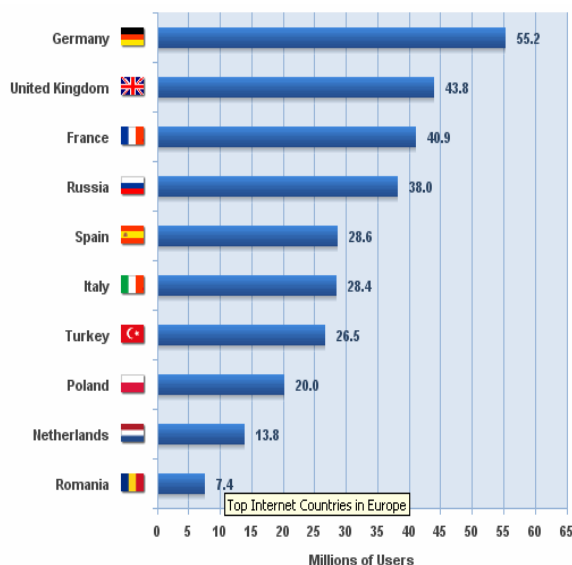
Figure 2. The Number of Internet Users in 10 European Countries (March 2009)

Resource: Internet World Stats-www.internetworldstats.com

As it's seen in Figure 2, Turkey with its 26.5 million users is which use the internet more in Europe. With this figure, Turkey with is one of the countries using the internet the most. Furthermore, it's observed that the number of users is increasing day by day. This situation is an indicator for how the Internet world is important and how much it attracks attention.

The Internet is an indispensable part of business life as well. Firms use the Internet to share information with both internal ad external stakeholders to have communication with them. The firms who are aware of this gives great importance to the web sites, update them, and use the web sites as an effective tool to manage their stakeholders (Lassar, Dandapani, 2003, p.38).

In the last years, the media called as electronic media or Internet media have been more popular and created more responsibilities of the firms and acceptance of a more responsible approach 24 hours. That the Internet can deliver the information to larger masses necessiates the firms to be more transparent and accountable. Informing the public continuously, sistematically, and healthy way is vital for institutional reputation. May disparage the reputation of the firm and thus decrase the market share. It's possible to face such examples both in Turkey and international area (Besler, Sarıkaya, 2008, p.147). Thus, firms should be more sensitive to the internet media. Because internet media have a different position from other stakeholders and are vital for the survivability of the firms.

The Internet which is a new media type icludes all communication vehicles we can recognize such as radio, television, newspapers, magazines, letters etc. As it so comprehensive, internet is indespensible today. Also, as it is updated regularly, it provides importatnt advanteges to follow the time (Çakır, 2007, p.125).

The research indicate that the Intermet media has the ability to develop strategies to gather and spread the information. Moreover, the Internet media has a significant share in the social interaction and exchange of information among the stakeholders. The Internet media

having this feature is an important tool for the firms to be accepted by the public (Lassar, Dandapani, 2003, p.39).

Any news about the firm on the Internet may reach millions of people its correctness without being questioned and may create perception. This forces the firms to be more sensitive to thier stakeholders and review their relationships with stakeholders. In this way, it's aimed to get rid of the negative effects on the stakeholders. Otherwise, a firm which has been doing activities for many years, may have too much loss.

The Internet media provide many advanteges to the stakeholders. The stakeholders who can reach immediately and quickly may command through the Internet and share their ideas with various members of their stakeholder group. The interaction provided by the internet is more efficient and interactive when compared with others (Lindic, 2006, p.2).

The Internet media provides information the society needs to the contribute and increases the social contribution. In daily life, the rate of the young people who communicates through Internet is considereably high. Young people mainly prefer the Internet rather than the other classical media (Christie, 2006, p.325). The young people who have high expectations and social sensitivity may word their demands and question social problems through the Internet.

Another reason for the increase of the Internet users is that people can utter their expectations and demands in every area of the society. It's such that a manner toward a firm thanks to this interaction increases its strength or negative news may cause individuals to support a firm as a reaction. This may the democratic participation more efficient and displays that the traditional management is insufficient.

The Internet media with its unique features are more efficient. These features are (Çakır, 2007, p.140):

- It provides the information continuously and updated,
- It helps the individuals to reach the information 24 hours and whenever they like,
- It uses sound drawing, visual files based on multimedia,
- It helps the people to reach the archieved information easily and it may save the information,
- Individuals can interact and send their commands immediately,
- In helps the individuals to respond without using intermediary,

It's possible to increase these features. However, especially interactive interaction and the individuals expressing themselves increase the individuals' effect as a stakeholder. The internet used to have limited effect on the NGO's when it was not this much widespread. Nonetheless, individuals who gather around platforms formed on the internet may present their responds more effectively even if they are in the different corners of the world. This causes the firms to pay attention to these groups and listen to these gropus. For example in Turkey, three different firm employees who have formed a website called www.nasil1firma.com may share their ciriticims about their firms and their ideas. The managers of the website who say that their aims are to prevent their managers arbitrary behaviours aim to solve the problems of the employees sticking to the principle of secrecy and privacy. At the same time on the web site they utter the

difficulties the applications face when they apply for a job.

In this respect, firms form units to follow and respond to such web sites and the news about their firms, or they appoint some employees for this purpose. Thus, firms aim to prevent negative perception about them on the internet.

Conclusions

Parallel to the social development, firms make innovation in their management style and adopt approaches suitable for the realities of the age. It's possible to see this parellelism when the development process in the management styles are examined. Like changes in the needs and priorities of the people, the firms in order to leave their existance search new and their priorities increases both in quality and quantity.

While developing information and communication technologies provides many advanteges for the firms in every area, it gives some responsibility to the firms.

Firms have a wide range of stakeholders and responsibility network. The management styles which work with input-output model and which has a few partner, fails to respond to the needs of today. In this respect, the media and specially the Internet media being an important stakeholder can direct the masses as a social actor. In today's world in which the concepts of time and place are changing. The stakeholders of the firms which affect the firms and are effected from the firms should be analyzed mora throughly and be approached sensitivly.

As a result, Internet media has become a stakeholder group with its role in the interaction of the stakeholders and members of the each stakeholder group and its effect on firms. When it's realized that most people spend most of their times on the Internet, it's seen that virtual life is an area which shouldn't be neglected. That's why firms should take into considerable the concept of stakeholder in a wider perspective and analyze the effect of the Internet with and out of the firm and develop efficient strategies.

References

1. Besler, Senem & Sarıkaya, Muammer (2008) Kurumsal İtibarı Yaratmada Kurumsal Paydaş Yönetimi ve Medya İle İlişkilerin Önemi, 2008 Muhan Soysal İşletmecilik Konferansı: İşletmecilikte Yeni Gelişmeler ve Fırsatlar, pp.143-153.
2. Carroll, Archie B. & Buchholtz, Ann K. (2000) Business and Society: Ethics and Stakeholder Management, Fourth Edition, Australia: South-Western College Publishing.
3. Christie, Thomas B. (2006) "Using the Internet for News and Perceptions of News Organization Bias", Competition Forum, 4, 2, pp.324-330.
4. Coy, Callison (2003) Media Relations and the Internet: How Fortune 500 Company Web Sites Assist Journalist in News Gathering, Public Relations Review, 29, pp.29-41.
5. Çakır, Hamza (2007) "Geleneksel Gazetecilik Karşısında İnternet Gazeteciliği, Erciyes Üniversitesi Sosyal Bilimler Dergisi, Sayı:22, Yıl:2007/1, pp.123-149.
6. Deephouse, David L. (2000) "Media Reputation as a Strategic Resource: An Integration of Mass Communication and Resource-Based Theories", Journal of Management, Vol.26, No.6, pp.109-112.
7. Dowling, Grahame & Weeks, Warren (2008) "What the Media Is Really Telling You About Your Brand", MITSloan Management Review, Vol. 49, No.3, pp.28-34.
8. Lassar, Walfried M.& Dandapani, Krishnan (2003) "Media Perceptions and Their Impact on Web Site Quality", The International Journal of Bank Marketing, 21, 1, pp.38-47.
9. Lindic, Jaka (2006) "How Do Corporations Use Internet for Public Relations?", 19th Bled Conference eValues, Bled, Slovenia June 5-7, pp.1-8.
10. Logsdon, Jeanne M. & Lewelly, Patsy G. (2000) "Expanding Accountability to Stakeholders: Trends and Predictions, Business and Society Review, 105, 4, pp.419-435.
11. Miller, Richard Lee & Lewis, William F. (1991) "A Stakeholder Approach to Marketing Management Using the Value Exchange Models", European Journal of Marketing, Vol.25, No. 8, pp.55-68.
12. Morsing, Mette (1999) "The media Boomerang: The Media's Role in Changing Identity by Changing Image", Corporate Reputation Review, Vol.2, No.2, pp.116-135.
13. Preble, Jhon F. (2005) "Toward a Comprehensive Model of Stakeholder Management", Business and Society Review, 110, 4, pp.407-431.
14. Sarıkaya, Muammer (2009) "Paydaş Yönetimi" Yönetim Yaklaşımlarıyla Kurumsal Sürdürülebilirlik, Ed: Senem Besler, İstanbul: Beta Basım, pp.41-64.
15. Sarıkaya, Muammer (2009) "İşletmelerin Sürdürülebilirliğinde İkincil Paydaşlarla İlişkilerin Önemi", Kamunun Aydınlatılmasında Yatırımcı İlişkileri, Ed: Nurhan Aydın, Eskişehir: Anadolu Üniversitesi Yayınları.
16. Smith, Jeanette (1995) The New Publicity Kit, U.S.A: John Wiley&Sons Inc.
17. Stern, Reuben J. (2008) "Stakeholder Theory and Media Management: Ethical framework for News Company Executives", Journal of Mass Media Ethics, 23, pp.51-65.
18. Waxenberger, Bernhard & Spence, Laura J. (2003) "Reinterpretation of a Metaphor: From Stakes to Claims", Strategic Change, 12, pp.239-249.
19. http://www.internetworldstats.com/stats4.htm: 15.09.2009.

Muammer Sarikaya, Selim Özdemir

Besikeičianti verslo aplinka ir Internetinė žiniasklaida tarpininkės vaidmenyje

Santrauka

Žiniasklaida tapo įtakinga aktorė ne tik verslo pasaulyje, bet ir visuomeniniame gyvenime. Ypatingai internetinė žiniasklaida, kuri labiau paplito ir sukūrė naują aspektą žiniasklaidos firmų tarpusavio santykiuose. Šitame moksliniame tyrime yra išnagrinėta internetinės žiniasklaidos veikimo sritis ir atsakomybė firmose.

About the authors

Muammer Sarıkaya, PhD, Faculty of Economics and Administration Sciences at Yalova University in Yalova. E-mail.: msarikaya@yalova.edu.tr, tel: +90 226 8142223. Research interests: corporate social responsibility, stakeholder management, NGOs, and social entrepreneurship.

Selim Özdemir, PhD, Faculty of Economics and Administration Sciences at Yalova University in Yalova. E-mail.: sozdemir@yalova.edu.tr, tel: +90 226 8142223. Research interests: job staisfaction, motivation, entrepreneurship.

INTERNATIONALIZATION INFLUENCE ON LITHUANIAN HOTEL SERVICES SECTOR

Jurgita Sekliuckienė, Neringa Langvinienė

Kaunas University of Technology, Lithuania

Abstract

Internationalization processes involves a lot of services sectors. It plays an urgent role for various services enterprises, as transport, retail or wholesale, and hospitality, too. The paper presents the identifying what is an influence of internationalization for Lithuanian hotel services sector; how this sector is changing recently because of disappearing borders between countries, relationship between various businesses, located in the different regions. On the ground of statistical data and systematic analysis, the situation of hotel services sector, related to international capital is estimated. Perspectives of these services sector are identified.

Keywords
Internationalization, international business, hotel services, sector, influence

Introduction

The actuality of the paper. Internationalization of services enterprises recently involves more and more new sectors. Internationalization is determined by development of technological innovations, declined trade barriers between countries or enterprises located in the different regions. Internationalization is described as a successful development of international activity, geographical market, products, services and operations. A process of internationalization has an influence on increasing of companies and plays a role for achieving competitive advantages before others. Internationalization is closely related to globalization. In the train of globalization companies more intensive are penetrate to the global markets. The globalization of world markets increases the opportunities for marketing, selling services internationally; stipulate local and international companies' cooperation investing capital, establishing the joint companies, strategic alliances, etc.

Companies develop their activity during international process, usually by investments in the foreign markets. Foreign direct investment (FDI) stimulates to grow the entire economy of a country. FDI has a large impact on development of the Lithuanian economy's sectors, including hotel sector. Hotels services sector in Lithuania is one of the most important sub-sectors of tourism, having an influence on increasing both competitiveness of all tourism and of the region, in which tourism services are provided. Tourism sector has one of the largest parts, comparing with other services sectors, of GNP to the impact of all economy of a country. Development of the hotel sector is one of the most important tasks for Lithuania, for any other country which hasn't many advantages before others.

Scientific problem analysed in this paper is to identify what is an influence of internationalization on development of hotel services sector, as more enterprises engaged in hotel business ties themselves with international capital; how a sector of hotel services is changing because of processes of internationalization.

A goal of this paper is to disclose the influence of internationalization on hotels services sector. Statistical data of hotel services sector in Lithuania are analysed. Different indices of internationalization on the ground of statistical data are estimated. Summarizing the results, possibilities for international capital invasion and perspectives of development of hotel services sector in Lithuania are identified.

An object of the research is internationalization in hotel services sector.

Methods of the research are scientific literature, statistical data, and systematic analysis.

Limitations of the research could be described by a lack of statistical data about foreign-controlled hotel services enterprises. Some of the data are presented for all class of hospitality (it is hotels and restaurants total).

Concept of internationalization

Internationalization is conceivable as a successful development of the international activity of enterprises. Authors perceive the definition of internationalization differently (Table 1).

Table 1

The conception of internationalization by different authors

Authors *(by chronological range)*	Definition provided
Axinn, C. N. Matthyssens, P. (2002)	It is a behaviour of firms explained in terms of: a) increasing expansion in export markets; b) increasing capital investments across the globe; c) decisions made by firms in chosen between the increasing number of entry models available to them in accessing foreign markets.
M. Ruzzier, R. Hisrich, B. Antoncic (2006)	a) is a synonym for geographical expansion of economic activities over a national's countries border; b) is a process of mobilizing, accumulating, and developing resource stocks for international activities.
J. Kuada (2006)	It is step-like fashion process, when firms are moving to the next stage only after sufficient experience in local market.
J. Sekliuckienė (2008)	It is transferring abroad of enterprise's knowledge, technologies, production and marketing.
A. Osarenkhoe (2009)	a) is a process when enterprises develop business relationship in networks in other countries through international extension,

	penetration or international integration; b) is a process, because markets are depicted as a system of relationships among a number of different players, and strategic action is rarely limited to a single firm.

Summarizing we are able to conclude, that: *internationalization is a successful development of international activity of the companies, geographic markets, products, services and operations, also changes in management philosophy, organizational behaviour, organizational resources and development of relationship; it is expanding globally the activity of the companies and their actions*. Generally speaking, it is a successful development of enterprises activity internationally – acting abroad.

Analysing the process of internationalization, two main questions are formulated: „*why*"and „*how*"international companies are internationalising their activity. Answering to the question „*why*", referring to scientists (Žičkienė, 2008; Žukauskas, 2006, Sekliuckienė, 2008), such main internationalization motives could be developed: expansion of new markets, a range of larger profit, diversity of the market, a range of economy of scale, reduction of production costs, a search for larger prices for produced articles and cheaper resources, taxes privileges, glut of local market with companies items, more rapid growing of other markets, diversity of risks, assimilation of modern technologies, creating of companies image, etc. It should be added, that internationalization of activity is more related to large companies. According to G. R. Javalgi, D. A. Griffith, and D. S. White (2003), a size of an enterprise plays a critical role in influencing managerial attitudes toward internationalization. Management's international orientation in larger companies may come from *two separate elements*: *growth* and *resources*. Larger enterprises are searching for growth internationally and have ability to absorb the risks inherent in international expansion and maintain the human capital resources to manage international operations.

Answering to the question „*how*", a market entry mode is usually analysed. Hotel industry companies mostly penetrate to foreign markets through direct ownership, franchising, leasing, and managing contracts. Reffering to L. Altinay (2005) and A. R. Rodriguez (2002), who were implemented researches on factors, affecting entry mode choices in international hotels, it could be excluded, that international hotels groups, which are investing to countries with large uncertainty level, large political and economic risk (usually they are less developed countries or quick developing countries) – use a franchise or non – equity based arrangements. While more developed countries are investing mostly to stocks.

Mostly large international hotel groups have several brands with location in entire the world. Such examples could be given as Rezidor Hotel Group with brands known to everybody in the world: Park Inn, Regent, Country Inn, Radisson Blu (ex-. Radisson Sas), Hotel Missoni (http://www.rezidor.com/).

Main indices and trends affecting internationalization process in hotel industry

Analysing the internationalization process in the specific economy sector – an international scale at particular period is usually emphasized. For the identification of scale of globalization in the hotel services sector D. Litteljohn (1997) excludes international travel arrivals and the international holdings of hotel groups. According to him, a change of these two indices – increasing or decreasing – shows also a level of internationalization both on general point of view and on analysing different countries, while a change of coming tourists through the specific period and a change of foreign capital enterprises growing at hotel services industry are calculated. Analysing the size and scale of the hotel industry worldwide, D. Litteljohn (1997) educate such criteria for hotels at the level of region: revenue, hotels number, rooms' number, employees' number.

D. Litteljohn, A. Roper and L. Altinay (2007) excluded such trends, related to internationalization process and competitiveness of international hotel companies:

- Future competitiveness will be achieved at the local, rather than international level. As the main index to substantiate their proposal authors indicate international tourism arrivals and its variation.
- Travel and tourism investment will grow in North America and North East Asia.
- The diversity of company types (and their origins) is likely to increase any further in the future.
- Changes in technology and communications will play a crucial role in hotels interaction with other tourism suppliers and customers, ultimately changing traditional industry relationships and boundaries.
- Changing service sector strategy from low value (e.g. hotels) to higher value service sectors. Prioritisation concerns of competitiveness at mature tourism destinations.

On the ground of basic indices, a describing the affect of internationalization, hotels services industry will be presented below.

Internationalization in the Lithuanian Hospitality industry: research methodology and empirical results

Research methodology and the main results will be presented here, in this part of the paper. For the analysis of the theoretical aspects of the main indices affecting internationalization process in the hotels industry in Lithuania general survey methods were applied: 1) statistical data comparison; 2) systematic analysis. The main indices were studied for a period since 2004 to 2009. Lithuanian statistical databases were analysed.

Internationalization of Lithuanian hotel services sector will be evaluated according to the main indices of internationalization: incoming foreigners, incoming foreigners by countries, FDI to Lithuanian hotels and restaurants, main indices of hotels and restaurants, controlled by foreign capital (for example, number of enterprises, turnover, etc.), share of foreign controlled enterprises, and features of hotels, what belongs to international hotels' networks.

It should be added that all hotels, what belongs to international hotels' networks were included into the systematic analysis (upon the data of 2009).

An international coming tourist is the first index what we want to represent. A development of hotel services industry in Lithuania is determined by a number of arriving tourists and their consumption expenses. A flow of incoming tourists is presented in a Figure 1.

On the ground of statistical data we are able to declare that a clear trend of growing number of arriving tourists is noticeable. The larger rise is visible in 2007 comparing to 2006, when a growth is by 82% points. While a situation shows, that in 2005 only 3% point's growth is visible.
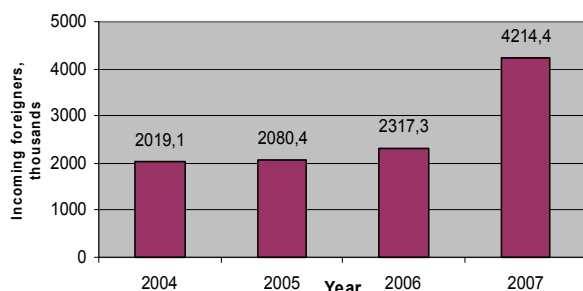
Figure 1. Incoming foreigners, thousands
(*Author's calculations, Flow of visitors (2009). Department of Statistics*)

However it should be noted, that as economical crisis, as bankruptcy of the largest Lithuania air transporter "Flylal – Lithuanian Airlines" – have had unquestioned influence on tourism sector. Thus, a number of incoming tourists in 2009 likely is going down.

Analysing the changes upon the countries from which tourists are coming to Lithuania, the number of tourists from Asia, Africa, EU is increasing, while a number of tourists from Belarusian, Russia, other former Soviet union countries (Table 2) - decreasing.

Table 2

Incoming foreigners by country, thousands

Country	2004	2005	2006	2007
Euro-zone	n.a.	n.a.	n.a.	468
Africa	1,8	2,2	2,1	3,3
America	36,2	44,1	46	33,2
Australia, Oceania	4,4	5,7	6,9	..
Asia	33,8	37,8	42,4	53,5
ELPA countries	n.a.	n.a.	n.a.	52,4
European Union	n.a.	n.a.	n.a.	3014,8
NVS countries	1682,8	1729,8	1946	1081
BY Belarus	402,4	457,8	525,4	383,7
EE Estonia	n.a.	n.a.	n.a.	140,4
LV Latvia	n.a.	n.a.	n.a.	1220,8
PL Poland	n.a.	n.a.	n.a.	973,7
RU Russia	1207,9	1193,6	1327,8	618,8
DE Germany	n.a.	n.a.	n.a.	225,9
Other countries	n.a.	n.a.	n.a.	651,1

Source: Incoming foreigners by country and year (2009). Department of Statistics

The second index is **foreign direct investment (FDI)** to hotel services sector. A growth of Lithuanian hotel industry is conditioned also by a trend that international foreign networks are investing to these services sector in Lithuania more and more often. Analysing the attracting of foreign capital to Lithuanian hotel and restaurant services sector (it should be notices, the separate data for hotel sector without restaurant sector are not available), we see that as number of enterprises attracting foreign capital, as an amount of FDI during the three last year are growing (Figure 2). However, the data of 2007 year shows, that FDI in this year were by 5% points less than in 2006, a number of enterprises, attracting foreign capital, was by 21% less than a year before.

Analysing the situation, what countries are investing in Lithuanian hotel services sector, according to statistical data (2009), we are able to notice, that a large part of FDI is invested by Latvia (44,2 million Lt), Germany (19,4 million Lt), Norway (76,4 million Lt), Finland (18,6 million Lt) (Foreign Direct Investment in Lithuania, 2009). Netherlands, Denmark, Poland practically do not invest to Lithuanian hotel services sector, according to the data of Department of Statistics.
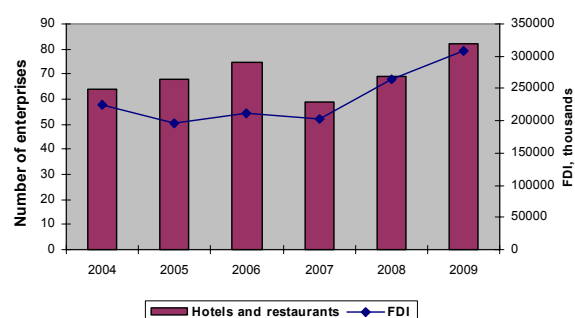

Figure 2. FDI to Lithuanian hotels and restaurant sector at the beginning of year
(*Author's calculations, Foreign Direct Investment in Lithuania (2009) Department of Statistics*)

The number of hotel and restaurant services enterprises – the third index describing the internationalization level in Lithuania. According to the statistical data since 2004, the number of enterprises in hotel and restaurant sector, that are controlled by foreign capital, was growing during 2003-2006 (Table 3). Even in 2006 a number of enterprises, controlled by foreign capital decreased by 1 point, a turnover was growing. Investment in tangible fixed assets in 2006 comparing to 2005 was larger more that four times (from 17439 to 72689, thousand Lt), while the number of employees was enlarged by 13% points only.

Table 3

The main indices of hotels and restaurants, controlled by foreign capital

Index	2004	2005	2006
Number of enterprise	49	58	57
Turnover, thousand Lt	117659	169465	203002
Value added by cost of production, thousand Lt	51470	72861	86086
Cost for staff, thousand Lt	33040	43298	54820
Investment in tangible fixed assets, thousand Lt	17131	17439	72689
Number of employee	2305	3083	3503

Source: Foreign capital enterprises business indices (2009). Department of Statistics

According to the Tourism sector study (2008), a number of accommodation sector's enterprises were growing

during 2003-2007 gradually. Even a prognosis for next decade was rather optimistic, according the study, authors of this study noticed, that tourism sector is very sensitive to various crisis (Turizmo sektoriaus studija: Darbuotojų ir jų kvalifikacijos kaitos prognozių tyrimo ataskaita, 2008). Thus, a situation that was seen during last 4-5 years is changing now. And since the end of 2008 is has been changing till now, because the economy recession has been affected the hotels services sector, too.

According to the Department of Statistics, at the beginning of 2009 year 655 enterprises were active (Activities of accommodation establishments, 2009). 331 enterprises were hotels, 37 motels, 129 rest establishments, 11 camping sites, 6 tourist camps, 19 hostels, 22 health establishments, 2 conferences, centres, private accommodation 78. Comparing to 2004, the number of accommodation establishments practically has not changed (it was 637). But the structure of accommodation establishments changed – the number of hotels increased from 278 to 331, private accommodation from 48 to 78. The number of rest establishments, health establishments decreased twice.

Share of foreign-controlled enterprises in the non-financial enterprise sector by financial intermediation enterprises shows, that a part of hotels, controlled by foreigners, in Lithuania is decreasing (Figure 3). If in 2004 hotels, controlled by foreigners, made about 1,7% of all hotels in Lithuania, in 2006 it was 1,5% of all hotels market. For general view, the situation of all economic is presented in the Figure 3, too.

Even if a part of market is decreasing, the turnover index shows that a part of foreign-controlled hotels give a large part of money year after year. If foreign-controlled hotels gave 11,4% of turnover in 2004, in 2006 it made 12,4%. Personnel cost were rather equal (13,3% in 2004 and 13,2% in 2006). Investment in tangible assets was growing also very smart during analysed period – from 10,7% of all share of hotel industry in 2004 to 19,1% in 2006. As all other activity, number of employees at hotel services industry during analyse period was growing, too.
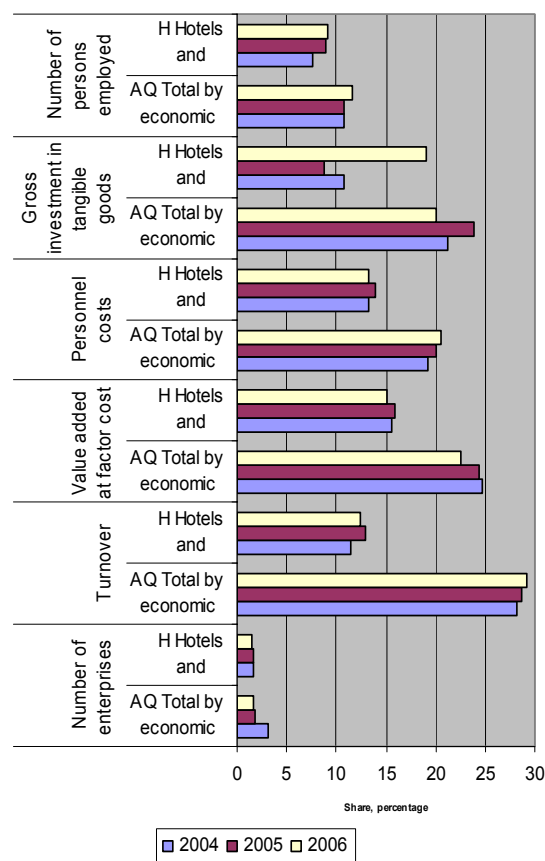
Figure 3. Share of foreign-controlled enterprises in the non-financial enterprise sector by financial intermediation enterprises, %
(Share of foreign-controlled enterprises (2009). Department of Statistics)

Numbers above show the general situation in hotel services sector while, if we compare indices of foreign capital hotel services establishments in 2002 and 2009, the positive change is increase of number of accommodation controlled by foreign capital. At the end of 2002 seven foreign hotels, that belongs to international hotels groups, were acting in Vilnius („Radisson SAS", „Summit Hotels&Resorts", „Best Western", „Scandic Hotels", „Relais&Chateaux", „Le Meridien", „Holiday Inn"), two ("Best Western" ir "Minotel") in Kaunas. At the beginning of 2009 already 20 hotels belonging to international networks were acting in Lithuania.

Foreign capital in hotel services sector**.** At the beginning of 2009 – 311 hotels were acting in Lithuania. 20 hotels of them belong to 12 international hotels groups (Table 4).

Table 4

Hotels, belonging to international hotel groups, in Lithuania (at the end of 2008)

Name of hotels group	All brands hotels world wide	Hotels	City	Number of star and brand/ name of hotel	No. of rooms
Rezidor Hotel Group	260. Plus 100 under develo		Vilnius Klaipėda	5*, Radisson SAS Astorija Hotel, 4*, Radisson SAS Hotel	11 9 74

	pment				
Starwoods Hotels and Resorts Group (Le Meridien Hotel group)	942	1	Vilnius	5*, Le Meridien Villon	193
Scandic Hotels Group - EQT	138	1	Vilnius	4*, Scandic Hotel Neringa	60
Best Western Hotel Chain	over 4200	3	Vilnius Kaunas Druskininkai	4*, Best Western Vilnius 4*, Best Western Santaka 4*, Best Western Central	114 92 36
Relais & Chateaux global group	456 members	1	Vilnius	5*, Relais & Chateaux Stikliai Hotel	43
Summit Hotels & Resorts	115		Vilnius	5*, Narutis Summit Hotel	0
IHG - InterContinental hotels group	over 4200	2	Vilnius	4*, Holiday Inn Vilnius 5*, Crowne Plaza Vilnius	134 108
Reval Hotels Group	10	4	Vilnius Kaunas Klaipėda	4*, Reval Hotel Lietuva 3*, Reval Inn Vilnius 4*, Reval Hotel Neris 3*, Reval Inn Klaipėda	291 84 208 84
Novotel	Near 400		Vilnius laipėda	4*, Novotel	159
Unique stay Hotels	4	1	Vilnius	3*, Centrum Uniquestay Hotel Vilnius	105
Boutique Hotels & Resorts International	Near 200	1	Palanga	5*, Vanagupė	97
Wyndham Hotel Group	Near 7000	1	Vilnius	5*, Ramada *Hotel* and Suites Vilnius	55

The *majority of the hotels, which belong to international hotels' network, were located in the largest cities of Lithuania: Vilnius, Kaunas, Klaipėda*. The largest part of five-star international network hotels is located in Vilnius city – capital of Lithuania. Hotels, belonging to international hotels networks, according numbers inside the hotel, turnover, etc. are rather large in Lithuania. Thus, an influence of these hotels to general situation of Lithuania hotel services industry is rather urgent. An establishment of five starts Kempinski international hotels group hotels in Lithuania with hotel *„Kempinski* Hotel Cathedral Square" is foreseen in mid 2010. It would be 13th international groups of hotel services industry in this country.

Analysing the pattern of penetration of international hotels networks to Lithuania three methods are dominating: foreign direct investment, franchise contracts, management and marketing contracting agreements. It is noticeable that not only international hotels networks increased in Lithuania. Lithuanian hotels networks were also established, as Panorama Hotel-Mikotel-Comfort Vilnius hotels, Baltpark, Centrum Hotels', Europa Group network. It should be noted, that internationalization activity was implemented by networks of hotels established in Lithuania firstly. Samples could be Centrum Hotels' network, Europa Group Hotels. A case of Europa Group Hotels should be excluded. In 2001 the first hotel Europa Royale opened its doors in the capital of Lithuania. Till the beginning of 2009 it expanded their hotel's network to Latvia and Romania. Currently this network includes 10 hotels, 6 from them located in Lithuania, 3 in Latvia and 1 in Romania (http://www.groupeuropa.com).

It is rather difficult to foreseen *trends and perspectives of international hotels networks in Lithuania*. Economical recession is overwhelmed the majority countries of the world, including Lithuania. *Positive* and *negative* factors should be taken into account.

The main negative factors, impeded the development of hotels in Lithuania, are *political instability* during the economical recession, *decrease of national incomes* arising as a basic of increased credits for foreign countries. *Value added tax* (VAT) what increased from 5% to 21% since the beginning of 2009 to hotels services sector has had also negative influence on development of the sector. VAT has been increased by 16 percentage points. In forced the hotels to take the majority of extra costs for this year visitors as tourists who are coming to hotels were not overload by taxes what were not expected. This gives a lot of problems both for administrating the extra costs or calculating the expenses, and, of course, covering them. The same could be said about the four times increased tax for the *land lease*. A tax for real estate property also could serve as negative factor for hotel services development. *A lack of air transport companies* providing flies to Lithuania is the next negative factor for the sector. Solving poor transporting infrastructure enables to attract both tourists to Lithuanian or stipulate to move local visitors from town to town.

Notwithstanding the negative factors, it seems likely that a number of international hotels networks are going to increase in the near future or existing networks will expand from the capital of Lithuania to other Lithuanian cities, especially resort territories. As a sample could serve two hotels established in Vilnius at the end of 2008 when the recession of economy was already clearly seen – Wyndham Hotel Group hotels Ramada *Hotel* and Suites Vilnius. Creating new value for a resort places let to attract more visitors to come here and to increase the competitiveness of the territory (Langviniene, Sekliuckiene, 2009). This, its rather believable, stimulates to penetrate foreign visitors to come here and to invest to the hotels services industry in Lithuania.

Development could be determined by popularization of Lithuania as an attractive country for tourists (for example, a popularization of Vilnius as a capital of European Culture, oncoming championship of European Basketball in 2011 which is going to attract sport lovers). These events doubtless attract foreign tourists to our country. *Factors which are able to stipulate internationalization of hotels sector and attract of foreign investors are*: 1) introducing of common currency – Euro in the next couple years; 2) more convenient conditions provided by Government to foreign investors; 3) good infrastructure: international events in Lithuania, conferences, appearance of new air transporters; 4) an increasing number of international companies among other service's sectors, etc. *In other worlds, influence of internationalization to hotel services sector will be enlarged if the larger attention will be paid to development of tourism, including activating of events management, management of cultural tourism, increasing of possibilities of spa services supply and a number of golf-links*.

Conclusions

Internationalization affects any economy sector as in the touch with globalization more and more companies develop their activity and move their capital, experience and know-how abroad. Internationalizing the activity companies mobilize, redistribute their resources, assimilate other countries' experience and create new stocks.

A tendency to join in hotel networks is visible in hotels sector. Particularly often an entry to foreign hotel services markets mode are franchising, leasing, and managing contracts. A boom-reputed hotel or network brand means high level standards of services, trustiness, and comfort level, therefore clients often choose services of well-known hotels, which services quality are guaranteed worldwide. A franchise is the most frequent method of development of foreign hotel operators in Lithuania. FDI are often, too.

Main indices displaying expression of internationalization for particular time is volume of FDI, incoming tourists, what provide occupation of hotels, playground of foreign hotels network (rooms, volume, etc.).

Analysing the trends of internationalization and its influence on Lithuanian hotel services sector, it is noticeable that till the end of 2008 (clear appearance of economy recession) a number of incoming tourists, FDI to hotel services sector, a number of foreign enterprises and other foreign capital enterprises business indices were increasing. However these indices are likely going to fell down because of 2008-2009 economy recession and means of Government trying to stabilize the situation of country (for example, VAT 21%, since 1st of September, 2009). As a result, it is believable that a number of international hotels are going to stabilize. And *an increase* of the international hotels penetration in Lithuania face to face to economy recession *is not foreseen*.

The level of internationalization is shown by number of foreign hotels networks inside the country. The majority of hotels in Lithuania, which belongs to international hotels' network, are located in the capital of the country – Vilnius.

An extent of internationalization of Lithuanian hotels sector is affected by *positive* (vacant market niches in capital or smaller towns) and *negative* (law, stopping interest of foreign investors to hotels sector, economy situation, lack of air transporters, etc.) factors. In order to attract more foreign investors to hotels sector it is necessary to eliminate negative factors and to strengthen an image of Lithuania as an attractive country for tourists.

References

1. Activities of accommodation establishments by type of accommodation establishment, statistical indicator and quarter. Department of Statistics to the Government of the Republic of Lithuania. Internet WWW page, at URL: http://www.stat.gov.lt/en/pages/view/?id=1638 (version current as on 10th of June, 2009).
2. Altinay, L. Factors influencing entry mode choices: empirical findings from an international hotel organisation. Journal of Hospitality & Leisure Marketing, Vol. 12 No. 3. 2005. pp. 5-28.
3. Altinay, L. The internationalization of hospitality firms: factors influencing a franchise decision-making process. Journal of Services Marketing. Vol. 21 No. 6. 2007. pp. 398-409.
4. Axinn, C. N.; Matthyssens, P. Limits of internationalization theories in an unlimited world. International marketing review. Vol. 19 No. 5. 2002. pp. 436-449.
5. Flow of visitors. Department of Statistics to the Government of the Republic of Lithuania. Internet WWW page, at URL: http://www.stat.gov.lt/lt/pages/view/?id=1269 (version current as on 9th of June, 2009).
6. Foreign capital enterprises business indices. Department of Statistics to the Government of the Republic of Lithuania. Internet WWW page, at URL: http://www.stat.gov.lt/statbank/selectvarval/saveselections.asp?MainTable (version current as on 20th of March, 2009).
7. Foreign direct investment at the beginning of the year by kind of economic activity, statistical indicator and year. Department of Statistics to the Government of the Republic of Lithuania. Internet WWW page, at URL: http://www.stat.gov.lt/en/pages/view/?id=2412 (version current as on 10th of June, 2009).
8. Foreign Direct Investment in Lithuania. Department of Statistics to the Government of the Republic of Lithuania. Internet WWW page, at URL: http://www.stat.gov.lt/lt/catalog/viewfree/?id=1538 (version current as on 10th of June, 2009).
9. Incoming foreigners by country and year. Department of Statistics to the Government of the Republic of Lithuania. Internet WWW page, at URL: http://www.stat.gov.lt/en/pages/view/?id=1638 (version current as on 10th of June, 2009).
10. Internet WWW page, at URL: http://www.groupeuropa.com/index.php/europa_group/top_meniu/about_brands/213 (version current as on 14th of June, 2009).
11. Internet WWW page, at URL: http://www.ihgplc.com/index.asp?pageid=16 (version current as on 14th of June, 2009)
12. Javalgi, G. R., Griffith, D.A., White, D.S. An empirical examination of factors influencing the internationalization of service firms. Journal of Services Marketing, Vol. 17., No 2, 2003. pp. 185-201.
13. Kuada, J. Internationalisation of Firms in Developing countries – Towards an Integrated Conceptual Framework. Working Paper Series, No. 43. 2006. ISSN: 0908-1658.

14. Langviniene, N.; Sekliuckiene, J. Opportunities of Lithuanian resorts spa and wellness services face-to-face to the challenges of the new economy. RESER 2009: Public and private services in the New Global Economy, September 24-26, 2009, Budapest, Hungary: abstracts. Budapest: RESER. pp. 47-47.

15. Litteljohn, D. Internationalization in hotels: current aspects and Developments. International Journal of Contemporary Hospitality Management, Vol. 9 No. 5-6,.1997. pp. 187–192

16. Litteljohn, D.; Roper, A.; Altinay, L. Territories still to find – the business of hotel internationalisation. International Journal of Service Industry Management. Vol. 18 No .2. 2007. pp. 167-183.

17. Osarenkhoe, A. An integrated framework for understanding the driving forces behind non-sequential process of internationalization among firms. Business Process Management Journal. Vol. 15 No. 2. 2009. pp. 286-316.

18. Rodriguez, A.R. (2002), "Determining factors in entry choice for international expansion: the case of the Spanish hotel industry", Tourism Management, Vol. 23 No. 6, pp. 597-607.

19. Ruzzier, M.; Hisrich, R.; Antoncic, B. SME Internationalization research: past, present, and future. Journal of Small Business and Enterprise Development. Vol. 13 No. 4. 2006. pp. 476-497.

20. Sekliuckienė, J. Tarptautinio verslo organizavimas: mokomoji knyga. Kaunas: Technologija. 2008. 136 p.

21. Share of foreign-controlled enterprises in the non-financial enterprise sector by financial intermediation enterprises, kind of economic activity and year. Department of Statistics to the Government of the Republic of Lithuania. Internet WWW page, at URL: http://db1.stat.gov.lt/statbank/selectvarval/saveselections.asp (version current as on 10th of June, 2009).

22. Turizmo sektoriaus studija. Darbuotojų ir jų kvalifikacijos kaitos prognozių tyrimo ataskaita. Profesinio mokymo metodikos centras. 2008. 60 p.

23. Žičkienė S. (2008). Globali integracija: vertinimo galimybės. Socialiniai mokslai. Nr. 2 (60).

24. Žukauskas P. (2006). Kompanijų veiklos internacionalizacija. Teorija ir praktika. Monografija. VDU

Jurgita Sekliuckienė, Neringa Langvinienė

Internacionalizacijos poveikis Lietuvos viešbučių paslaugų sektoriui

Santrauka

Internacionalizacijos procesai apima daug paslaugų sektorių. Ji vaidina svarbų vaidmenį įvairioms paslaugų, kaip transportas, mažmeninė ar didmeninė prekyba, taip pat ir svetingumo paslaugų įmonėms. Straipsnyje identifikuojama internacionalizacijos įtaka Lietuvos viešbučio paslaugų sektoriui; kaip šis sektorius šiuo metu keičiasi dėl išnykstančių sienų tarp šalių, santykių tarp įvairių verslų, išdėstytų skirtinguose regionuose. Statistinių duomenų bei sisteminės analizės pagrindu vertinama viešbučio paslaugų sektoriaus, susijusio su tarptautiniu kapitalu, situacija. Identifikuojamos šių paslaugų sektoriaus perspektyvos.
Raktiniai žodžiai: internacionalizacija, tarptautinis verslas, viešbučio paslaugos, sektorius, poveikis

About the authors

Jurgita Sekliuckienė, assoc. prof., dr. of Social Science (Management and Administration), Kaunas Technological University, Lithuania. E-mail.: jurgita.sekliuckiene@ktu.lt, tel.: +370 37 300127, mob. tel. +370 610 48336, Research interests: services' internationalization and competitive ability, services and innovations.

Neringa Langvinienė, .assoc. prof., dr. of Social Science (Management and Administration), Kaunas Technological University, Lithuania. E-mail.: neringa.langviniene@ktu.lt, tel.: +370 37 300127, mob. tel. +370 618 61169. Research interests: services' internationalization and competitive ability, services and innovations.

IMPLEMENTATION OF SYNCHRONIC PRODUCTION SYSTEM IN LITHUANIAN INDUSTRIAL COMPANIES

Aušra Skrudupaitė, Robertas Jucevičius
Kaunas University of Technology, Lithuania

Abstract

As the economy changes, global competition intensifies, customer expectations and individualization rise, the companies are compelled to implement the most advanced production management methods. Cost reduction, elimination of various losses and flexible adaptation to the changes in demand become particularly actual tasks when seeking to survive in the competitive battle as well as to acquire a competitive advantage. Companies must offer to the customers the production of high quality at acceptable prices as well as be capable of fulfilling the increasingly varied wishes of the customers as quickly as possible. Considering the changing business environment, it is important how the companies are going to modify their production processes, production technique, sales, logistics and information systems in order to resist the competition. It is not sufficient to improve the current status in some of the areas only. It is essential to restructure and reform the entire system, starting from the regulation of information and material flows to the alignment and optimization of individual processes. By joining all the forces, the synchronic production system enables the creation of integrated production management system. The article defines the conception of synchronic production system, the multitude of similar conceptions used and the complexity of their definition; reveals the evolution and transformation of Toyota production system and presents an overview of the implementation of synchronic production system in Lithuanian industrial companies.

Keywords
Synchronic Production System (SPS), Toyota Production System (TPS), Lean Production System (LPS), Implementation, Lithuanian industry

Introduction

Yet back in the first half of the last century, the same product was being produced for many years or even decades without even changing the design or modification. Nowadays, under the conditions of scientific progress, saturated market and increased competition, products undergo frequent improvements and updates. Thus, additional requirements arise for the production process: it has to be organized in such a way and the technical base must be such as to enable fast and cost-efficient reorganization of production process for the manufacturing of new products.

The object of the article – implementation of synchronic production system.

The purpose of the article is to conduct an overview of synchronic production system implementation in Lithuanian industrial companies.

The methods used in the article, which helped to achieve the mentioned purpose, include analysis and summary of scientific literature sources, non-structured survey of experts.

Definition and origins of synchronic production system

The analysis of scientific literature shows that term *'synchronic production system'* is used quite seldom. The definitions such as *Toyota Production System, Lean Management, Lean Manufacturing, Lean Production* are known and used more often and widely. Analysing the historical development of these definitions Japanese Toyota Motor Company should be mentioned firstly. This company, seeking to improve production efficiency, created production system called *Toyota Production System* (further in the text as TPS). According to Jeffrey K. Liker (2006), TPS is the most emphasized result of

company's aspiration for perfection in Toyota production. The history of the system formation began in 1937. Kiichiro Toyoda, establisher of the Toyota Motor Company, had the idea for just-in-time delivery of parts. In 1950 Taiichi Ohno developed practical methods to implement Kiichiro Toyoda's concept for just-in-time delivery of parts. According to Taiichi Ohno (2005), the necessity developed the system of Toyota production. Some market limitations with low demand made companies produce little quantities of different products. The same fate was determined for the Japanese automobile industry after War II. These limitations became as a difficult challenge for the Japanese automobile producers: was it possible to entrench and compete with European and United States mass production and mass sale systems. The main goal of Toyota production system was to increase production efficiency decreasing unnecessary costs and waste.

According to J. Womack (1990), in 1960 „under the leadership of Eiji Toyoda, the Toyota Motor Company gradually created a TPS with a new approach to problem solving, leadership, production operations, supplier collaboration, product and process development, and customer support".

As Jeffrey K. Liker (2006) claimed, after Henri Ford mass production TPS can be called the second large revolution in the efficient business process. It was written down, analysed and carried out of many different companies in all over the world. In other countries TPS is often called as *Lean Production System* (further in the text as LPS).

When Toyota Motor Company succeeded in unbelievable results, the reasons of its success attracted attention the producers in USA and Europe. The International Motor Vehicle Program (further in the text as IMVP) (1980-1984) focused on identifying trends in the global automotive industry and provided competitive analysis.

Lean production (LP) is a term coined by former IMVP researcher John Krafcik and introduced in year 1987. IMVP explains the following development of the concept 'Lean': "Lean Production is 'lean' because it uses less of everything when compared to mass production - half the manufacturing space, half the investment in tools, half the engineering hours to develop a new product in half the time. Also, it requires keeping far less than half the needed inventory on site, results in many fewer defects, and produces a greater and ever growing variety of productions."

According to Jeffrey K. Liker (2006), these terms became popular after two best-sellers had been published: "The Machine That Changed the World" (Womack, Roos, 1991) and "Lean Thinking" (Womack, 1996). However the authors of these books claimed that doing the leanness survey they had followed TPS and the experience of Toyota Company (Liker J. K., 2006). The main TPS principles were applied in automobile industry as well as in other industrial areas and service sectors, public administration and other. Toyotism spread out all over the world. At this time TPS and LPS faced with many transformations which were influenced by external environment changes and different features of different specific business sectors. Through the transformation new definitions such as *Lean Thinking, Lean Solutions, Synchronic Production System, Thinking People System* and other appeared.

Takahiro Fujimoto (1996) claims that, „it is well known that Toyota's assembly process designs have been significantly modified since the late 1980s, while maintaining much of its core manufacturing capabilities known as TPS. Some people call it *post-Toyota system*, *new-Toyota system*, *post-lean system*, and so on. The new system tries to improve its attractiveness to the new generation of workers in Japan, where the number of young work force is decreasing in the long run, while trying to save its cash flow by making the plant and equipment design slimmer and by avoiding excessive automation and capital investment. The authors call it `lean-on-balance' system, as the system tries to regain the balance between employee satisfaction and customer satisfaction, as well as the balance between lean production process and fat plant/equipment design" (Fujimoto, Fujimoto and Takeishi).

Considering the continual transformation of this producing system the concepts of TPS and LPS becomes difficult to define. As Bartezzaghi E. (1999) claimed, "the definition of lean production is actually rather vague and confused". Jostein Pettersen (2009) investigated the definition of LPS and offered these findings: "the absence of a clear definition has a number of consequences for practitioners seeking to implement lean as well as researchers trying to capture the essence of the concept. These issues have been addressed by a number of researchers. The lack of a definition will lead to communication difficulties (Dale and Plunkett, 1991 in Boaden, 1997). It will complicate education on the subject (Boaden, 1997). Researching the subject will be difficult (Godfrey et al., 1997; Parker, 2003) – although Boaden (1997) states that this is not essential. There will also be difficulties in defining overall goals of the concept (Andersson et al., 2006). Parker (2003) states that

the multitude of interpretations on what lean really is makes it harder to make claims towards the effects of lean, thus increasing the requirements that researchers specify exactly what they are researching. Karlsson and Åhlström (1996) point out that the lack of a precise definition also will lead to difficulties in determining whether changes made in an organization are consistent with LP or not, and consequently difficulties in evaluating the effectiveness of the concept itself".

At the end of the XX century Hitoshi Takeda formulated the concept of synchronic production system (further in the text as SPS) and prepared practical guide of its implementation. According to the author, companies should offer products of high quality but low price as well as satisfy different needs and requests of customers. To reach that goal it is not enough to concentrate attention only to the production process. If company is not strong enough in all these areas from information flow regulation to production delivery terms, processes coordination and their optimization in planning and producing, it will fail. According to Hitoshi Takeda (2005), "SPS is a system, which purpose is to reconstruct company in the way that it would be protected from recession and would be able to perform through high international competiveness conditions. Therefore it should offer products of high quality and low prices and should be able to react to the growing diversification and multiplicity. Losses should be eliminated and synchronized through the all production process chain from order receive to production delivery". According to the author, "SPS is based on just-in-time philosophy", what corresponds with the concept of TPS conception.

According to the results of the scientific literature analysis it can be claimed that:

1. The origin of the conceptions *Lean Production System* and *Synchronic Production System* are *Toyota Production System* developed by Japanese Toyota Motor Company.
2. Conception SPS was used only by Hitoshi Takeda.

The evolution of the Toyota production system

First of all, implementation of TPS was initiated in various plants of Toyota outside Japan. Eventually, other actors of the automotive industry and companies working in other fields of business became interested in this system all over the world. New United Motor Manufacturing, Inc. (NUMMI) was the pioneering joint venture of General Motors Corporation and Toyota Motor Corporation. Established in Fremont, California, in 1984, NUMMI helped change the automobile industry by introducing the TPS and a teamwork-based working environment to the United States (www.nummi.com).

According to Emiliani M. L. (2006), "since the late 1970s, lean management has become an important route for improving the performance of businesses in the USA – e.g. reducing costs, improving quality, reducing lead times, increasing market share, developing new products and services, human resources, etc."

Moreno Muffatto (1999) claimed that "the competitive advantage of Japanese firms during the 1980s encouraged the spread of the production model. Its transfer to other social and cultural contexts helped to highlight the multiplicity of factors which influence the transfer

process itself. The adoption of the model by the American and European firms was studied, as were the internationalization of production, the interdependence among national economies and the importance of national labour markets. The transfer of the best production practices has set off multilateral learning flows. These learning flows go hand in hand with the evolution of the systems themselves and can lead to phenomena of convergence of the models as well. The evolution of production systems should be seen in relation to both the transnational aspects and to specific local features. These specific local features can be interpreted in two ways: those of the national system and those of the individual firm's system. Indeed, when studying production systems, reference to national systems could constitute a generalization which is too wide in the context of the analysis of evolution. The differences among plants which are part of each individual firm or between firms within the same country are often very significant. Certainly Japanese firms could not all be fitted into the same model".

According to Takahiro Fujimoto (1996), "it is well known that Toyota's assembly process designs have been significantly modified since the late 1980s, while maintaining much of its core manufacturing capabilities known as TPS. Some people call it *post-Toyota system*, *new-Toyota system*, *post-lean system*, and so on. The new system tries to improve its attractiveness to the new generation of workers in Japan, where the number of young work force is decreasing in the long run, while trying to save its cash flow by making the plant and equipment design slimmer and by avoiding excessive automation and capital investment. The authors call it `lean-on-balance' system, as the system tries to regain the balance between employee satisfaction and customer satisfaction, as well as the balance between lean production process and fat plant/equipment design (Fujimoto, Fujimoto and Takeishi)".

Moreno Muffatto (1999) noted that "the evolution of the lean model should be studied in the context of a series of factors and conditions that characterized the Japanese economic and industrial system at the beginning of the 1990s:

- the labour market and, especially, the problem of finding young workers willing to work on production lines;
- work conditions considered particularly unattractive from three points of view known as the 3K (3D), that is, *Kitanai* (Dirty), *Kiken* (Dangerous) and *Kitsui* (Demanding);
- the reduction of production volume after the end of the so-called "bubble economy" and, consequently, the existence of excess production capacity;
- increase in the cost of capital, hence, of investments, which reduced the tendency to replace human workers with automation.

When summarizing his observations Moreno Muffatto (1999) remarked that "the system cannot be considered to be static and unchanging. Indeed, it is subject to both internal and external pressure for change, and hence must be considered to be constantly evolving". Despite multitude of transformations and adaptations through time, countries and business branches, the TPS keeps up the key elements.

In his book "The Toyota Way", Jeffrey K. Liker (2006) depicted the TPS as the drawing of house, based on certain methods as well as structure (Figure 1).
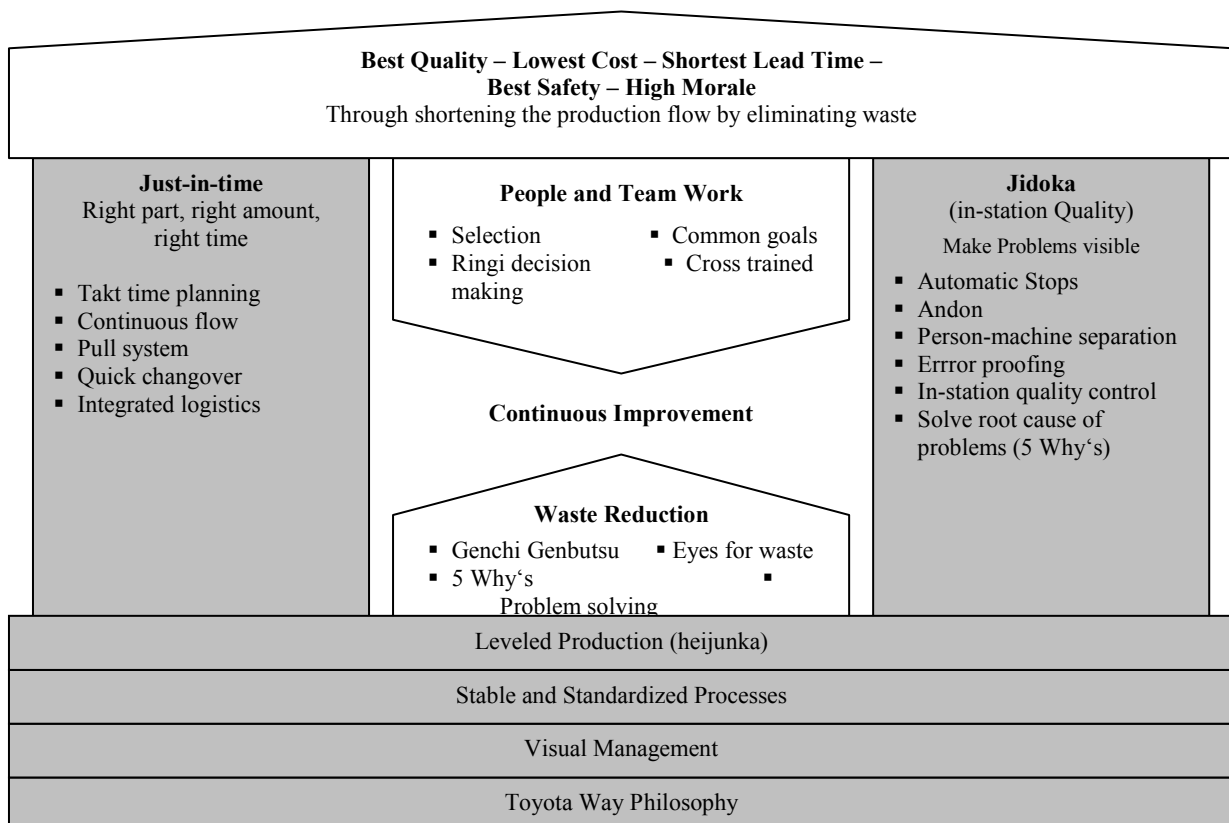

Figure 1. Toyota Production System (Liker, J.K., 2006, P. 38)

According to the author, such a simple way to depict the system was discovered by Fujio Cho, a follower of Taiichi Ohno. The house-like scheme of TPS became one of the symbols of modern production.

Jeffrey K. Liker (2006) claimed that there could be different models of the house, but the fundamental principles would be the same: the best quality, the lowest costs and the shortest lead time. The house also includes two main pillars. The first one is *the just-in-time* principle. The second one – *jidoka* (jap.), is aimed at ensuring that parts of inferior quality could never get into the next stage, and relieving the people of equipment – automation with the small aid of the people. People are at the center of the system. The house also comprises many

underlying elements. These include the need for a standardized, stable and reliable production process and *heijunka* (jap.), meaning the unification of the production schedule (quantity and variety).

Hitoshi Takeda (2005) depicted the synchronic production system in a scheme while simultaneously including the sequence of implementation stages. In the illustration of the system (Figure 2), assurance of profit is the ultimate goal. To ensure the profit, the second most important target has to be attained – reduction of production costs (by reducing losses) while simultaneously ensuring high quality and retaining the ability to respond quickly to changes.
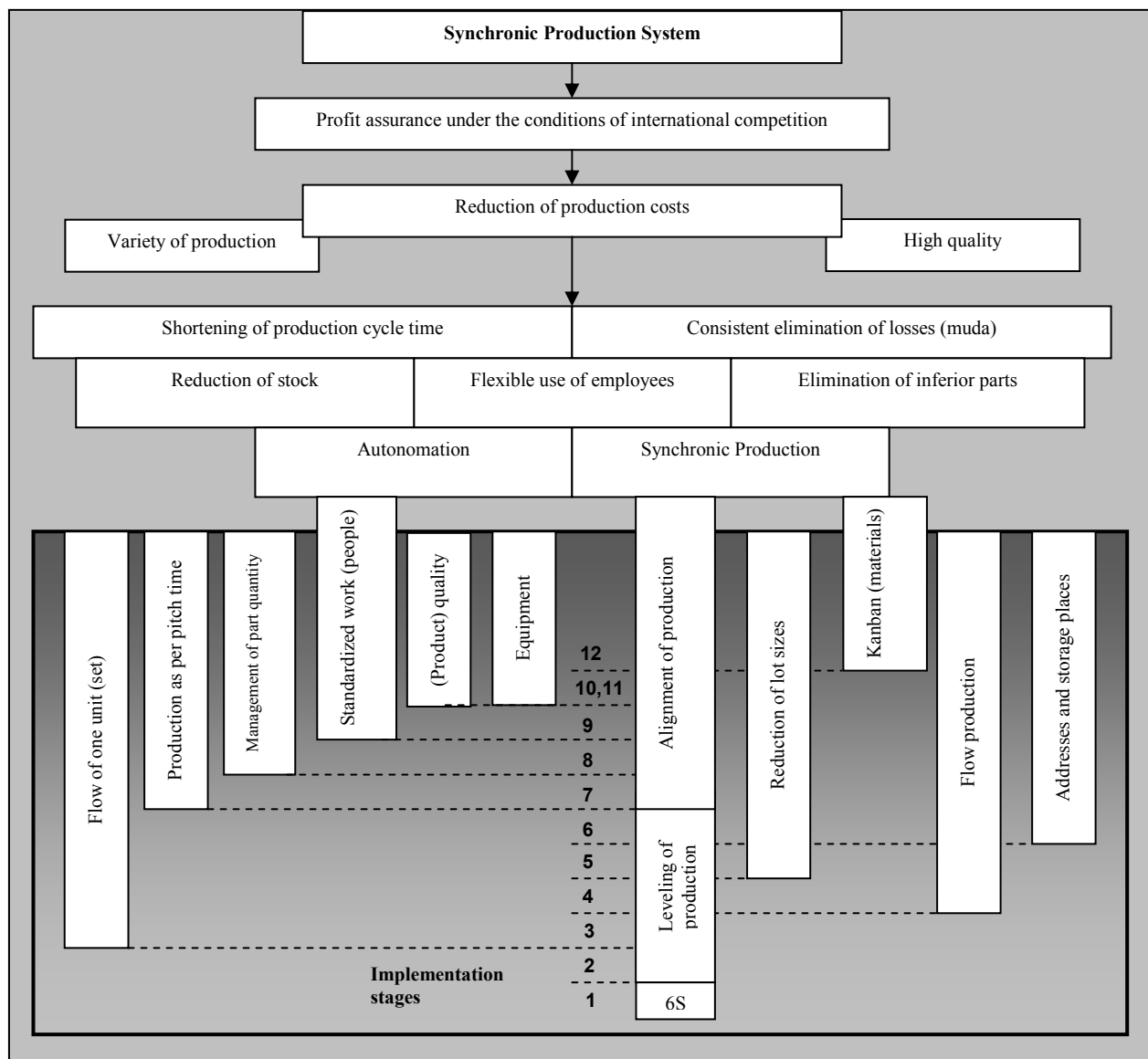
Figure 2. Synchronic Production System (Takeda H., 2005, P. 20)

According to the business experts, the essences of synchronic and Toyota's production systems match; it is only the visual presentation form that differs.

The TPS underwent more substantial transformations as its adaptation was started in service sector. Such new conceptions appeared as *Lean Logistics, Lean Healthcare System, Lean Construction, Lean Government, Lean*

Office, Lean Administration, Lean Maintenance, Lean Design, etc.

For example, *lean construction* is the new way to manage construction. The objective, principles and techniques of lean construction taken together form the basis for a new project delivery process. Unlike current approaches to managing construction (including design-build) and

programmatic improvement efforts (partnering and TQM), lean construction provides the foundation for an operations based project delivery system. From roots in the TPS, this new way of designing and making capital facilities makes possible significant improvements on complex, uncertain and quick projects (Howell And Ballard, 1997; Howell, 1999).

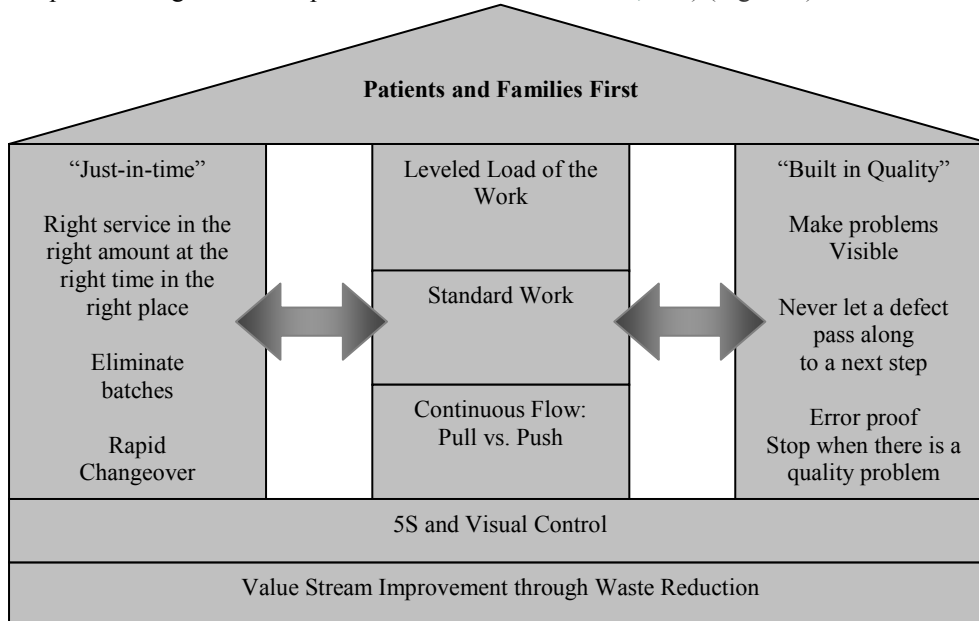Joan Wellman pioneered the application of lean principles in healthcare starting in 1995 (Joan Wellman& Associates, Inc.) (Figure 3).

Figure 3. Lean Healthcare System (Joan Wellman&Associates, Inc.)

Joan Wellman and Associates, Inc. affirmed that the keys to success lie not in the set of lean methods and tools but in the systems that drive improvement. Lean Healthcare System is a system of healthcare services including the following key elements: waste, standard work, quality and mistake proofing, rapid changeover, continuous flow, pull systems, work balance, managing change.

The overview of the TPS development shows that this production system sustained quite many transformations due to the changes in external environment, influence of cultural features of different countries and specifics of different fields of business. From production, it moved into the services' sector. Naturally, questions arise, such as where does *lean* start and end; how could we define the lean production system today – which remain open for further discussion.

Overview of synchronic production system implementation in Lithuanian industrial companies

Fujio Cho, Chairman of Toyota Motor Corporation, said: "many good American companies have respect for individuals and practice kaizen and other TPS tools. But what is important is having all elements together as a system. It must be practiced every day in a very consistent manner - not in spurts - in a concrete way on the shop floor."

Many authors concur that TPS is not just a set of methods and tools, but rather a system of inter-related elements. When sharing his experience of implementing *lean*, Jörg Tautrim (Lean Institute, Germany), indicated that as many as 90 % of companies fail when attempting at introducing the lean system. The most frequent obstacles include insufficient commitment and involvement of the top management and sustainability assurance.

TPS is being implemented in the world for as many as 20-25 years, and endeavors are being made to adapt it to different sectors. In the meantime, the interview with the business experts shows that experience of Lithuanian companies goes back only 3-5 years. According to the experts, the preconditions necessary for the implementation of this system prior to the restoration of independence in Lithuania were nonexistent; after the restoration on 11 March 1990, there was no necessity. This can be explained by the fact that after the restoration of independence the labor force in Lithuania was relatively less expensive in comparison to the developed European countries, and the competitive advantage in international environment was sustained mostly at the expense of labor cost. The issue of managers' competence could be mentioned in the second place. Older managers with soviet education tended to accept the changes and free market conditions with difficulty, while the young ones possessed only the basic knowledge of the new type of management and very little experience. The period from 1990 to 2000 could conditionally be defined as the managerial transformation period. The economic crisis spreading from Russia in 1998-1999 affected the states connected by commercial ties, including Lithuania. However, this was not an adequate incentive to get interested in TPS; it sufficed to orient from the direction of East to West. Nonetheless, when the salary costs started rising by approximately 10-20 per cent annually during the economic boom, it became more difficult to compete. The competition was significantly fueled by the decline of economy that started in the second half of 2008.

LPS is a complex measure for the increase of performance efficiency and promotion of the new culture of work. According to experts, currently about 10 Lithuanian companies have more or less experience in

implementing LPS. Almost a half of them follow the SPS guide (by Hitoshi Takeda). LPS is being introduced in vehicles, timber, furniture, metal, food and biotechnology industries. Here, one of the peculiarities of LPS implementation management could be distinguished that is determined by the differences of cultural features. Liker J. K. and Meier D. P. (2008) pointed out the importance of preparation for training; the training takes place in a specific workplace, while the employees are trained by specially prepared instructors (jap. *sensei*). As deducted from the interviews with the experts, in Toyota company this system is implemented "from the bottom up", i.e., starting from implementation of the system elements in individual stages of task and gradually encompassing the entire task. This corresponds to the task division scheme intended for training, presented by Liker J. K. and Meier D. P. (2008) (Figure 4).
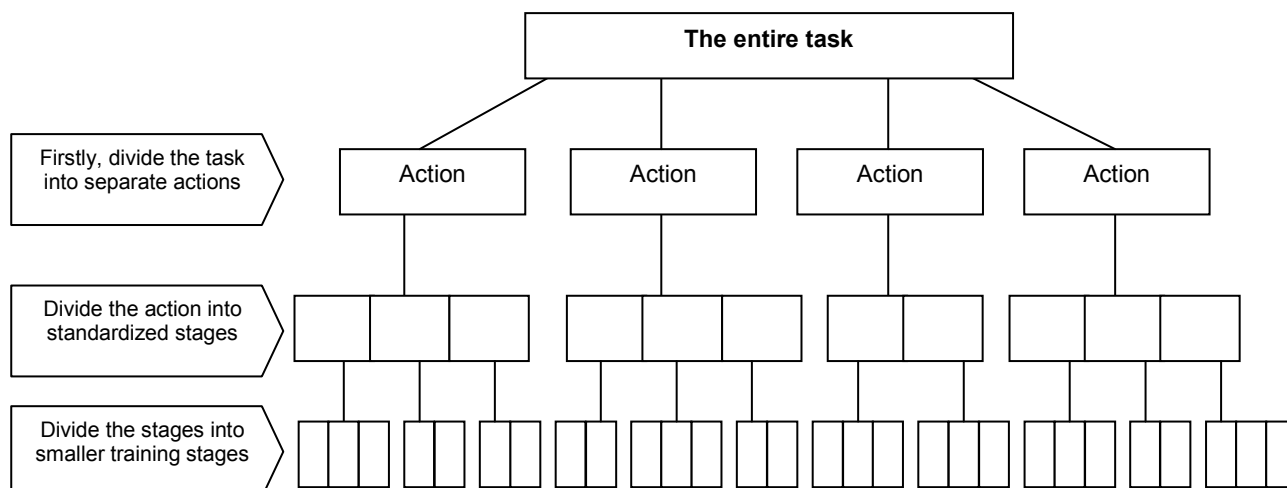
Figure 4. Division of task into smaller actions for training purposes (Liker J. K., Meier D. P., 2008, P. 141)

According to the business experts, to Lithuanians, the opposite way is characteristic – "down from the top", i.e., Lithuanians try to comprehend from the very beginning the entire picture; they tend to analyze more prior to starting the activity and strive to understand why they have to do it and what benefit will be gained from the system. The experts pointed out that this slows down the pace of implementation and when striving to implement TPS, therefore, this has to be taken into account. This feature is typical to many European states and the USA.

When summarizing the results of the interview with the business experts, it can be stated that the interest in LPS (SPS) implementation is spreading slowly. Implementation of LPS seems to be more interesting to companies operating in international markets.

Findings

The studies of the scientific literature showed that the conceptions LPS and SPS originated in Toyota Production System developed by Japanese Toyota Motor Company. The conception of SPS was used only by Hitoshi Takeda.

When summing up the overview of TPS development it can be stated that TPS sustained numerous transformations due to the change of environment outside Japan and this determined the appearance of such terms as post-Toyota system, new-Toyota system and post-lean system. The spreading of TPS experience in different countries brought in some changes to the implementation management due to the cultural features. As the application of the key principles of TPS started in automotive as well as other industries and service sectors, a multitude of derivative terms appeared, which originate from the TPS: Lean Logistics, Lean Healthcare System, Lean Construction, Lean Government, Lean Office, Lean Administration, Lean Maintenance, Lean Design, Lean Publishing, etc.

Based on the interviews with business experts, it can be concluded that the interest in LPS (SPS) in Lithuania is still rather slack. Up to 10 Lithuanian industrial companies are counted which have some experience in LPS (SPS) implementation; approximately as many are concretely interested in LPS (SPS) implementation. Although small, the practice of implementation shows that the method of implementing LPS (SPS) "from the bottom up" is characteristic to Lithuania and it involves seeking to perceive the entire picture before gradually shifting to details.

References

1. Ballard G., Howell G. Implementing Lean Construction: Stabilizing Work Flow. Lean Construction. A.A. Balkema, Rotterdam, The Netherlands, 1997, 497 pp. Reprinted with permission from A.A. Balkema, pp. 101-110. Made available on the Lean Construction Institute's web site http://www.leanconstruction.org
2. Bartezzaghi E. The evolution of production models: is a new paradigm emerging? International Journal of Operations & Production Management, Vol. 19 No. 2, 1999, pp. 229-250, MCB University Press, ISSN 0144-3577
3. Building a strong foundation for your lean healthcare system. Joan Wellman and Associates, Inc. [interactive] http://www.joanwellmanassociates.com
4. Developing lean administration. General review. Strategic Direction, Vol. 21 No. 11, 2005, pp. 33-35 Emerald Group Publishing Limited. ISSN 0258-0543

5. Emiliani M. L. Origins of lean management in America: The role of Connecticut businesses. Journal of Management History Vol. 12 No. 2, 2006 pp. 167-184 q Emerald Group Publishing Limited. ISSN 1751-1348

6. Fujimoto, T. An evolutionary process of Toyota's final assembly operations. The role of *ex-post* dynamic capabilities, Discussion Paper 96-J-11, Faculty of Economics, University of Tokyo, January. Apr. 1996.

7. GM and the NUMMI alliance. Strategic Direction VOL. 22 NO. 4 2006, pp. 26-29, Q Emerald Group Publishing Limited, ISSN 0258-0543

8. Howell G. A. What is Lean Construction – 1999. Proceedings IGLC-7, 26-28 July 1999, University of California, Berkeley, CA, US

9. Howell G., Ballard G. What is Lean Construction? "On Foundations of Concurrent Engineering", Koskela, L, and Houvila, P. in Anumba, C & Evbuomwan, N.(editors) *Concurrent Engineering in Construction, CEC97*/ London, 3-4 July 1997. The Institute of Structural Engineers, London, 22-32

10. Jones D. T. What is lean? Lean Enterprise Academy, e-letter September 2007, www.leanuk.org

11. Karlsson Ch., Åhlström P. Assessing changes towards lean production. International Journal of Operations & Production Management, Vol. 16 No. 2 1996, pp. 24-41. MCB University Press, ISSN 0144-3577

12. Karlsson Ch., Åhlström P. A lean and global smaller firm? International Journal of Operations & Production Management, Vol. 17 No. 10, 1997, pp. 940-952. MCB University Press, ISSN 0144-3577

13. Lean Timeline. Lean Enterprise Institute, Inc. [interactive] http://www.lean.org

14. Liker, J. K. "Toyota" sėkmės kelias. Kaunas: Smaltijos leidykla, 2006. 400 p. ISBN 9955-551-84-4

15. Liker, J. K., Meier D. P. „Toyota" talentas. Ugdykite darbuotojus „Toyota" metodu. Kaunas: Smaltijos leidykla, 2008. 280 p. ISBN 978-9955-707-56-1

16. Muffatto M. Evolution of production paradigms: the Toyota and Volvo cases. Integrated Manufacturing Systems Nr. 10/1, 1999. pp. 15–25. MCB University Press. ISSN 0957-6061

17. Ohno T. Tojotos gamybos sistema. Tolyn nuo masinės gamybos. Vilnius: Rgrupė, 2005.192 p. ISBN 9955-9682-6-5

18. Pettersen J. Defining lean production: some conceptual and practical issues. The TQM Journal, Vol. 21 No. 2, 2009 pp. 127-142 q Emerald Group Publishing Limited, ISSN 1754-2731

19. Piercy N., Rich N. Lean transformation in the pure service environment: the case of the call service centre. International Journal of Operations & Production Management Vol. 29 No. 1, 2009 pp. 54-76. Emerald Group Publishing Limited ISSN 0144-3577

20. Takeda H. Sinchroninė gamyba. „Pačiu laiku" būdas visai įmonei. Vilnius: Rgrupė, 2005. 280 p. ISBN 9955-9682-7-3

21. Toyota Production System Implementation. Gemba Consulting, [interactive] http://www.gemba.com

22. Werkzeuge Toyota Produktionssystem (TPS). Lean Institute [interactive] http://www.lean-institute.de

23. What we're about. New United Motor Manufacturing, Inc.(NUMMI) [interactive] http://www.nummi.com

Aušra Skrudupaitė, Robertas Jucevičius

Sinchroninės gamybos sistemos diegimas Lietuvos pramonės įmonėse

Santrauka

Ekonominio nuosmukio metu dėl paaštrėjusios konkurencijos visuomet didėja susidomėjimas įvairiomis gamybos efektyvumo didinimo bei kaštų mažinimo priemonėmis. Specialistai tvirtina, kad nuosekliai diegiant sinchroninę gamybos sistemą galima ženkliai sutrumpinti įrengimų perderinimo laiką, sutrumpinti užsakymo vykdymo laiką, dvigubai sumažinti turimas atsargas, padidinti tiekėjų patikimumą.

Šio straipsnio tikslas - atlikti sinchroninės gamybos sistemos diegimo Lietuvos pramonės įmonėse apžvalgą; darbo objektas - sinchroninės gamybos sistemos diegimas; darbo metodai – mokslinės literatūros analizė ir apibendrinimas, nestruktūruota ekspertų apklausa.

Straipsnyje apibrėžiama sinchroninės gamybos sistemos samprata, išryškinama panašių sąvokų gausa bei jų apibrėžimo problemiškumas, atskleidžiama Tojotos gamybos sistemos evoliucija bei transformacija, pateikiama sinchroninės gamybos sistemos diegimo Lietuvos pramonės įmonėse apžvalga.

Mokslinės literatūros analizė leidžia teigti, kad koncepcijų sinchroninė gamybos sistema ir „lean" gamybos sistema ištakos yra Tojotos gamybos sistema. Dėl išorinės aplinkos kaitos Tojotos gamybos sistema patyrė nemažai transformacijų, kas sąlygojo tokių sąvokų kaip post-Toyota system, new-Toyota system, post-lean system atsiradimą. TPS patirties plitimas įvairiose šalyse dėl kultūrinių bruožų įnešė pokyčių diegimo valdyme. Pagrindinius TPS principus pradėjus taikyti ne vien tik automobilių pramonėje, bet ir kitose pramonės šakose bei paslaugų ir aptarnavimo sektoriuose, atsirado eilė TPS ištakas turinčių išvestinių terminų: Lean Logistics, Lean Helthcare System, Lean Construction, Lean Government, Lean Office, Lean Administration, Lean Maintenance, Lean Design ir kt. Pasak verslo ekspertų, domėjimasis sinchroninės gamybos sistemos diegimu Lietuvoje nėra masinis - priskaičiuojama apie dešimt pramonės įmonių, turinčių didesnį ar mažesnį sinchroninės gamybos sistemos (arba „lean") diegimo įdirbį.

About the authors

Aušra Skrudupaitė, PhD Student of Social Sciences (Management and Administration), Kaunas University of Technology, Faculty of Social Sciences, Department of Strategic Management; e-mail ausra.skrudupaite@ktu.lt

Robertas Jucevičius, Prof. Dr. Habil. of Social Sciences (Management and Administration), Kaunas University of Technology, Faculty of Social Sciences, Department of Strategic Management; e-mail robertas.jucevicius@ktu.lt

FINANCIAL MEASUREMENT OF MARKETING PERFORMANCE

Gelminė Sližienė, Ginta Railienė

Kaunas University of Technology, Lithuania

Abstract

The most attention is paid to problems of marketing activities and management, but the contribution of marketing performance to long-term financial performance, business and shareholder value creation is nonetheless important. The measures from marketing and finance perspective, their relations and contribution to shareholder value creation are analyzed in the article. The problem analyzed is how to improve the accountability and productivity of marketing performance creating the financial valuation techniques demonstrating marketing's contribution to business value creation. The objectives raised, control objects defined and measures used in Lithuanian enterprises are discussed.

Keywords

Marketing resources, marketing performance measurement, shareholder value.

Introduction

Businesses having the aim of long-term profit maximization and customers' needs satisfaction; have to create the highest value to them. It raises new challenges for marketing activities. Marketing is the chain in business system with the aim to define customer needs and create the appropriate organization, informing about customer needs and helping to satisfy them. The purpose of marketing is to create value to customers, ensure business success and earn profit, as well as active influence on market and formation of customer needs. Therefore the importance of marketing performance may be summarized as the ability to coordinate customer needs and enterprise resources for customers' satisfaction and business value creation. The link between marketing performance and business value requires in more detail explanation and structured definition. The business value is usually analyzed in relation to shareholder value and is defined by financial ratios and models. When analyzing marketing performance the most attention is paid to problems related to scope of marketing activities (Carson, Gilmore, 2000; Sheth, Sisodia, 2002; Balmer, Greyser, 2006, Virvilaitė, 2008; Juščius et al., 2006) and management of marketing activities (Anderson, Vincze, 2000; Kotler, 2003; Morgan, Hunt, 2002; Trim, 2004; Urbanskienė et al., 2008; Bučiūnienė, 2004). But there is lack of studies addressing the concept of marketing performance contribution to long-term financial performance, business value and shareholders' value creation. The most exhaustive studies in this field are of Srivastava et al. (1999), Srivastava, Reibstein (2004). The measures from marketing and finance perspective, their relations and contribution to shareholders' value creation are analyzed in the article and the use of financial measures for marketing performance measurement in Lithuanian enterprises is discussed as well.

Scientific problem analyzed in this paper is how to improve the accountability and productivity of marketing performance creating the financial valuation techniques demonstrating marketing's contribution to business value creation.

A goal of this paper is to summarize the financial measurement of marketing performance techniques and discuss on application of these measures in Lithuanian enterprises.

An object of the research is financial measures of marketing performance measurement.

Methods of the research are scientific literature analysis, systematic and comparative analysis, survey, statistical data analysis.

Theoretical aspects of marketing performance measurement

Marketing success is understood as ability of marketing resources and marketing organization to reach the defined organization's goals combining organizational capabilities, competitiveness, consumer preferences and other environmental conditions (Kahn, Myers, 2005). Hunt, Arnett (2006) states that marketing success is possible when marketing competence is assigned to organizational resources. From marketing perspective, the creation of competitive position is the result of satisfaction of target consumers reached by organization's individual resources and their use. It is important to take into account that in marketing activity consumers and organizations are involved in all stages of value creation chain (Day, 1994). Understanding the consumer needs and their satisfaction with best market solutions can be the main success factor and the guarantee of competitive advantage (Hooley et al., 2001; Clulow et al., 2007). In this case organization's competitive position is the indicator of its continuous and long-term activity.

Marketing resources are understood as organization's resources used for value creation in the market. The quantity and quality of resources is the source of organization's differentiation potential. It is important for any kind of businesses to reach the highest quality, reach and sustain the competitive advantage (Slater, Narver, 1994). Competitive advantage may be reached by proper combination of strategic insight, resources and their use while implementing the chosen strategy (Morgan et al., 2002). In marketing literature (Anderson, Vincze, 2000; Kotler, 2003; Morgan, Hunt, 2002) the role of integration of organization's attempts to satisfy consumer needs and reach higher profits is assigned to marketing. It is also stated that it is necessary to develop marketing capabilities among employees in order to form and implement the marketing strategies and at the same time to make changes in organizational structure and

marketing system. According to this view, it can be concluded that the essence of market orientation is compounded of three behavioral elements: consumer orientation, competitor orientation, inter-functional coordination; and two decision making criteria: long-term activity focus and profit orientation (Slater, Narver, 1994).

Marketing practice is based on **resource-advantage** theory, i.e. marketing actions enables the organization to provide effective and/or efficient offerings to market segments (Hunt, Arnett, 2006). Marketing is treated as a resource and is named as competence (Day, 1994). Marketing competence provides the possibilities to coordinate the assets in the way that helps to achieve organization's aims. Competences are the complex of organization's tangible and intangible (as specific personnel skills and knowledge and organization's special policies and procedures) resources. Such resources are heterogeneous and are important for long-term competitive advantage as it depends on proper allocation and use of resources (Hooley et. al, 2005).

Barney (1991) has defined the resources as the set of assets, capabilities, organizational processes, firm attributes, information and knowledge. The **resource-based view** is oriented to organization's resource characteristics. It is related to strategic management and allows understanding the main relationships among resources, competitive advantage and business activity. It enables to define the main resources for strategy implementation. Marketing resources used for creation and sustaining the competitive advantage are also tangible and intangible (Han et al, 1998). Intangible resources and capabilities are especially hard to copy and ensure the proper base for marketing strategy development (Hooley et al., 2001). However not all resources are equally important, only those that create value for customers (Barney, 1991), are costly to copy and add more value compared to other organizations' offerings.

The new conception of *consumer marketing* emphasizes the *value- centricity*. It means the movement to development of customer relationships. Hence marketing activity is related to three major processes: value definition, value creation and value delivery (Baker*, 2004). The major marketing principle is value required by customer. Marketing purpose may be defined as creation of long-term competitive advantage through the definition, creation and delivery of value to consumer.

Marketing resources involve equities and marketing capabilities (see fig. 1). Equities are the abilities to accumulate the resources (i.e. investments into brand, relationships, value). *Capabilities* are used for coordination and empowering of equities (Day, 1994) or skills and collective learning, practice of organizational processes that ensures the coordination of functional activities (Hooley et al., 2005).

Lemon et al. (2001) defines customer equity as the total of the discounted lifetime values of all the firm's customers. The three elements are separated for customer equity valuation: value equity, brand equity and relationship equity. This separation is used in explaining marketing and finance nexus by Srivastava et al. (1998). *Value equity* is explained or valued by quality (physical

and nonphysical aspects of the product and service), price (the aspects of "what is given up by the customer") and convenience (actions that help reduce the customer's time costs, search costs, and efforts) (Lemon et al., 2001).

For valuation of customer equity, brand equity is defined more narrowly by Lemon et al. (2001): customer's subjective and intangible assessment of the brand, above and beyond its objectively perceived value. It involves (Balmer, Greyser, 2006) brand awareness (enhanced with marketing communications), attitude toward the brand (influenced by media campaigns and direct marketing), and corporate ethics (specific actions as community sponsorships or donations, firm privacy policy, and employee relations).

Relationship equity as defined by Lemon et al. (2001) is the tendency of the customer to stick with the brand, above and beyond the customer's objective and subjective assessments of the brand. It can be enhanced with loyalty programs, special recognition and treatment, affinity programs (for creation of strong emotional connections with customers), community building programs, and knowledge-building programs.

Beside the customer equity, it is important to develop partner equity mostly by building *relationships with partners* (Payne, Holt, 2000). It helps to reduce costs in long run. The development of relationships with partners may be explained by three elements as Srivastava et al. (1998) suggests: channels, co-branding, and networking. The benefits for the organization are explained in scientific literature analyzing business to business relationships (Juščius at al, 2006; Hopenienė et al., 2009). When all the equity elements are taken into account the most important question is to determine the critical drivers for particular firms' customer and partner equities. As Lemon et al. (2001) notes, that would be the first step in building the truly customer-focused marketing organization. As we focus on financial valuation of marketing performance further steps would be to determine the marketing success factors and performance measures.

When analyzing the problems of marketing performance measurement **marketing success** is defined as organization's consumer philosophy, strategic orientation and organizational productivity (Sheth, Sisodia, 2002). The main marketing success factors are the development of created capabilities and ability to change according market and consumer needs and requirements. Ambler, Puntoni (2003), Woodburn (2004) have analyzed the problems related to marketing performance valuation and concluded that marketing performance valuation helps to improve marketing activity and to justify marketing investments in overall organization's achievements.

Marketing success valuation is oriented to external and internal markets, consumers and processes and involves *efficiency*, *effectiveness* and *adaptability* valuation (Sheth, Sisodia, 2002; Kahn, Meyers, 2005) (Fig. 1):

- *Effectiveness* shows what organizational aims and objectives are achieved (the analysis of marketing productivity);
- *Efficiency* shows the relationship of performance outcomes and expenditures or inputs (marketing audit);

- *Adaptability* shows the ability of organization to adapt to environmental changes.

Effectiveness shows the level of consumer satisfaction, efficiency – whether the resources were used effectively when satisfying consumer needs. This explanation identifies two important dimensions of activity valuation and discloses the importance of internal as well as external factors determining the nature of activity. According to Grønholdt, Martensen (2006) valuation can be defined as a process of emergence of qualitative and quantitative dimensions of activity effectiveness and efficiency.
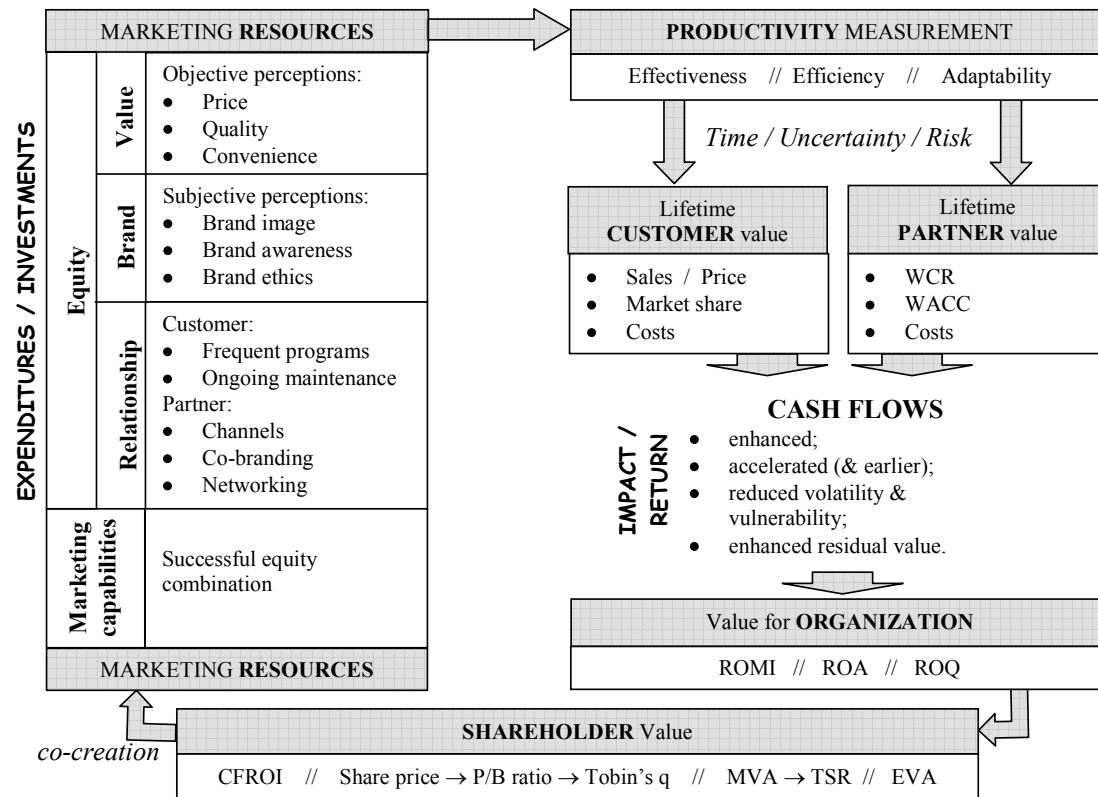
Figure 1. Interdependence of marketing performance and shareholder value measures

The valuation is oriented to marketing **effectiveness**, i.e. to the process where value is created using organization's resources for marketing activities and creation of competitive advantage (Morgan, Hunt, 2002), where income for shareholders is ensured with higher value to customers compared to competitors (Srivastava et al., 1998; 1999), where marketing success complement the success of organization together with successful fulfillment of other functions (Moorman, Rust, 1999).

Effectiveness is declared as one of the most important dimensions for assessing and controlling of marketing organization (Sheth, Sisodia, 2002; Vorthies, Morgan, 2003). Kahn and Myers (2005) define marketing effectiveness by five components: customer philosophy, integrated marketing organization, adequate marketing information, strategic orientation, and operational efficiency. It shows that marketing effectiveness depends on ability to implement marketing projects successfully in different organizational levels.

Marketing investments and commitments have to be valued as having the impact on business processes, financial results, effectiveness and productivity of value created to customers. Valuation measures have to include internal (organization's activity results) and external (activity results of competitors, industry leaders and other organizations) activity standards (Srivastava et al, 1998). The main elements are consumers, products, service delivery, financial results, marketing management (Moorman, Rust, 1999).

Kahn and Myers (2005) state that the perspective of goal attainment and outcome is under dispute because of the changes in marketing activity and its valuation:

- Not all aims are important for success valuation. It raises the problem of deciding on importance of aims: some of marketing aims may be in conflict with aims of other organization's functions (Maltz, 2000) or with aims of overall organization. Besides there is always a conflict between short-term (cost covering) and long-term (consumer satisfaction) aims (Rust et al., 2002).

- Marketing is indeterminate when its activity is divided into separate operations (as advertising) and the effectiveness is measured according aim attainment (Morgan et al., 2002, Sheth, Sisodia, 2002). It is difficult for managers to evaluate the causal–effect relationships among marketing expenditures, marketing processes and marketing activity results (Morgan et al., 2002).

- Valuation of aims attainment: the conflict raises because of use of various valuation methods.

- Traditional orientation of valuation into results where income and profit are of crucial importance contravene with modern understanding of marketing activity as orientation into customer

where profit is not the main criteria of marketing effectiveness (Kotler, 2003). The nature of marketing effectiveness has to be analyzed from different perspectives including external environment as well as personnel, middle managers, exchange partners, consumers and society (Woodburn, 2004).

- Marketing has limited contribution to management decision process and formation of organization's strategy (Srivastava et al.1998). One of the reasons – it is difficult to identify, determine and evaluate the input of marketing specialists, to relate marketing results with heir financial valuation (Ambler, 2003).

It shows that the valuation of marketing effectiveness based on perspective of goal attainment and outcome is limited and cannot fully explain the essence of marketing activity effectiveness.

Marketing *efficiency* is associated with expenses (inputs) and results (performance outcomes) and quality. When assessing the marketing performance costs, product quality and enterprise growth is evaluated.

The concept of **marketing productivity** is used when combining the valuation of marketing effectiveness and efficiency: relationship between resources, results and costs comparing to income; activities for attaining and management of marketing aims (Thomas, 2002). Marketing should be oriented to effective efficiency, ensuring the value to customer and to organization with lower costs. The scope of marketing performance should be reflected on marketing budget, operations, and financial accounts. Analysis of marketing costs is important as it can disclose separate marketing expenses. When valuing marketing productivity it is much easer to define the marketing costs than marketing effects that should be measured in order to calculate and evaluate the return on marketing investments.

The importance of marketing performance valuation can be explained by few essential factors. *Firstly,* organizations seek for better accountability of value-added: in order to lower the costs it is important to assess the functions fulfilled in the organization by financial measures. Organizations, seeking to evaluate the marketing return, have to treat the marketing expenses as investments. Usually marketing expenses are treated as short-term expenses and are included in profit-loss account (Rust et al., 2004a). When marketing expenses are valued as investments, marketing assets can be compared to other tangible and intangible assets and the role of marketing function in strategy implementation can be evaluated (Schultz, Gronstedt, 1997). In this case the financial valuation methods as return on investment (ROI) are used (Moorman, Rust, 1999).

Secondly, organizations seek to determine the direct relationship between marketing and financial results. Marketing measures used separately and not linked to overall organization's results, are insufficient and unsuitable for complete valuation of marketing performance impact on organization's wealth and goal attainment. Hence marketing return valuation measures have to be multidimensional (Ambler et al. 2004). Beside general valuation, causal valuation methods involve data of separate consumers and provide the information about

individual consumer behavior, i.e. help to evaluate marketing investment decisions at the individual consumer level (Kale, 2004).

Adaptability is defined as organization's ability to react to environmental changes and is the potential for effectiveness and efficiency (Kahn, Myers, 2005).

The concepts of **customer and partner lifetime value** should be introduced as further valuation of shareholder value is related to models based on discounted cash flows measurement (see fig. 1). As in financial context, it is important to evaluate the future benefits received from current investments. Calculating the return the net present value of future benefits or investments (were applicable) should be measured and such factors as uncertainty and risk should be taken into account as planning or making detailed prognoses means predicting the changes in the future. It is highly recommended to apply this view in marketing return measurement. *Customer lifetime value* (CLV) is the net present value of a customer's profit stream (Rust et al., 2004b). The measures as sales, price, market share and costs would show the benefits received from customer equity taking in mind the future benefits as well (Gupta, Lehmann, 2006). In this context the *partner lifetime value* (PLV) would be the net present value of a partner profit stream. The benefits gained (taking in mind the future benefits as well) would be the lower working capital requirements (WCR), lower weighted average capital costs (WACC) and costs of goods and services (see fig. 1). Hence the main variables that should be measured are income, costs and retention rate (as the probability that customer or partner will remain loyal). Total benefits would be: higher and less volatile income and lower and less volatile costs, i.e. cash flow (CF).

Srivastava et al. (1998) cited the Rappaport's principle of firm market value calculated by net present value of future cash flows and explained the financial benefits of marketing addressing the marketing **impact on cash flows**:

- An *acceleration* of CF (earlier CF are preferred because risk and time adjustments reduce the value of later CF);
- An *increase in the level* of CF (e.g., higher revenues and/or lower costs, working capital, and fixed investments);
- A *reduction in risk* associated with CF (e.g., through reduction in both volatility and vulnerability of future cash flows) and, indirectly, the firm's WACC;
- The *residual value* of the business (long-term value can be enhanced, for example, by increasing the size of the customer base).

These are the main measures used to link financial measurement of marketing performance as discounted CF are used in different models for shareholder value calculation. As Rao and Bharadway (2008) conclude, the effect of marketing activities on cash flows and shareholder value is not straightforward, the impact of WCR (depending on investments value as marketing initiatives should be financed) and the impact on productivity should be evaluated as well.

The financial measures have to be separated into two groups – the ones that measure partial impact/return for

organization and the ones that measure business as well as shareholder value in total. That's why the value for organization and shareholder value is presented separately (see fig. 1). The measures assigned to *organization value* include financial ratios as marketing return on investment (marketing ROI or return on marketing investment - ROMI), return on assets (ROA), return on quality (ROQ), return on advertising, return on loyalty programs (Rust et al., 2004a; Gupta, Lehmann, 2006). All measures are based on discounted future cash flows.

The value-based performance measures used for *shareholder value* calculation can be divided into four groups:

- accounting values as sales, price and costs;
- measures incorporating net present value of cash flows as discounted future cash flows (DFCF), cash flow return on investments (CFROI);
- measures with share value as share price itself, price to book ratio (P/B ratio), Tobin's q and measures incorporating return from dividends and share price appreciation as market value added (MVA,), total shareholder returns (TSR);
- economic profit and economic value added (EVA).

Accounting measures are usually used as intermediate measures determining future cash flows. Most researches on firm performance have relied on methods with discounted cash flows. They incorporate all the accounting measures as well as amount of capital required with valuation of its costs. Cash flow return on investment (CFROI) is an economic measure and represents the CF generated in a given year as a percentage of the cash invested to fund assets used in the business (an internal rate of return over the average economic life of the assets involved) (Barbera, Coyte, 1999). The measures employed are the future cash flows, capital involved, and cost of capital as discount rate. As it is calculated for overall business activities, the partly measures as discussed above are included as well: the impact of market activities as ROMI, ROQ, return on advertising, return on quality, etc.

The measures incorporating *share price* are used as the share price by its nature reflects the future financial performance (the expectations of investors) and are valued as more forward-looking measures. But they are useful only to comparatively large organizations that go public, i.e. their shares are traded in the market. The *price to book ratio* shows the appreciation or depreciation of share book value compared to expected future financial performance. *Tobin's q* is the most widely used measure from this group as it incorporates market value of the firm compared to the current replacement cost of firm assets (alternative uses of a firm's assets). As Anderson et al. (2004) states, Tobin's q is adjusted for expected market risk and is less affected by accounting conventions.

The most direct measures of shareholders' value are ones that show dividend yield and return from share price changes. But they are applicable only in cases when dividend policy is clearly stated and ensured and shares are publicly traded. The measures applied are *market value added* (MVA, market capitalization plus borrowings and minus total capital invested) and for individual shareholder – *total shareholder returns* (TSR, share price appreciation plus dividend yield) (Barbera, Coyte, 1999; Rust et al., 2004a).

The method of *economic value added* (EVA, net operating profit after tax minus capital multiplied by weighted average capital cost rate) measures single period performance (Barbera, Coyte, 1999). Hence the value drivers are profitability in current operations, and the amount and cost of capital employed. *Economic profit* (EP) is similar to EVA, as it incorporates total return of the firm compared to opportunity costs. More exact calculation would be: return on investment minus book weighted average capital cost multiplied by book value of capital. As EP is based on book values the use is limited, but useful for strategy selection.

The calculation of shareholder value is based on the assumption that the value is created with efficient management of organization's resources and as a result business earns a return greater than the cost of the capital employed. Thus the calculations made relating marketing activities with financial results are important in order to have the answer weather marketing resources – equities and capabilities - are used efficiently. If the result is unsatisfactory the co-creation of marketing strategies or development of new equities and capabilities is required. Further calculations should be made using the discussed logic – choosing the most appropriate equities, valuation of their effectiveness, efficiency and adaptability, calculating the impact on cash flows, calculating the value for organization and, finally, the shareholder value.

Research methodology

Empirical research was made in order to disclose the fairness of methodological premises made by theoretical reasoning:

- the nature and scope of marketing performance valuation is defined by marketing role in organization, i.e. the objectives defined;
- valuation of marketing performance has to involve the main indicators of marketing activity; the choice of indicators depends on organization's approach to marketing input into business results, i.e. to creation of shareholder value;
- marketing valuation is made by valuing marketing efficiency, expressed by financial measures.

The aim of empirical research – disclose marketing valuation areas and use of financial measures for marketing performance valuation in Lithuanian enterprises.

The research was made using quantitative method – questionnaire. Beside the questions explaining the respondent characteristics the questionnaire consisted of three parts: questions, related to set of marketing objectives, objects controlled by marketing activities, and valuation (control) measures including financial ones. In figure 2 the detailed structure of research aspects and measures is presented.
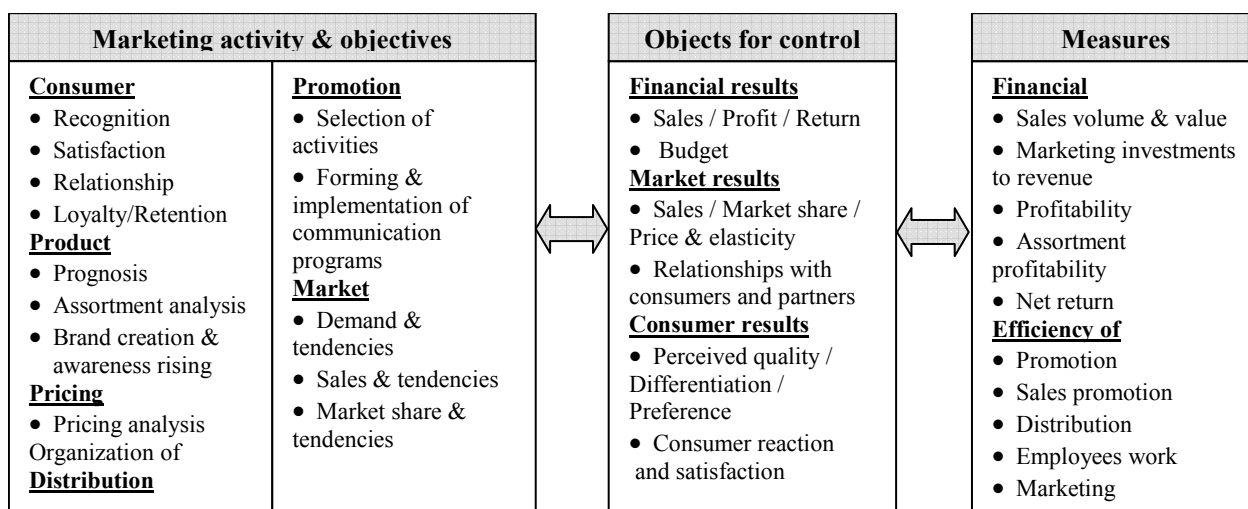
Figure 2. The structure of questionnaire: marketing objectives, control objects and measures for valuation

The survey was made in 2007; there were 298 Lithuanian companies surveyed. The data were processed using *SPSS* 9.0 program. For comparison of means in different groups (enterprise location, business duration and activity type) the Kruskal-Wallis criteria was used. Hypotheses about equality were rejected, when p≤0.05 (differences were treated as statistically important). The Spearman correlation coefficient was used for testing the relationships between two variables (means).

Findings of the survey

Marketing activity and objectives. The survey results disclosed that the most attention is paid to objectives related to pricing, then to market, consumer and distribution, and less – to promotion and products.
In most enterprises surveyed (82.2%) the objectives related to consumer activities are set. When implementing consumer related activities, the objectives of rising consumer loyalty and consumer relationships management are striving to be achieved (33% and 32.8 % respectively). However the results show that enterprises give too little attention to analysis of consumer satisfaction and improvement of consumer service (3% and 3.7%).
Enterprises that have raised the objective – definition of product demand and delivering the products to the market (61.7%) – pay the most attention to such objectives as planning of sales volume (33%), analysis and structuring of assortment (18%). Such objectives as management of new brands, development of partner relationships, search and attraction of new customers, and customer retention are raised rarely.
Based on respondents' answers, the objectives of distribution are not always assigned to marketing competence: only 34.4% of respondents pointed delivery objectives as marketing activity. The objectives of planning and implementing the promotion activities are raised in 42% of enterprises surveyed. Pricing objectives are set in most enterprises (81.4%). As the most important aspects pointed were analysis of demand and its tendencies, creation of new products and refuse of unsellable goods and services.
When analyzing the results according business duration and objectives rose, none of the major differences were

observed. However enterprises placed in major cities pay more attention to management of goods and services compared to enterprises located in other areas (the average out of possible 4 objectives in this group is 1.4 and 0.72 respectively). Promotion is treated as important in all enterprises, but there is statistically important difference between enterprises in major cities and in other locations (the average out of possible 2 objectives in this group is 0.7 and 0.33 respectively). The most market objectives are raised in enterprises located in Vilnius (2.07 out of 5 possible, in other major cities and locations – about 1.5). Comparing objectives raised by type of activities, the only statistically important difference was in case of consumer objectives: mixed (services and manufacturing) enterprises raise much more objectives related to consumer activity than other type of businesses (services, trade, and manufacturing alone) (2.3 and 1.5 out of 5 possible respectively).
Objects of control. Survey results showed that enterprises usually control their budget (84.6%), promotion activity (63.8%), relationships with partners (66.4%), less attention is paid to product quality (5%), control of assortment (8.4%), control of customer reaction, satisfaction (15.8%). There were no statistically important differences comparing enterprises by location, business duration and activity type.
Measures of valuation. Most enterprises seek to evaluate financial results of marketing performance. However, the younger the enterprise, the less attention to financial valuation is paid (cor. coef. -0.132). More measures for efficiency valuation are used in enterprises where trade is the main activity, compared to service and manufacturing (1.96 and 1.3 out of 5 possible respectively). The measures used most frequently are sales volume, ratio of marketing expenses to sales volume and profitability (22,4%, 26,2% and 48,6% respectively). The valuation of marketing efficiency was pointed as important (69.4%). The efficiency of promotion and distribution are valued more frequently, and less attention is paid to valuation of assortment profitability.
When comparing the groups of marketing objectives with marketing objects for control the relationships were highlighted and few conclusions may be drawn. The more attention is paid to consumer activity, the more control of

product assortment is made (cor.coef 0.144, p≤0.051); the product objectives are related with higher control of product quality (cor.coef 0.144; p≤0.01). When more attention is paid on distribution objectives, more control is executed on market share, market research, and relationships with partners (cor. coef. 0.124, 0.174, 0.129, respectively; p≤0.01). Pricing objectives raise higher needs to control budgeting and market research (cor. coef. 0.195, 0.150 respectively; p≤0.01). Negative correlation of market objectives and control objects shows that enterprises rising more market objectives pay less attention to sales volume and price elasticity (cor.coef. -0.160, p≤0.05 and -0.127, p≤0.01 respectively).

The relationships between the groups of marketing objectives and groups of performance measurement are presented in table 1.

Table 1

Relationships between objectives raised and measures used

Objectives / Measures	Consumer	Product	Distribution
Financial	,338(**)	,338(**)	,280(**)
Efficiency	,387(**)	,457(**)	,241(**)
	Promotion	**Pricing**	**Market**
Financial	,355(**)	,254(**)	,467(**)
Efficiency	,351(**)	,197(**)	,449(**)

** Correlation is significant at the .01 level (2-tailed).

The relationships are significant in all cases (Table 1), i.e. the more attention is paid to certain objectives the more measures are applied for financial valuation of marketing performance (using single financial measures and complex efficiency valuation).

Conclusions

The main business concern is to create value and to understand the importance of consumer value, thus marketing is crucial for long-term business success. Marketing success is defined as ability to match the marketing resources to consumer needs and market requirements. Selection of marketing resources and their successful use can be ensured if proper valuation measures are selected. The analysis of scientific literature disclosed that marketing performance valuation is executed through measurement of *effectiveness* (value created using organization's resources for marketing activities), *efficiency* (relationship of performance outcomes and expenditures) and *adaptability* (organization's ability to adapt to environmental changes). The concept of *marketing productivity* is used when combining the measurement of marketing effectiveness and efficiency: relationship between resources, results and costs comparing to income; activities for attaining and management of marketing aims. Financial measures used for marketing performance valuation indicate the impact of marketing performance to long-term business results and to shareholder value, respectively.

The main survey findings disclosed that most enterprises surveyed use quantitative marketing performance control in order to detect the improper deviations. The most attention is paid to objectives related to pricing, then to market, consumer and distribution, and less – to promotion and products. The objects for control in most cases are budget, promotion activity and relationships with partners. The measures used most frequently are sales volume, ratio of marketing expenses to sales volume and profitability. Financial measurement of marketing performance is more precise and detailed in enterprises were marketing objectives and control objects are defined more precisely. In authors' opinion, the valuation of efficiency is realized, but lack of valuation of marketing effectiveness limit the ability to evaluate marketing productivity and effect of marketing activities on shareholder value.

References

1. Ambler T. Marketing: the trouble with finance. *Business Strategy Review*, vol. 14(3), 2003, p.54-63.
2. Ambler, T. and Puntoni, S. Measuring marketing performance. In Hart, S (Ed.), *Marketing Changes*. London, UK: Thomson Learning. 2003, p.289-309.
3. Ambler, T., Kokkinaki, F. and Puntoni, S. Assessing marketing performance: reasons for metrics selection, *Journal of Marketing Management*, vol. 20, 2004, p.475-498.
4. Anderson E.W., Fornell C., Mazvancheryl S.K. Customer satisfaction and shareholder value. *Journal of Marketing*, vol. 68, 2004, p.172–185.
5. Anderson, C.H., Vincze, J.W. Strategic marketing management. meeting the global marketing challenge. New York: Houghton Mifflin Company. 2000.
6. Baker, S. New consumer marketing: managing a living demand system. Wiley & Sons, England. 2004.
7. Balmer, J.M., Greyser, S.A. Corporate marketing. Integrating corporate identity, corporate branding, corporate communications, corporate image and corporate reputation. *European Journal of Marketing*, vol. 40(7/8), 2006, p.730-741.
8. Barbera M., Coyte R. Shareholder value demystified: an explanation of methodologies and use. Australia: ACMAD. 1999.
9. Barney, J.B. Firm resources and sustained competitive advantage. *Journal of Management*, vol. 17(1), 1991, p. 99-120.
10. Bučiūnienė, I. Impact of relationship marketing on company's micro and macro environment. *Engineering economics*. Kaunas University of Technology, vol. 2(37), 2004, p. 92-98.
11. Carson, D., Gilmore. Marketing at the interface: not "what," but "how." *Journal of Marketing Theory and Practice*, vol. 8(2), 2000, p.183-196.
12. Clulow, V, Barry, C., Gerstman, J . The resource-based view and value: the customer-based view of the firm. *Journal of European Industrial Training*, vol. 31(1), 2007, p.19-35.
13. Day, G.S. The capabilities of market-driven organizations. *Journal of Marketing,* vol. 58, 1994, p.37-52.
14. Grønholdt, L., Martensen, A. Key Marketing performance measures. *The Marketing Review*, vol. 6, 2006, p.243-252.
15. Gupta, S., Lehmann, D. R. Customer lifetime value and firm valuation. *Journal of Relationship Marketing*, vol. 5(2/3), 2006, p.87-110.
16. Han, J.K., Namwoon, K., Srivastava, R.K. Market orientation and organizational performance: Is innovation a missing link. *Journal of Marketing,* vol. 62(4), 1998, p.18-30.
17. Hooley, G., Greenley, G., Fahy, J., Cadogan, J. Market-focused resources, competitive positioning and firm performance. *Journal of Marketing Management*, vol. 17, 2001, p.503-520.
18. Hooley, G.J., Greenley, G.E., Cadogan, J.W., Fahy, J. The performance impact of marketing resources. *Journal of Business Research,* vol. 58, 2005, p.18-27.
19. Hopenienė, R., Railienė, G., Kazlauskienė, E. Emergence of virtual tourism business system: empirical findings. *Proceedings of 14th International conference „Economics and management 2009"*. Kaunas University of Technology. 2009, p.780-787.

20. Hunt, Sh. D., Arnett, D.B**.** Does marketing success leads to market success? *Journal of Business Research*, vol. 59, 2006, p.820-828.
21. Juščius, V., Navickas, V., Jonikas, D. Empirical researches of relationship marketing: the role in foreign countries and Lithuania. *Engineering economics*. Kaunas University of Technology. Vol. 4(49), 2006, p. 95-103.
22. Kahn K. B., Myers M. B. Framing marketing effectiveness as a process and outcome. *Marketing Theory*, vol. 5(4), 2005, p.457-469.
23. Kale, S. H. CRM failure and seven deadly sins. *Marketing Management*, vol. 13(5), 2004, p.42-46.
24. Kotler, P. *Marketing Management*. Upper Saddle River, NJ: Prentice Hall. 2003.
25. Lemon K.R., Rust R.T., Zeithaml V.A. What drives customer equity. *Marketing Management*, vol. 10(1), 2001, p.20-25
26. Maltz, E. Reducing marketing's conflict with other functions: the differential effects of integrating mechanisms. *Journal of the Academy of Marketing Science*, vol. 28(4), 2000, p. 479-192.
27. Moorman, C., Rust, R.T. The role of marketing. *Journal of Marketing,* vol. 63(4), 1999, p. 180-197.
28. Morgan, N.E., Clark, B.H., Gooner, R. Marketing productivity, marketing audits, and systems for marketing performance assessment: integrating multiple perspectives. *Journal of Business Research*, vol. 55 (3), 2002, p.63-375.
29. Morgan, R.E. Hunt, S.D. Determining marketing strategy: a cybernetic systems approach to scenario planning. *European Journal of Marketing,* vol. 36(4), 2002, p. 450-478.
30. Payne A., Holt S. Diagnosing customer value: integrating the value process and relationship marketing. *British Journal of Management*, vol. 12, 2000, p.159 – 182.
31. Rao K.S.R., Bharadwaj N. Marketing initiatives, expected cash flows, and shareholders' wealth. *Journal of Marketing*, Vol.72, 2008, p.16-26.
32. Rust, R.T., Ambler, T., Carpenter, S.G., Kumar, V., Srivastava, R. Measuring marketing productivity: current knowledge and future directions. *Journal of Marketing*, vol. 68, 2004a, p.76-89.
33. Rust, R. T., Lemon, K. M., Zeithalm, V.A.. Return on marketing: Using customer equity to focus marketing strategy, Journal of Marketing, 68 (1), 2004b, p.109-127
34. Rust, R.T., Moorman, C., Dicson, P.R. Getting Return on Quality: Revenue Expansion, Cost Reduction, or Both? *Journal of Marketing*, vol. 66(4), 2002, p.7-24.
35. Schultz, D. E., Gronstedt, A. Making marcom an investment. *Marketing Management*, vol. 6(3), 1997, p.40-49.
36. Sheth, J.N., Sisodia, R.S. Marketing productivity: issues and analysis. *Journal of Business Research*, vol. 55, 2002, p.349-362.
37. Slater, S.F., Narver, J.C. Market orientation, customer value and superior performance. *Business Horizons*, vol. 37, 1994, p. 22-28.
38. Srivastava, R.K., Reibstein, D. J. *Metrics for Linking Marketing to Financial Performance*, Working paper submitted to Marketing Science Institute. 2004.
39. Srivastava, R.K., Shervani, T.A., Fahey, L. Market-based assets and shareholder value: a framework for analysis. *Journal of Marketing*, vol. 62(1), 1998, p.2-18.
40. Srivastava, R.K., Shervani, T.A., Fahey, L. Marketing, business processes, and shareholder value: an organizationally embedded view of marketing activities and the discipline of marketing. *Journal of Marketing*, vol. 63(4), 1999, p.168-179.
41. Thomas, M. J. Measuring performance in marketing. *Journal of Targeting, Measurement and Analysis for Marketing*, Vol. 6(3), 2002, p.233-246.
42. Trim, P.R. The strategic corporate intelligence and transformational marketing model. *Marketing Intelligence and Planning*, vol. 22(2), 2004, p. 240-256.
43. Urbanskienė, R., Žostautienė, D., Chreptavičienė, V. The Model of Creation of Customer Relationship Management (CRM) System. *Engineering economics*. Kaunas University of Technology. Vol. 3(58), 2008, p.51-59.
44. Virvilaitė, R. Development of Marketing Science and Studies in Lithuania. *Engineering economics*. Kaunas University of Technology. Vol. 4(59), 2008, p.76-84.
45. Vorhies, D.W., Morgan, N.A. A Configuration theory assessment of marketing organization fit with business strategy and its relationship with marketing performance. *Journal of Marketing*, vol. 67, 2003, p.100-115.
46. Woodburn, D. Engaging marketing in performance measurement. *Measuring Business Excellence*, vol. 8(4), 2004, p.63-72.

Gelminė Sližienė, Ginta Railienė

Finansinis marketingo veiklos vertinimas

Santrauka

Įmonės veiklos sėkmingumo požiūriu svarbus marketingo išteklių panaudojimas ir vaidmuo ilgalaikiams įmonės finansiniams rezultatams, verslo ir akcininkų vertės užtikrinimui. Straipsnyje analizuojamos marketingo veiklos rezultatų finansinio vertinimo galimybės, marketingo vertinimo sudėtis ir finansinio vertinimo priemonės. Empirinis tyrimas atskleidė, kokie sprendžiami marketingo uždaviniai, išskiriami kontrolės objektai ir vertinimo metodai Lietuvos įmonėse. Tyrimo rezultatai parodė, jog įmonės daugiausia dėmesio kreipia kainodaros, rinkos, vartotojų ir paskirstymo uždaviniams. Dažniausios kontrolės sritys – biudžetas, rėmimo veikla, santykiai su partneriais; rodikliai – pardavimų apimtys, marketingo išlaidų ir pardavimų apimties santykis, pelningumas. Finansinis marketingo veiklos vertinimas išsamesnis įmonėse, kuriose formaliai apsibrėžti marketingo uždaviniai ir kontrolės objektai.
Raktiniai žodžiai: marketingo ištekliai, marketingo veiklos vertinimas, vertė akcininkams.

About the authors

Gelminė Sližienė, lektorė, Kauno technologijos universitetas, gelmine.sližiene@ktu.lt, +370 37 300127, mobilus tel. +370 698 83222, mokslinių interesų kryptys: įmonės marketingas, marketingo kontrolingas.
Ginta Railienė, socialinių mokslų daktarė (ekonomika), lektorė, Kauno technologijos universitetas, ginta.railiene@ktu.lt, +370 37 300127, mobilus tel. +370620 81617, mokslinių interesų kryptys: įmonės finansų valdymas, finansinių paslaugų plėtra, verslo paramos sistemos.

THE IMPACT OF INFRASTRUCTURE DEVELOPMENT ON SOCIAL AND ECONOMIC EVOLUTION: THEORETICAL ASPECTS

Vytautas Snieška[1], Ineta Šimkūnaitė[2]

[1]Kaunas University of Technology, Lithuania; [2]Public Institution „PVC", Lithuania

Abstract

The issue of infrastructure impact on development is very popular even though it is analysed in various perspectives. The results of academic research are hard to compare because there is variety of interpretations. There are no generally agreed principles for evaluation of the link between infrastructure and social-economic development: every author formulates his own evaluation model and provides theoretical and practical justification of it. In order to understand the aspects of infrastructure impact evaluation, authors of the paper provide theoretical analysis of impact evaluation aspects, advantages and disadvantages of evaluation model applicability.

Keywords

Infrastructure, social-economic development, infrastructure impact measurement.

Introduction

The issue of infrastructure impact on development of countries is very common in recent scientific literature. Increasing investments in infrastructure of both government and private sector stem scientific and political discussions considering the effect of infrastructure development. Academic scholars unanimously agree that investments in infrastructure effect development of countries and regions they only disagree about their magnitude and direction of interdependency. The problem of infrastructure is analysed in the context of different countries: researchers evaluate the impact of infrastructure on income inequality, life quality and welfare in India, Latin America and Africa, other empirical works estimate the effect of infrastructure development on economic growth and regional competitiveness in Europe and China. Many studies focus on the European Union considering financing of infrastructure from Structural Funds and their contribution to growth performance of the countries. There is no agreed concept in scientific literature for determining the notion of infrastructure, for distinguishing and measuring its components; various models are used for measuring the impact of infrastructure which provide hardly comparable results and interpretations. Characteristics of each country determine the set of infrastructure components and the aspect of impact on social and economical development: economic growth, income inequality, output, regional competitiveness, labour productivity and welfare. Methodological model for evaluation of impact of infrastructure is crucial for accurate analysis and authors propose principles based on three main factors: definition of infrastructure, determination and measurement of its components, formation of a model for evaluation of the impact.

The aim of the article is to analyze theoretical and empirical aspects of infrastructure impact evaluation models and to define methodological principles for infrastructure impact evaluation.

Methods of the research: comparative and logical analysis of theoretical concepts, methods and conclusions, published in scientific literature.

Conception of infrastructure

Different authors (Prud'homme, 2004, Fourie, 2006, Baldwin and Dixon, 2008) analyse infrastructure from different aspects and provide different definitions of infrastructure. Various impacts and incidence of infrastructure create different interpretations of its definition which encumber attempts of researchers to evaluate the impact of infrastructure. The most common trends of infrastructure description formulation are based on its attribute and functions (Torrisi, 2009):
- Describing characteristics of infrastructure features;
- Listing the structure (components) of infrastructure;
- Distinguishing the types of ownership.

These definitions overlap and for that reason variety of estimations are made and results obtained which allow wide range of interpretations. Researchers do not provide clear justification for using certain definition and this creates uncertainty when it comes to impact evaluation.

Torrisi (2009) distinguishes material and immaterial infrastructure which creates different value for households and enterprises. Material is understood as infrastructure which satisfies the needs and requirements of people (waterways, pipes, sewerage systems, roads, etc.); immaterial is referred to innovation, development and education infrastructures (research centres, innovation networks, etc.).

According to Ayogu (2007), authors agree that infrastructure provides services for consumption to residents and these services are input for private production, only researchers disagree about magnitudes involved. Fourie (2006) argues, that economists and urbanists in academic literature distinguish two types of infrastructure: economic and social. Economic infrastructure (roads, highways, railroads, airports, sea ports, electricity, telecommunications, water supply and sanitation) promotes economical activities and social infrastructure (schools, libraries, universities, clinics, hospitals, courts, museums, theatres, playgrounds, parks, etc.) promotes health, education and cultural activities.

Authors usually provide a broad definition of infrastructure essential functions which define its role and Torrisi (2009) calls this approach "functional". Fourie

(2006) argues that infrastructure consists of two elements – "capitalnes" and "publicness". According to this specification, infrastructure would include goods that have capital character, but are not necessarily public. Author also suggests that infrastructure can be defined by the list of infrastructure goods such as: transport, energy supply, water, communications infrastructure and etc.

Prud'Homme (2004) identifies characteristics of infrastructure as capital goods that provide services to both households and enterprises instead of being directly consumed, are lumpy, not incremental, have a long lifespan, are space specific and associated with market failures. These features make infrastructure different from other sectors. Baldwin and Dixon (2008) according to these features classify infrastructure into machinery and equipment, buildings and engineering construction. Authors analyse buildings and engineering construction together as structures calling them infrastructure assets and argue that they serve broader set of functions (communications, transportation, energy distribution, electricity, waste, water and sewerage, recreation, culture and education, health and social protection, defence and public safety).

Academic scholars do not use a single agreed set of infrastructure variables and analysis of scientific literature allows summarising, that there is a tendency to either lump infrastructure's sub-sectors together in one category or to study one type of infrastructure, e. g. transportation, and ignore any relationship among different types of infrastructure subsectors. Snieska and Simkunaite (2009) argue that authors of recent scientific literature operate a detailed understanding of infrastructure and they estimate the effect of different infrastructure sub-sectors and try to find the dependence between several variables. The most analysed sectors are: telecommunications, energy, transport and sanitation sectors (Seethepalli, Bramati, Veredas, 2008, Straub, 2008).

In addition to the problem of identification of infrastructure components, there is also a problem of their measurement. There is no agreed methodology for evaluation of infrastructure variables – various types of measures are implemented in scientific literature (physical and monetary). Adopting different measurement approaches lead to results that differ greatly. Most researchers use physical indicators rather than monetary ones for the reason to avoid the difficulty of infrastructure evaluation. The data on government spending is not always available too. Authors (Grubesic, 2009, Straub, Vellutini, Warlters, 2008, Yeaple, Golub 2007, Canning, Pedroni, 2008) consider different sets of physical variables for each subsector of infrastructure and they find these indicators more specular than monetary, e.g. telecom – number of phones lines, number of telephones, number of mobile subscribers; electricity – electric power consumption, electricity generating capacity; transport – kilometres of paved roads, percentage of paved roads; sanitation – percentage of population with access to improved sanitation facilities, percentage of population with access to improved water source.

In order to perform analysis of possible effect of infrastructure, it is crucial to define the set of components which contain the sector of infrastructure and it is one of the most important steps in infrastructure impact evaluation process. It is important to consider each method for variable measurement in order to appraise its advantages and disadvantages for interpretations of the estimated results.

Scientific literature does not provide unique concept of infrastructure description from the ownership perspective. Different interpretations of infrastructure facets are discussed: some authors consider that public capital and public infrastructure are synonyms, other researchers analyse public infrastructure and define it as services, provided to the public. The third category of studies focuses on the ownership of infrastructure and they define publicly owned infrastructure as public capital. Most of them take into account produced physical assets and omit other forms of capital: environmental, institutional, and social-cultural. Infrastructure is mostly understood as having impact on big number of users and it is called public because of its benefit (Baldwin, Dixon, 2008). Other authors evaluate the private capital share in country infrastructure, because many types of infrastructure are mainly owned not only by government, but as public-private partnership. Thus it is not easy to distinguish private infrastructure capital from other capital assets. According to Rosik (2006) for this reason the OECD countries usually use the narrow definition of public capital which focuses on infrastructure owned by the public administration. Researchers are aware to analyse infrastructure as private or public according to the type of investments, because nowadays publicly used infrastructure is sponsored by both – government and private investors.

Definition of infrastructure is ambiguous fundamental phase evaluating the link between infrastructure and development as it indicates the direction for further analysis.

The link between infrastructure and socio-economic development

Academic scholars analyse the effect of infrastructure on various aspects and there is no single agreed concept of the impact of infrastructure. For that reason researchers base their methodologies and calculations on the data they poll. Characteristic of each country determines the set of infrastructure components and the aspect of impact on social and economical development: economic growth, income inequality, output, regional competitiveness, labour productivity and welfare. Table 1 provides the most common aspects of the impact of infrastructure found in scientific literature and Picture 1 represents the model of infrastructure impact.

Table 1

The impact of infrastructure: theoretical evidence

Impact of infrastructure on:				
Income inequality	Regional competitiveness	Economic growth	Private production level	Welfare
Chong and Calderón (2001) Calderón and Servén (2004) Ding, Haynes and Liu (2008)	Nijkamp (1986) Fleischer (2003) Snieska and Draksaite (2007) Martinkus and Lukasevicius (2008) Grundey (2008) Snieska and Bruneckiene (2009) Burinskiene and Rudzkiene (2009)	Aschauer (2000) Demetriades and Mamuneas (2000) Perrera-Tallo (2003) Calderón and Servén (2004) Prud'homme (2005) Agénor and Moreno-Dodson (2006) Fourie (2006) Straub (2008) Seethepalli, Bramati and Veredas (2008) Li and Li (2008) Zou, Zhang, Zhuang and Song (2008) Mamatzakis (2008) Straub, Vellutini, Warlters (2008) Snieska and Simkunaite (2009) Nketiah-Amponsah (2009) Kellenberg (2009) Sahoo (2009) Fedderke and Bogetic (2009)	Aghion and Schankerman (1999) Demetriades and Mamuneas (2000) Paul (2003) Damaskopoulos, Gatautis, Vitkauskaite (2008) Macdonald (2008) Mentolio and Solé-Ollé (2009) Gu and Macdonald (2009) Bronzini and Piselli (2009)	Auscher (1998) Bristow and Nellthorp (2000) Agénor and Moreno-Dodson (2006)

It is very common in recent scientific literature to analyse the relationship between infrastructure and economic growth (Aschauer, Calderón, Servén, Seethepalli, Bramati, Veredas, Agénor and Moreno-Dodson, Rioja, Li and Li, Grubesic, Macdonald, Bougheas, Demetriades, Mamuneas, Fourie, Canning and Petroni, Del Bo and Florio, Nketiah-Amponsah and others).
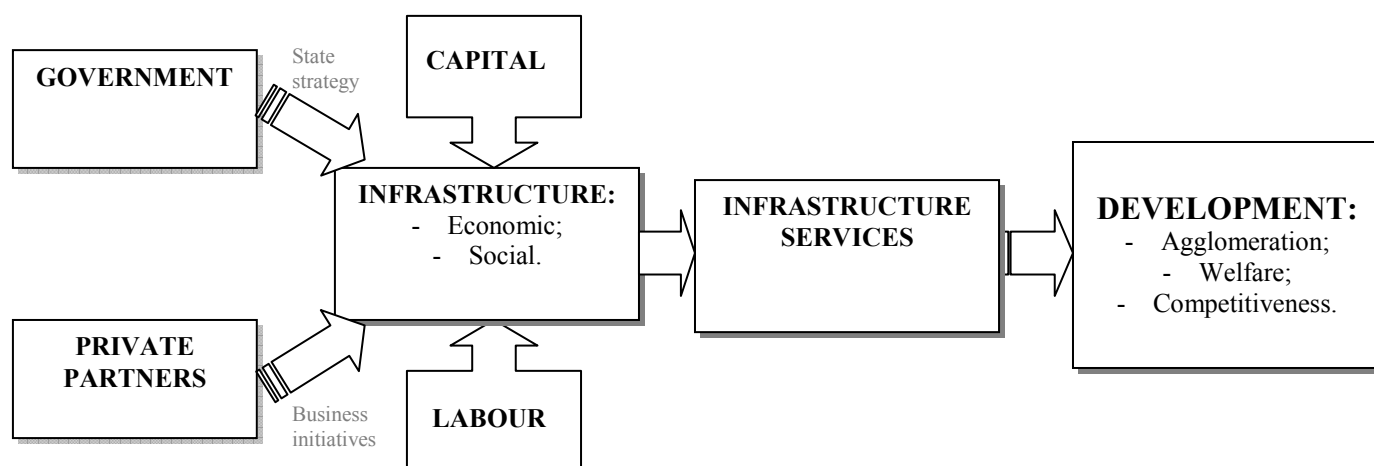
Figure 1. Infrastructure impact model

Researchers claim that subsectors of infrastructure, such as transport, telecom, water, electricity improve the welfare of society and positively affect their productivity. Infrastructure services also lower production costs and expand market opportunities to business enterprises which are crucial for increasing their competitiveness. Welfare of households and competitive production leads to social and economical development of the country. Important to say that the relationship between infrastructure and economic development is very heterogeneous and the causality tends to be reverse: investments to infrastructure stimulate growth and at the same time higher growth also often leads to higher demand for infrastructure.

Determining the field on which the impact of infrastructure will be analysed leads to the next phase – choosing the technique for estimation of the impact.

Measurement of infrastructure impact

Different techniques are used for evaluation of infrastructure impact in scientific literature. de Haan, Romp, Sturm (2007) after analyzing scientific literature distinguish four approaches to measure the impact of public infrastructure on economic growth:
- Production function approach – the most common approach, estimating function of Cobb-Douglas functional form.
- Behavioural approach – a cost or profit function involving and estimating stock of infrastructure. This model is more flexible and takes into account different characteristics of public and private capital.
- Vector Auto Regressions (VAR) models analyze causality and endogeneity problems in production function and behavioural approaches.
- Cross-section growth regressions take into account government investment spending.

Production function approach was the first widely implemented method for estimating the impact of public infrastructure in private production. Public capital is taken as input in the same way as capital and labour in functional form. Followers of aggregate production function approach argue that productive inputs (employment, private capital stock, etc.) are exogenously determined, and firms make output decisions based on the availability of these factors. Under this approach, the question of infrastructure productivity becomes whether additions to public capital stocks increase the output that can be obtained from given input stocks. In practice, estimates of production function depend on the assumption that disturbances in output will be uncorrelated with quantities of inputs available (Haughwout, 2002).

In the scientific literature infrastructure enters the macroeconomic production function in direct and indirect ways. Infrastructure may enter the production function as a third input or its stock may influence productivity in an indirect way. It depends on the functional form of the production function whether both effects can be identified. However, it is hard to distinguish direct and indirect impact of infrastructure because most theoretical models provide similar equations for estimating the effect (de Haan, Romp, Sturm, 2007). Critics of this approach remark the possibility of reverse causation between infrastructure and productivity.

Behavioural approach is used by many economists (Paul, Aghion and Schankerman, Mentolio and Solé-Ollé, Gu and Macdonald) as a better way to estimate the impact of public capital. Public capital is assumed as unpaid factor of production that effects the cost level. Advocates of this approach prefer the assumption that input prices, not quantities, are treated as exogenous by producers. The cost function measures the impact of public capital on productivity in terms of cost-saving benefits. The basic aim of the cost function is to examine if the costs of output (labour and private capital) decrease with the higher stock of public capital (Rosik, 2006). Estimates using cost function result in positive impact of public capital and they are assumed as more realistic than the ones done using production function.

The vector auto regression model (VAR) allows overcoming the problem of the direction of causality. The multivariate time series approach is frequently used for forecasting systems of interrelated time series. The single-equation framework excludes the dynamic feedbacks among the model variables, which are essential to understand the relationship between public infrastructure and economic performance. The VAR approach treats every endogenous variable in the system of equations as a function of the lagged values of all of the endogenous variables in the system. (Rosik, 2006).

Cross-section growth regressions take into account the government investment spending and provide the comparison of calculations with data from different countries or regions. Growth regressions test the robustness of the cross section infrastructure relationships; if the cross-country relationships represent equilibrium conditions, the growth rates of the infrastructure stocks should respond to disequilibrium in the relationship (Canning, 1998).

Different techniques prove very different results even when a similar set of countries is examined. Straub, Vellutini, Warlters (2008) use growth accounting framework and cross country regressions. They failed to prove significant link between infrastructure, productivity and growth and their results contrast strongly with previous studies that find positive and significant effect of infrastructure using production function. Seethepalli, Bramati, Veredas (2008) use augmented Solow growth model which relies on a Cobb – Douglas production function and their results are consistent with other authors that infrastructure is important for promoting growth. Canning (1998), Demetriades and Mamuneas (2000), Roller and Waverman (2001), Fernald (1999), Nketiah-Amponsah (2009), Kellenberg (2009), Bronzini and Piselli (2009) also analyzed the effect of infrastructure in cross-country data context and confirmed significant output contribution of infrastructure. Calderón, Servén (2004) using cross-country time series data set resulted that infrastructure assets positively affect growth.

Analysis of scientific literature allows summarizing that there is variation in empirical results testing the relationship between infrastructure and economical growth. Not all studies find growth-enhancing effect of the infrastructure in some sources there is evidence of reverse causation found. Decision of choosing a certain technique depends on researcher's purposes and data available. These results prove that lack of generally agreed methodological principles leads to incomparable variety of results and causes further discussions.

Methodological principles for infrastructure impact evaluation

Results of theoretical analysis proved, that it is not enough to define the theoretical aspects of infrastructure impact evaluation. Analysis of empirical works is crucial and after performing it authors of the article summarise that evaluation and measurement of infrastructure impact is complex process because there is no generally agreed methodology. The analysis of infrastructure development impact is based on three main factors: definition of infrastructure, determination and measurement of its

components, formation of a model for evaluation of the impact. Figure 2 represents the logical sequence of impact evaluation process.
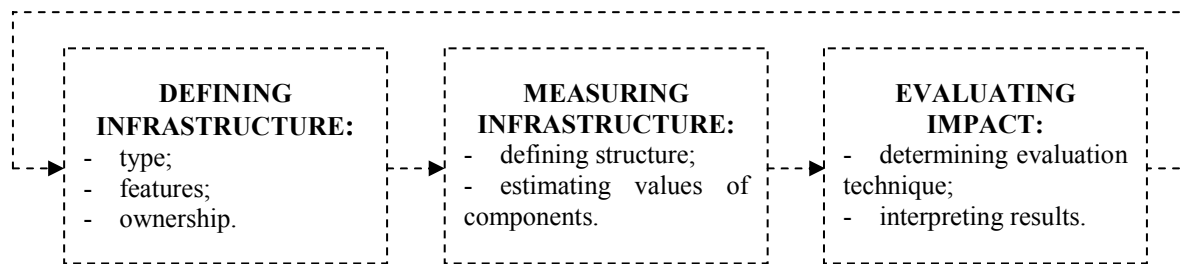

Figure 2. Logical sequence of infrastructure impact evaluation process

According to the scientific literature the first and fundamental phase of impact evaluation process is to formulate the definition of infrastructure justifying its features which might influence the type of impact (type of infrastructure, features, ownership). Evaluation of infrastructure impact can't be performed without completing this stage because definition of infrastructure influences its structure and possible impact. Definition of infrastructure type allows distinguishing tendencies of impact and further analysis: economic infrastructure affects economic development of the country and development of social infrastructure influences the level of education and health assurance. As it is generally agreed that infrastructure affects social and economic development and many researchers agree about basic features of infrastructure, empirical results in scientific literature show that features of infrastructure don't have direct effect on the relationship between infrastructure and socio-economic evolution. Classifying infrastructure into public and private allows only distinguishing type of investment but this doesn't have crucial impact on the interdependency between infrastructure and development. Furthermore the data about government spending is not always available which hinders to estimate the strength of the impact. The authors of the paper propose that definition of infrastructure must reflect regional peculiarity, determining certain aspects, e.g. Government strategy, business initiatives.

The second phase of impact evaluation is to define the structure of infrastructure components and to measure their value. The authors of the paper suggest that in order to perform accurate estimation of the impact, sub-sectors of infrastructure, their variables and interdependency must be delineated clearly and to accord strategic development trends, e.g. analysis of transportation sector and its variables is reasonable only if it was lately developed and might have caused the changes in regions' evolution. Countries or regions in similar level of development must be analysed in order to assure comparison of obtained results, e.g. countries in transition, high/middle income economies (according to World Bank), etc. The authors emphasize that according to this principle the structure of infrastructure will differ due to regional features of the states analysed. As empirical estimations of Snieska and Simkunaite (2009) proved, the same model implemented for the case of Lithuania and Latvia provided different results of the link between infrastructure ant economic development variables even though Lithuania and Latvia according to the World Bank classification are attributed to the same group of countries (upper-middle-income economies).

The method for components' value measurement (monetary – financial stock, financial flows or physical – length of roads, energy production capacity, etc.) most likely will depend on data available for certain country. The authors assent to opinion of academic scholars and recommend using physical indicators which are most accessible and provide specular information about development of certain sub-sector.

The last phase is to form impact evaluation model and to estimate the value of impact. The authors of the paper argue that the model must be complex and involve all the features mentioned above. Decision about the econometrical technique depends on the scope of research and data analysed. Interpretations of results obtained depend on the first two phases analysed above and modelling with different infrastructure structure or application of methods is challenging goal for further studies.

Summarizing the methodological principles proposed by the authors it is important to stress, that explicit evaluation of infrastructure impact on social-economic evolution can be performed if the regional aspects in infrastructure definition are incorporated, if the structure of infrastructure components is defined according to regional development trends and if the model of impact evaluation is created according to theoretical and logical justification.

The authors of the paper will continue the analysis of the issue of infrastructure impact by implementing all proposed principles and by providing deeper and more explicit empirical analysis studying the impact of infrastructure on middle income economies.

Conclusions

1. The actuality of the issue and variety of research performed provide controversial empirical results and interpretations of infrastructure role and still cause discussions about possible effect of infrastructure on social and economic evolution.

2. The lack of unique methodology in academic literature hinders evaluation of the infrastructure investments' impact on social and economical development.

3. Authors of the article propose methodological principles for infrastructure impact evaluation in following sequence:

- To define infrastructure ant its features according to the regional peculiarity of a country;

- To ascertain the structure of infrastructure according to the development trends of the country and to measure infrastructure components in physical values;

- To form theoretically and logically justified impact evaluation model.

4. The proposed principles will be implemented in the further studies of the authors evaluating the impact of infrastructure on the socio-economic development on the middle-income economies.

References

1. Agénor, P. R., & Moreno-Dodson, B. (2006). Public Infrastructure and Growth: New Channels and Policy Implications. *The World Bank Policy Research Working Paper 4064*.
2. Aghion, P., Schankerman, M. (1999). Competition, entry and the social returns to infrastructure in transition economies. *Economics of Transition* 7 (1), 79-101.
3. Aschauer, D. A. (1989). Is public expenditure productive? *Journal of Monetary Economics* (23), 177-200.
4. Aschauer, D. A. (2000). Do states optimise? Public capital and economic growth. *The Annals of Regional Science* (34), 343-363.
5. Ayogu, M. (2007). Infrastructure and Economic Development in Africa: A Review. *Journal of African Economies* (16), 75-126.
6. Baldwin J. R., & Dixon, J. (2008). Infrastructure Capital: What Is It? Where Is It? How Much of It Is There? *Research Paper Research Paper Series* (16).
7. Bougheas, S., Demetriades, P. O., & Mamuneas, T. P. (2000). Infrastructure, Specialization, and Economic Growth**. *Canadian Journal of Economics* (33), 506-522.
8. Bristow, A. L., & Nellthorp, J. (2000). Transport project appraisal in the European Union. *Journal of the World Conference on Transport Research Society* (1).
9. Bronzini, R., Piselli, P. (2009). Determinants of long-run regional productivity with geographical spillovers: The role of R&D, human capital and infrastructure. *Regional Science and Urban Economics* (39), 1987-199.
10. Burinskiene, M., & Rudzkiene, V. (2009). Future Insights, Scenarios and Expert Method Application in Sustainable Territorial Planning. *Ukio ekonominis ir technologinis vystymas-Technological and Economic Development of Economy* (1).
11. Calderón, C., & Servén, L. (2004). The Effects of Infrastructure Development on Growth and Income Distribution. *The World Bank Policy Research Working Paper 3400*.
12. Canning, D. (1998). A Database of World Infrastructure Stocks, 1950-95. *The World Bank Policy Research Working Paper 1929*.
13. Canning, D., & Pedroni, P. (2008). Infrastructure, long-run economic growth and causality tests for cointegrated panels**. *The Manchester School* (76), 504-527.
14. Chong, C., & Calderón, C. (2001). Volume and Quality of Infrastructure and the Distribution of Income: An Empirical Investigation. *Working paper* 450.
15. Damaskopoulos T., Gatautis, R., & Vitkauskaite, E. (2008). Extended and Dynamic Clustering of SMEs. *Inzinerine Ekonomika-Engineering Economics* (1), 11-21.
16. de Haan J., Romp, W., & Sturm, J. E. (2007). Public Capital and Economic Growth: Key Issues for Europe. *Perspektiven der wirtschaftspolitik* (8), 6-52.
17. Del Bo C., & Florio, M. (2008). Infrastructure and Growth in the European Union: an Empirical Analysis at the Regional Level in a Spatial Framework. *Working paper* (2008-37).
18. Demetriades, P. O., Mamuneas, T. P. (2000). Intertemporal Output and Employment Effects of Public Infrastructure Capital: Evidence from 12 OECD Economies. *The Economic Journal* (110), 687-712.
19. Ding, L., Haynes, K. E., & Liu, Y. (2008). Telecommunications infrastructure and regional income convergence in China: panel data approaches. *Annals of Regional Science* 42 (4), 843-861.
20. Fedderke, J. W., & Bogetic, Z. (2009). Infrastructure and Growth in South Africa: Direct and Indirect Productivity Impacts of 19 Infrastructure Measures. *World Development* 37 (9), 1522-1539.
21. Fernald, J. G. (1999). Roads to Prosperity? Assessing the Link Between Public Capital and Productivity. *The American Economic Review* (89), 619-38.
22. Fleischer, T. (2003). Infrastructure networks and the competitiveness of the economy. *Working paper* (2). Access by internet: www.pm.gov.hu
23. Fourie, J. (2006). Economic infrastructure: a review of definitions, theory and empirics**. *South African Journal of Economics* (74), 530-556.
24. Grubesic, T. H. (2009). The Management and Measurement of Infrastructure: Performance, Efficiency and Innovation. *Growth and Change* (1), 184-187.
25. Grundey, D. (2008). Managing sustainable tourism in Lithuania: Dream or reality? *Technological and Economic Development of Economy, 14*(2), 118-129.
26. Gu, W., & Macdonald, R. (2009). The Impact of Public Infrastructure on Canadian Multifactor Productivity Estimates. The Canadian Productivity Review. *Research paper* (21).
27. Haughwout A. F. (2002). Public infrastructure investments, productivity and welfare in fixed geographic areas.
28. Macdonald, R. (2008). An Examination of Public Capital's Role in Production. *Research Paper Economic Analysis (EA) Research Paper Series* (50).
29. Kellenberg, D. K. (2009). US affiliates, infrastructure and growth: A simultaneous investigation of critical mass. *Journal of International Trade & Economic Development* 18 (3), 311-345.
30. Mamatzakis, E. C. (2008). Economic performance and public infrastructure: an application to Greek manufacturing. *Bulletin of Economic Research* (60), 307-326.
31. Martinkus, B., & Lukasevicius, K. (2008). Investment environment of Lithuanian resorts: Researching national and local factors in the Palanga case. *Transformations in Business & Economics, 7*(2), 67-83.
32. Mentolio, D., & Solé-Ollé A. (2009). Road Investment and Regional Productivity Growth: the Effects of Vehicle Intensity and Congestion. *Papers in Regional Science* 88 (1), 99-118.
33. Paul, S. Effects of Public Infrastructure on Cost Structure and Productivity in the Private Sector. *The Economic Record* 79 (247), 446-461.
34. Nketiah-Amponsah, E. (2009). Public spending and economic growth: Evidence from Ghana (1970-2004). *Development Southern Africa* 26 (3), 477-497.
35. Perera-Tallo, F. (2003). Growth Due to Globalization. *International Economic Review* 44 (2), 651-676.
36. Prud'homme, R. (2005). Infrastructure and Development. Lessons of Experience. *Proceedings of the 2004 Annual Bank conference on Development Economics*. 153-181.
37. Röller, L. H., & Waverman, L. (2001). Telecommunications Infrastructure and Economic Development: A Simultaneous Approach. *American Economic Review* (91), 909-23.
38. Rosik, P. (2006). Transport Infrastructure, Public Capital and Regional Policy – Review of Studies. *International conference „Shaping EU Regional Policy: Economic Social and Political Pressures"*.

39.   Sahoo, P. (2009). Infrastructure development and economic growth in India. *Journal of the Asia Pacific Economy* 14 (4), 351-365.

40.   Seethepalli, K., Bramati, M. C., & Veredas, D. (2008). How Relevant Is Infrastructure to Growth in East Asia? *The World Bank Policy Research Working Paper 4597.*

41.   Snieska, V., & Bruneckiene, J. (2009). Measurement of Lithuanian Regions by Regional Competitiveness Index. *Inzinerine Ekonomika-Engineering Economics* (1), 45-57.

42.   Snieska, V., & Draksaite, A. (2007). The Role of Knowledge Process Outsourcing in Creating National Competitiveness in Global Economy. *Inzinerine Ekonomimka-Engineering Economics* (3), 35-41.

43.   Snieska, V., & Simkunaite I. (2009). Socio-economic impact of infrastructure investments. *Inzinerine Ekonomika-Engineering Economics (3).*

44.   Straub, S. (2008). Infrastructure and Development: A Critical Appraisal of the Macro Level Literature. *The World Bank Policy Research Working Paper 4590.*

45.   Straub, S. (2008). Infrastructure and Growth in Developing Countries: Recent Advances and Research Challenges. *The World Bank Policy Research Working Paper 4460.*

46.   Straub, S., Vellutini, C., & Warlters, M. (2008). Infrastructure and Economic Growth in East Asia. *Policy Research Working Paper 4589.*

47.   Torrisi, G. (2009). Public infrastructure: definition, classification and measurement issues.

48.   Yeaple, S. R., & Golub, S. S. (2007). International Productivity Differences, Infrastructure, and Comparative Advantage. *Review of International Economics* (15), 223-242.

49.   Zou, W., Zhang, F., Zhuang, Z., & Song, H. (2008). Transport Infrastructure, Growth and Poverty Alleviation: Empirical Analysis of China. *Annals of economics and finance* (2).

Vytautas Snieška, Ineta Šimkūnaitė

Infrastruktūros plėtros poveikio socialiniam ir ekonominiam vystymuisi vertinimo teoriniai aspektai

Santrauka

Būtinybę analizuoti investicijų į infrastruktūrą poveikio problematiką lemia didėjančios vyriausybės ir finansinių institucijų investicijos į infrastruktūros plėtrą. Pastarajame dešimtmetyje vyrauja aktyvus mokslininkų ir politikų susidomėjimas, kokia yra šių investicijų įtaka šalių vystymuisi. Tai yra itin svarbus strateginis klausimas formuojant besivystančių šalių plėtros koncepcijas, paskatinęs didelę gausą mokslinių ir ekonominių tyrimų. Nors ši problema yra plačiai paplitusi, tačiau pasigendama vieningos metodologijos, kuri leistų vieningai ir tiksliai įvertinti infrastruktūros plėtros poveikį socialiniam ir ekonominiam šalių vystymuisi. Mokslinėje literatūroje pateiktų investicijų į infrastruktūrą poveikio vertinimo koncepcijų ir empirinių rezultatų palyginamoji, loginė ir sistematinė analizė leido išskirti metodologinius principus ir pateikti siūlymus, taikytinus vertinimo modeliams suformuoti.

Raktažodžiai: investicijos į infrastruktūrą, ekonominis augimas, infrastruktūros plėtros poveikio vertinimas, socialinis ir ekonominis vystymasis.

About the authors

Vytautas Snieška, prof. dr., Social Science, Economics; Kaunas University of Technology, Faculty of Economics and Management, Department of Economics and International Trade, vytautas.snieska@ktu.lt, +370 37 30 05 75. Academic interests: national competitiveness in global economy, business environment forecasting, infrastructure development.

Ineta Çimk nait , Master of Social Science, Economics; Public Institution „PVC", ineta@pvcentras.lt, +370 37 320 720. Academic interests: socio-economic impact of infrastructure investments, methodology of impact evaluation.

ANALYSIS OF REAL ESTATE BUBBLE OF 2007 IN LITHUANIA: DOES IT QUALIFY AS A PONZI SCHEME?

Vytautas Snieška, Dalia Toločkaitė
Kaunas University of Technology, Lithuania

Abstract

The Financial Panic of 2007 provides a good example of how the uncertainty in the financial market may result in the chain economic events such as the reduce of the possibility to develop activities with the use of credit, the pause of the development of repomarkets, the cease of global economy development, also, it has triggered the certain currency crisis as well as the uncertainty of savings security. The Panic's outcomes have highlighted once again the impact of such an economic factor as real estate price fluctuations as one the main risk factors among others having an effect on the financial stability of an industrial economy.

The purpose of this paper is to analyze economy factors that cause the real estate prices to rise to an unsustainable level and to examine the real estate bubble formation mechanism in Lithuania in order to determine whether the real estate bubble qualifies as a Ponzi scheme.

Keywords
Real Estate Market, Real Estate Prices, Real Estate Bubble, Ponzi Scheme

Introduction

The decline of the USA and European real estate market, the increase of the number of insolvent loans and the subprime mortgage related derivative's market value fluctuations on the core has affected the repomarket operations in all industrialized countries and has provoked the global financial instability.

Property price decline and foreclosures is one of the outcomes of the global Financial crisis of 2007, the core of which lies in the loss (or lack) of information about location and size of subprime risks due to the asymmetric information flow between sell side and buy side which has been created via complexity of the subprime related financial structures.

Real estate market is usually the first one to be affected by a country's financial instability. Today it is evident by recent period of real estate sector growth followed by a sharp drop of real estate and plot prices in developed countries, as well as the great uncertainty in their construction sector.

A numerous scientific researches and scientific publications have been developed to explain the conditions under which the Ponzi like schemes and other types of bubbles can arise, survive and what management rules nowadays may prevent its development. However, the discussion whether such bubbles result from market's participant's rational and economically explainable (O'Connell, S. A. and Zeldes S. P. (1988), Abreu D. and Brunnermeier M., (2003), Allen F. and Gorton G. (1993), Bhattacharyya S. and Lipman B. (1995)) or irrational and on behavioral theory assumptions based behavior (Shiller R. J. (2007), Leamer E. E. (2002), Shleifer A. and Summers L. (1990), is still open. The significance of the analysis of real estate bubble's formation in Lithuania lies in relevance to bring the earlier scientific literature discussing the case of asset price departing systemically from fundamentals up-to-date in order to contribute to the attempt of the economists to understand the properties of Ponzi like schemes or bubbles in economies.

Novelty of the paper – the answer to the question whether the real estate bubble of 2007 in Lithuania qualifies as a Ponzi scheme.

Scientific problem raised in this article is the lack in the economics literature of a common opinion as of what real estate bubble formation factors qualify as a Ponzi scheme in an industrial economy.

Purpose of the paper is to analyze the real estate bubble formation mechanism in Lithuania in order to determine whether it qualifies as a Ponzi scheme.

Object of the paper is the analysis of the real estate market of Lithuania and the economy factors that cause the real estate prices to rise to an unsustainable level.

Research methods have comprised the analysis of research literature as well as the statistical data taken from the Bank of Lithuania and the Department of Statistic under the Government of the Republic of Lithuania. The research is based on comparative and generalization data research methods.

Economical factors defining a bubble

The *bubbles* periodically form in economies, securities, stock markets and business sectors because market is a social and complicated construct, and they happen because there's always a change in the way players conduct business. The very term "a bubble" has not been clearly defined yet and there is a considerable range of views on housing and other asset bubbles, but we refer to a few definitions which are as follows:

„...the term refers to a situation in which excessive public expectations of future price increases cause prices to be temporarily elevated" (Case K. E. and Shiller R. J. (2004)).

"…a situation where prices are thought to be out of line with underlying economic determinants of prices or "fundamentals" (Tatom, A. J. (2005)).

A *speculative* bubble within a particular industry is usually caused by events (heightened expectations of future growth, price appreciation, etc.) that drive trading volumes higher and cause an increase in asset values, pushing its prices beyond what an objective analysis of a

trading object value would suggest. The bubble bursts when the public interest in the investment drops sharply (Case, K. E. and Shiller, R. J. (2004)). This happens sooner or later, as the prices cannot rise forever and they stop increasing eventually and the prices fall back down to normalized levels because of diminished demand.

Each bubble has its own driving factors and variables, but economist agree that most involve a combination of fundamental (general and specific) and psychological forces as well since it does not appear possible to explain a bubble in terms of fundamentals only (Shiller, R.J. (2007)). Therefore the field of behavioral economics is emerging as the psychological expectations are likely to be a factor explaining the home price increases.

The *real estate bubble* is characterized by a rapid increase of real estate value to the unsustainable level relative to certain micro and macro - economic elements (GNP, capita income, interest rate, inflation, etc) as well as above mentioned psychological factors.

In comparison with the stock market which has no long-term predictable cycles, the real estate market tends to fluctuate between undervaluation and overvaluation, and in that way is rather predictable. According to Phyrr, S. A., Roulac, S. E. and Born, W. L. (1999), the normal pattern of real estate price movements could be shown as a smooth curve, upward or downward sloping. For example, the house prices, if they are to adjust downward, will fall gradually, instead of suddenly collapsing, and only relative to inflation (Tatom, A. J. (2005)).

The effect of collapse in the housing market leads to reduced demand first of all and the problems of financial sector (greater potential losses), and even without reduced credit availability it may as well reduce the consumer spending and the housing construction. But the question, whether the shrink of the housing sector may push the overall demand into recession, which is usually associated with unemployment and further increases in bankruptcy, is still a subject of discussion (Tatom, A. J. (2005)). According to some economists (Baker, D. (2002)), the best policy response to the bubble's collapse is a strong and well aimed stimulus (e.g., lowing the interest rate).

Fundamental economic impacts on house prices

A number of fundamental macro – economic factors tend to impact the growth of real estate prices:
- increase of general national income (GNP) or gross domestic product (GDP),
- increase of average net monthly income per working person (per capita),
- reduction of loan interest rates,
- equities prices increases,
- population variation,
- rate of inflation.

However, some of the most outspoken economists agree (Schiller, R. J. (2007), Leamer, E. E. (2002)) that these objective factors only explain a portion of house price rises and falls. Much of the rest is largely explained by the market's own cycles, by comparison with other assets on the market, by specific historical background and even

the country's mentality. In addition to the fundamental and psychological forces, the country's economic development also appears to have an impact on real estate price fluctuations. According to Ambrazas, G. and Stankevicius, D. (2007):

"Not only the developing countries, but a number of highly developed countries, such as Japan (Kim and Suh, 1993; Hirayama, 2005), Sweden (Turner, 1997), Finland (Doling and Ruonavaara, 1996), Spain (Fernandez-Kranz and Hon, 2006), the USA (Mueller, 2002), Belke ans Wiedmann, 2005) and others, experienced a sharp rise of dwelling prices and the subsequent market recession. This may be associated with the globalization of financial markets wich strongly affects real estate market, causing its cyclical fluctuations (Renauld, 1997; Wilson et. al., 2007; Tasan-Kok, 2007; Galiniene, et. al., 2006)".

Not only have the above mentioned factors tended to influence the real estate sector in developed or emerging industrial economy. The artificially formed financial schemes, such as Ponzi Scheme, may have a great impact on real estate price fluctuations as well.

Housing market indicators

To get an indication of when asset prices are reasonable from a fundamental perspective, economists have developed a number of financial tools. A few of the main real estate evaluation indicators are listed:
- Affordability measurement,
- Affordability index,
- Price to Income ratio,
- Price to Rent ratio (or Yield),
- Relative Prices,
- Price to Replacement Cost.

Housing affordability measures (Price to Rent ratio, Price to Income ratio, Asset Affordability index) are considered as quite realistic property value measure tools.

- **Affordability measurement** indicates whether a person can actually afford an asset or not, and is obtained by a calculating the ratio between the average cost per sq. m. and the average income per capita. If property is to be compared on international scale, it is best used to compare property prices in the countries with the similar GDP levels. The higher the ratio, the more likely the asset price in the investigated area is over valued.

- **Affordability Index** measures the ability to afford household by obtaining the ratio between the actual monthly cost of the mortgage and the take home income. It is a useful evaluation tool where the mortgage rates are directly related to credit rates. The higher the index, the lower the affordability.

- **Price to Income ratio** is calculated by finding the ratio between the median house prices and the media familial disposable incomes, and is usually expressed in percentage.

- **Price to Rent ratio (or Yield)** is the housing parallel to the price/earnings ratio used in stock markets The ratio gives the average cost of ownership divided by the received or estimated rent that would be paid if renting. The price to rent ratio would be even more accurate if the property linked expenses were considered

as well and were extracted from the rent while performing the calculations.

As a house has a P/E ratio (Price to Earnings ratio) too, the general guidelines (see Figure 1) considered reasonable in stock markets, to approximate a value quickly and not meant to be completely accurate, are acceptable in the housing market as well (Leamer, E. E. (2002)). Countries with higher nominal interest rates and weak mortgage markets will tend to have low P/Rs. Anyway, the yields shifting down to 4% would always represent danger as low P/R s tend to put upward pressure on house prices, and yields rising to 11% would always signal opportunity as high P/R s tend to put downward pressure on house prices (Global Property Guide (2009)).

Price/rent Ratio	Comment
5	Very undervalued
6.7	Very undervalued
8.3	Undervalued
10	Undervalued
12.5	Borderline undervalued
14.2	Fairly priced
16.7	Fairly priced
20	Borderline overvalued
25	Overvalued
33.3	Overvalued
40	Very overvalued
50	Very overvalued

Figure 1. Valuation Yardsticks for the housing market (Global Property Guide, 2009)

The above mentioned illustrates that the price you pay for a house should reflect the present value of future rent. Under normal conditions, the housing rental price and the purchase price should be close to each other dependent variables. A disconnect between the mentioned factors indicates a large amount of speculative transactions in the market, where housing is purchased with the purpose of resale. This increases the amount of space on offer and prevents the increase of rental prices, and also artificially causes the growth of the asset sale prices. For example, referring to approximate estimates of available statistics (Data source: Lithuanian Department of Statistics), the real estate rent prices in Lithuania earlier grew at a much slower pace (10-15%) if compared with the real estate prices growth (40-60%) during the rapid development of the market since the year 2003 up to 2004 (National Development Institute (2006)). Therefore one of the most prominent signals of market distortion is a long-run disconnect between a house price and its potential rental price growth (Leamer, E. E. (2002)).

- **Relative Prices** enable to evaluate the alternatives in order to find the best one affordable in reference to such indicators as the country's GNP and the property cost per sq. m. This valuation tool is based on simple logic of comparison: the more country is developed (the higher the country's GNP), the higher the real estate prices are reasonable, which is relative to the local standard of living. Therefore the real estate bubble is evident if the property in a poor or emerging economy country is priced the same as in a high – income country.

- **Price to Replacement Cost** is another indicator based on logic as well as on calculations, and is estimated by the comparison of the property price and the construction costs (the costs of building) in the given area. If the costs of building are extremely low relative to house prices, then the house prices are likely to come down as the new supply of real estate is motivated to come into the market and will tend to put upward the pressure on house prices. The relation between these two factors is less apparent where the regulations of new constructions are stricter.

The market's mobility both expose and encourage the Ponzi schemes

Ponzi scheme is a form of fraud in which belief in the success of a non-existent enterprise is fostered by payment of quick returns to first investors using money invested by others; any system which operates on the principle of using the investments of later contributors to pay early contributors (Oxford English Dictionary (**1994 – 2007)**)

In other words, Ponzi scheme is a fraudulent investing scheme promising high rates of return to investors from their own money (or money paid by subsequent investors) rather than from profit. It requires an ever-increasing flow of money from investors in order to keep the scheme active.

Diagrammatically, Ponzi scheme looks like an upward going curve and demonstrates the exponential growth of the positive return results' rate, as if to illustrate an investment scheme with "no loses".

In reference to a real estate bubble, there are a few aspects what make the bubble comparable with the Ponzi scheme: 1) Both require a pool. Bubbles are caused by expanding money supply generated beyond genuine capital investment supports, and in that sense would qualify as a Ponzi scheme, with expanding credit taking the place of an expanding pool of investors; 2) Investment cases rely on expectations of large and fast obtained profits and involve unsustainable prices in an open market. The only difference is, that Ponzi scheme has a pattern of activity, though there is no scheme behind a bubble simply because it may be raised by many factors affecting the market; 3) Both investment cases cannot guarantee gain only (or the expected/promised return), though both diagrammatically show the exponential growth.

Real estate bubble of 2007 in Lithuania - does it qualify as a Ponzi scheme?

The real estate prices in Lithuania over the last five years have been growing rapidly. An extreme upward price movement has been observed since 2004, and the formation of the real estate bubble became apparent (see Figure 2). Data source: Department of Statistics.

Referring to the real estate price growth history (Ivanauskas F., Eidukevicius R., Marcinskas A., Galiniene, B. (2008)) the real estate market of Lithuania has developed in four stages: the first stage (1992-2002) related to a more active commercial real estate market; the second stage (2002-2005) was characterized by the growth of demand in residential real estate and the market's overheat has been first time observed; the third

stage (the second half of 2005-early 2006) showed the real estate market's summit; and the fourth stage (2007-2008) was seen as stabilization in the market which has been followed by the sector's slow pace decline (see Figure 2) in the near term, due to the economy recession in the face of the worldwide financial crisis of 2007.
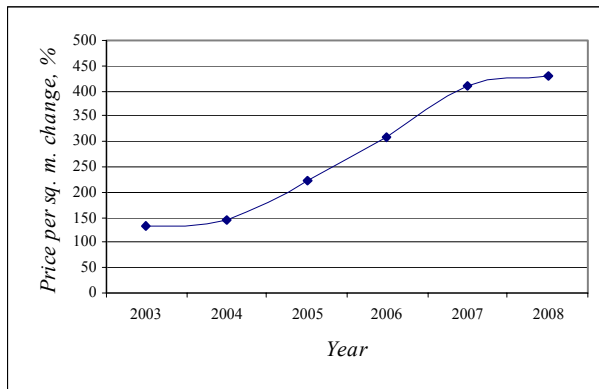

Figure 2. Real estate price fluctuations in Lithuania within the period 2003-2008

In order to determine, whether the rapid real estate price increase in the period 2004-2007 shows an exponential growth, the calculations have been performed in reference to the formula of an exponent. Both, the real estate price fluctuation curve and the exponential approximation curve have been assembled in a diagram form on purpose of comparison (see Figure 3).
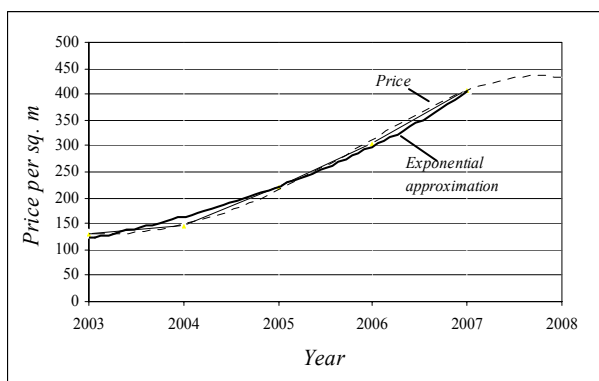
Figure 3. Ponzi like growth in real estate price in Lithuania within the period 2003 – 2008

As presented in the figure above, there appears congruence between the real estate price fluctuation in Lithuania and the Ponzi investment scheme. The real estate price fluctuation curve assumes the similitude of the exponential approximation curve and serves as a sound argument for the bubble formation mechanism in Lithuania to qualify as a Ponzi scheme.

The analysis of the fundamental macroeconomic indicators, having a long-term impact on real estate demand growth (GDP growth, personal income growth, population change, inflation rate change) during that time period has been held (see Figure 4). Data source: Department of Statistics.

The indicators above show that the economy has been growing at a much slower rate in comparison with the housing market of Lithuania. Therefore the fundamental macroeconomic indicators do not explain the price

increases up to 46% average per year (which is also evident in Figure 3) in the given period of time.

GDP growth	56,53 %
Population change (in person)	-58 900
Personal income growth	56,83 %
Inflation rate change	79,31 %
Real estate price change	183 %

Figure 4. Macroeceonomic factors change in Lithuania within the period 2004 – 2007

Referring to the fact, that the financial market is the core of real estate market's stability, the analysis of the fundamental indicators (GDP and personal income growth), and application of tax exemptions (for more details see Ivanauskas F., Eidukevicius R., Marcinskas A., Galiniene B. (2008)) as well as certain specific factors (the accumulated insufficient demand since the collapse of Soviet Union, high expectations and speculative attitude towards Euro introduction when Lithuania was gradually integrating into the European Union), all of which has stimulated the demand since 2002, do explain the growth of real estate market.

Also, the great impact on the market's rapid expansion had the expanded credit opportunity as a bank - based financial structure dominates in Lithuania (Lakstutiene, A. (2008), Lakštutienė, A., Vasiliauskaitė, A., Leitonienė, Š. (2006)) and partly could be explained by the increase of foreign direct investments (Snieška, V., Venslauskiene, D. (2009)). The development of the construction sector well illustrates the market's growth (see Figure 5). Data source: Department of Statistics.
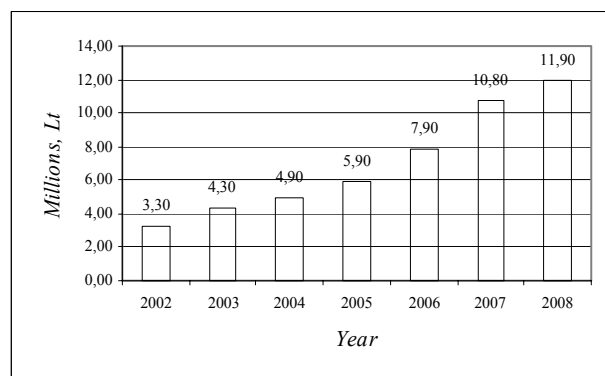

Figure 5. The volume of construction projects being held within the period of 2000-2008

On the other hand, the defined absence of housing costs and income cointegration as well as the missing causality of affordability and loan interest rates or GDP during the end of the first and the second market's development stages (1999-2004), which has led the market to its peak, does not justify the proven exponential price growth as well and indicates a price bubble in the housing market (Ivanauskas F., Eidukevicius R., Marcinskas A., Galiniene B., 2008).

Conclusions:

1. Lithuania's case confirms general theoretical opinion about close relations between the real estate bubble formation and Ponzi scheme. The asset value in Lithuania has been artificially inflated (overvalued) with a sharp rise followed by a graduate but temporal real estate price rise during 2004 - 2007 due to the public expectations and trust - the core factors for a bubble or Ponzi like scheme formation – cointegrated with expanded credit supply and free capital investment opportunities into the local construction sector.

2. The analysis of the real estate bubble of 2007 in Lithuania indicates that the exponential price growth cannot be justified only by the changes of fundamental economic factors. The behavioral theory's presumptions, also, the domination of the speculative deals in the market, which tends to shift market's balance by encouraging the manipulations with local real estate prices and the artificial speculative Ponzi like investment schemes, should be considered as well.

3. Real estate bubble is not good from the economical point of view, because it ineffectively distributes the funds from the construction sector and generates a space conducive to corruption.

References

1. Abreu, D., Brunnermeier, M. Bubbles and Crashes.Econometrica, 2003, 71(*1*). p. 173-204.
2. Allen, F., Gorton, G. Churning Bubbles. Rev. Econ. Stud. 1993 (60). p. 813-836.
3. Ambrazas, G., Stankevicius, D. An analysis of dwelling market in Vilnius, Lithuania. International Journal of Strategic Property Management. 2007 (11). p. 243-262.
4. Baker, D. The Run-Up in Home Prices: Is It Another Bubble. Center for Economic and Policy Research. 2002. p. 1-22.
5. Bhattacharyya, S., Lipman, B. Ex ante versus interim rationality and the existence of bubbles. Economy Theory 6. 1995. p. 469-494.
6. Case, K. E., Shiller, R J. Is There a Bubble in the Housing Market? An Analysis. Paper prepared for the Brookings Panel on Economic Activity. 2004. p. 299-342.
7. Department of Statistic under the Government of the Republic of Lithuania. 2009. http://www.stat.gov.lt.
8. How to Avoid bying into a Bubble? Global Property Guide. March 18, 2009. http://www.globalpropertyguide/real-estate-school/How-to-avoid-buying-into-a-bubble.
9. Ivanauskas, F., Eidukevicius, R., Marcinskas, A., Galiniene, B. Analysis of the Housing Market in Lithuania. International Journal of Strategic Property Management. 2008 (12). p. 271-280.
10. Lakštutienė, A. Correlation of the Indicators of the Financial system and Gross Domestic Product in European Union Countries. Inzinerine Ekonomika-Engineering Economics. ISSN 1392-2785. 2008. No 3 (58). p. 7-18.
11. Lakštutienė, A., Vasiliauskaitė, A., Leitonienė, Š. Dependence of the Financial Structure and Efficiency of the Bank Sector on Economic Growth. Inzinerine Ekonomika-Engineering Economics. ISSN 1392-2785. 2006. No 3 (48). p.18-27.
12. Leamer, E. E. Bubble Trouble? Your Home Has a P/E Ratio too. UCLA Anderson Forecast Report. 2002. p. 1-11.
13. Leamer, E. E. Housing is the Business Cycle. National Bureau of Economics Research. NBER Working Paper 13428. 2007. p.1-55.
14. O'Connell, S.A., Zeldes, S.P. Rational Ponzi games. International Economic Review. 1998. Vol. 29 p. 431-450.
15. Oxford English Dictionary Online (C). 1994-2007**.**
16. Phyrr, S. A., Roulac, S. E. , Born, W. L. Real Esate Cycles and their Strategic Implications for Investors and Portfelio managers in the Global Economy. Journal of Real Estate Research. 1999.Vol. 18. No 1. p.7-68.
17. Shiller, R. J. Understanding Recent Trends in House Prices and Home Ownership. Cowles Foundation Discussion Paper. No. 1630. 2007. p. 1-21.
18. Shleifer, A., Summers, L. The Noise Trader Approach to Finance. Journal of Economics Perspectives. 1990 (4). p. 19-33.
19. Snieška, V., Venslauskiene, D. Real Estate Market and Slowdown Interaction in Countries with Transition Economy. Economics and Management. ISSN 1822 – 6515. 2009. p.1026-1031.
20. State Enterprise Centre of Registers. 2009. http://www.kada.lt.
21. Tatom, A. J. Is Your Bubble About to Burst? Working paper. Networks Financial Institute at the Indiana State University. 2005. p. 1-15.
22. The analysis of real estate prices, its tendencies, causes and authority influence to the price fluctuations. National Development Institute. 2006. http://www.npi.lt/site/Failai/File/EEG_nekilnojamas%20turtas_galutinis.pdf.
23. The Bank of Lithuania. 2009. http://www.lbank.lt.
24. Why Real Estate Cycles matter? Global Property Guide, November 20, 2008. http://www.globalpropertyguide/real-estate-school/Why-real-estate-cycles-matter.

Vytautas Snieška, Dalia Toločkaitė

Nekilnojamojo turto burbulo formavimosi Lietuvoje analizė Ponzi schemos atžvilgiu

Santrauka

2007-ųjų krizė puikiai iliustruoja kaip netikrumas finansinėse rinkose gali sukelti ekonominių įvykių seką: galimybės plėtoti veiklą kredito pagalba sumažėjimą, perpardavimo rinkos sąstingį, globalios ekonomikos vystimosi pauzę, o taip pat atitinkamų valiutų krizę bei su tuo susijusį santaupų nuvertėjimą. Finansinės panikos pasekmės dar kartą išryškino nekilnojamo turto kainos svyravimo poveikį finansiniam šalies stabilumui industrinėje ekonomikoje

Straipsnio tikslas –išanalizuoti nekilnojamojo turto burbulo formavimosi mechanizmą Lietuvoje bei patikrinti jo atitikimą Ponzi schemai.

Straipsnyje išanalizuoti kainų burbulo formavimosi ir nekilnojamojo turto rinkos bruožai, išskirti nekilnojamojo turto kainų vertinimo veiksniai, parodytas ir matematiškai pagrįstas sąryšis tarp Ponzi eksponentinės investavimo schemos ir nekilnojamojo turto kainų burbulo Lietuvoje.

Raktiniai žodžiai: Nekilnojamojo turto rinka, nekilnojamojo turto kainos, nekilnojamojo turto burbulas, Ponzi schema.

About the authors

Vytautas SNIEŠKA, prof. dr., Social Science, Economics; Kaunas University of Technology, Faculty of Economics and Management, Department of Economics and International Trade, Laisvės al. 55, Kaunas LT-44309, Lithuania ; + 370 37 300575, vytautas.snieska@ktu.lt

Dalia TOLOCKAITĖ, Master of Public Administration, Social Science, Economics; Kaunas University of Technology, Ultrasound Institute, Studentu str. 50, Kaunas LT-51368, Lithuania +8 37 650 565, dalia.tolockaite@ktu.lt

VENTURE CAPITAL A CATALYST FOR EARLY STAGE BUSINESS DEVELOPMENT

Vytautas Snieška, Vitalija Venckuvienė

Kaunas University of Technology, Lithuania

Abstract

The importance of venture capital market to economical life shows the growing number of publication on the various aspects of venture capital. Many scientists emphasize significant role of venture capital in financing and consultation of promising new ventures. Usually young entrepreneur at the early stage of business development encounter financial gap for the financing future product development. Having an important role in economy as a whole small innovative companies are the engine for growth and employment. Then research question arises, what is the impact of venture capital funds on the development of early stage business.

Keywords

Venture capital, early stage business.

Introduction

Entrepreneurship is a cornerstone of many countries' policies, it is considered to be a main constituent for economical development (Acs, Desai, & Klapper, 2008). "Entrepreneurship favors economic growth, employment and technological and innovative activities of many countries" (Soriano, 2009). Many scholars agree that financing entrepreneurial companies is a distinctive feature of venture capital (Hellmann & Puri, 2000, 2002; C. Mason & Harrison, 1993; Van Auken, 2002). Small and medium size business is an engine for economical growth and development. Promoting venture capital investments is one of the significant instruments for boosting the developing of entrepreneurial ventures especially in their early stage of developing.

Recent studies emphasize the importance of venture capital in financing entrepreneurial ventures (Armstrong, Davila, & Foster, 2006; Caselli, Gatti, & Perrini, 2009; Van Auken, 2002). It is difficult for early stage ventures to acquire capital for launching and developing new products. Especially for those ventures with the high technology background due to higher risk in developing technological projects (Van Auken, 2002). The cutting edge research requires a lot of time and financial resources. Moreover it is always difficult to predict whether the innovative product will approve and will be successfully adopted in the market.

The paper aims to explore the catalyst role of venture capital in the financing early stage business. Thus the research problem arises: does venture capital is a catalyst for the early stage business development, and what effects emerge. The object of the article covers the role of venture capital in developing early stage business.

The article contributes to the papers which analyze the catalyst role of venture capital in early stage business development as well as spurring innovation creation potential. There are few papers already emerged, which stress the topicality of the present paper. For instance, the venture capital as a catalyst for innovation was analysed by (Caselli, et al., 2009). Also (Bygrave & Timmons, 1992) highlight that venture capital "played a catalytic role in the entrepreneurial process: fundamental value creation that triggers and sustains economic growth and renewal". Fredriksen (1997) argued that 'As catalyst and risk taker, venture capitalist has been instrumental in the creation and commercialization of completely new industries such as computers and biotechnology'. Although mentioned studies partially cover the object of the present article.

Research methods cover the comparative analysis of scientific literature, documents and reports as well as systematization. The article is organized in the following manner: first section deals with the theoretical background of venture capital as the tool for enhancing early stage entrepreneurs; second section explores venture capital as the catalyst for early stage business

Theoretical background of venture capital

Venture capital market first emerged in United States and its phenomenal growth was scrutinized by many scientists. There is significant number of research dealing with the features of venture capital market in U.S. (Florida & Smith, 1993; Freear, Sohl, & Wetzel, 1994; Harrison & Mason, 1993; Sohl, 2005) as well as growing number of publications which cover studies about the venture capital market in European countries (C. Mason & Harrison, 2003; C. M. Mason & Harrison, 1995).

Venture capital funds are pooled money from different financial sources; the most common are pension funds, endowment funds, banks and private investors. The term 'venture capital' refers to high return on investment to support business in its early stage and maturity (Bygrave & Timmons, 1992). Fredriksen (1997) in the venture capital firms' definition has emphasized three elements: time limited (1) equity capital investment (2) in high-risk projects (3).

Gompers and Lerner (2004) present venture capital as a cyclical process which starts with fund raising, proceeds to investing, monitoring and adding value to a start-up, then exit, and finally returning capital to the investors. The analysis of the relation between venture-backed private equity valuation and financial statement information explores that the main information for investors in pre-IPO (initial public offering) period contains cost of sales, information of sales, marketing, general and administrative as well as research and development expenses (Armstrong, et al., 2006). It is proved that innovative firms are more likely to obtain venture capital then their pares imitators (Hellmann &

Puri, 2000). Meanwhile, Caselli et al. (2009) explores the venture capital impact on innovation and venture performance. Their main contention is that innovative aspect is only important in pre-investment stage, because it is a main factor for investor to decide to invest. But in post investment stage ventures concentrate more on the economical gain, and innovation aspect lags behind it (Caselli, et al., 2009). According to Boguslauskas & Kvedaraviciene (2009), "The unique internal skills and knowledge sets that define an organization's competitive advantage, which is seen by its customers – are core competences".

Many authors make differences between early stage investors and late stage investors (Freear, et al., 1994; Van Auken, 2002). The former usually stands for so called "angel investors" or "business angel" (BA), which is wealthy private investors and having business development experience. The latter usually stands for venture capital funds. "BA and VC investments are substitutes, and they are endogenously determined by a number of firm- and founder-related factors, such as founder ownership and external board 'interlocks', and underwriter reputation" (Chahine, Filatotchev, & Wright, 2007).

There are many misperceptions about the nature and role of the venture capitalist. The most common misperception is that venture capitalist is considered to be just passive investor, and is reluctant to put much value to their portfolio company (P. Gompers, Alan & Lerner, 2004). Conversely, venture capital provides young promising venture not only with the money they need for product development, or commercialization of it, but also provides consultancy (as VC is considered to have experience in business development), as well as the communication network, contacts with the knowledge intensive business (Garvi, 2007). Venture capital activism is supposed to be one of the most important constituent in venture-backed company's success (Bottazzi, Da Rin, & Hellmann, 2008). Hellmann and Puri (2000) explores the relation between venture capital and firms product market strategies and the start-up's outcome as well. They argue, that venture capital impact can be more valueable in the early stage of business development and it is not only about monitoring but also the expertise on business and product developing, giving contacts and other value-added services.

P. Gompers, Lerner, & Scharfstein (2005) outline the factors which lead to the creation of venture capital-backed entrepreneurs, so called "entrepreneurial spawning" process. According the authors, "Younger firms, that were backed by venture capitalists themselves and that are located in the main hubs of venture capital activity (Silicon Valley and Massachusetts) are more likely to spawn new firms"(P. Gompers, et al., 2005).

Many scientists agree about Silicon Valley phenomena attracting venture capital and its important role in spurring start-ups. For instance, Isaak (2009) have claimed that "it has become the icon of cutting edge high tech and new economy start-ups" (Isaak, 2009).

Soriano (2009) have determined twofold factors for the characterization of entrepreneurial SME. Factors which positively affect business performance are: private loans; dynamism and optimism of entrepreneur; tertiary education, and focusing on investment in R&D, as well as acquiring for European financial support. Meanwhile, among the factors which have negative effects on business performance are as follows: using family resources for financing business development; internal CEO (previous owner of a firm), as well as using financial debts for firms development and daily functioning (Soriano, 2009).

Recent research explores the availability of community based venture capital formation. It deals with the model of capital formation in rural community which represents "mechanism to fund early-stage technology–based firms and meets the economic development needs of rural communities" (Van Auken, 2002). According to Van Auken (2002), the early stage technology based companies can be financed by progressive communities which are interested in the development of rural economy. There is extremely high risk in formation community based venture capital funds due to several factors: new technology, lack of business experience of business owners and untested market. Finance theory explores, that bigger risk is related to bigger expected return. In formation of such capital, the communication among community leaders', investors' and business representatives' is essential one.

To sum up, venture capital is usefull instrument for enhancing entrepreneurship. More and more various regions' governments focus on creating friendly environment for entrepreneurial business by creating favourable regulations for venture capital investors.

A catalyst role of venture capital in developing early stage business

In this chapter we will present a catalyst role of venture capital in developing early stage venture, which is common known as start-up. Figure 1 outlines the positive impact of venture capital on the start-up, market and economy. The value-added of venture capital market (as a catalyst) in the macro level is higher than it is in micro level.

First of all, venture capital as a catalyst has positive effect on start-up *professionalization*, which covers the team building and CEO (here and after Chief Executive Officer) turnover (Hellmann & Puri, 2002). Similarly, Buoziute-Rafanaviciene, Pundziene, & Turauskas (2009) contend that "The selection of new chief executive officer (CEO) is an important decision, which has implications for future performance of organization". Suchard (2009) explores relation between venture capital backing and the board structure of a portfolio company. It is proved that firms backed by venture capital more often had an independent director with the relevant industry experience. Similarly to Helmann and Puri (2002), Suchard (2009) founds that venture capitalist uses their network for recruiting specialists and outside independent directors. "Venture capital firms with partners that have prior business experience are more active recruiting managers and directors, helping with fundraising, and interacting more frequently with their portfolio companies"(Bottazzi, et al., 2008). Meanwhile, Makela & Maula, 2006 outline that "The lack of expected support, the lack of commitment by key stakeholders may be a

negative signal about the prospects of the venture, making it more difficult to find new investors and partners".

The other positive impact of venture capital is providing *value added services* such as formation of strategy and its' execution (Fitza, Matusik, & Mosakowski, 2009); coaching and guidance, networking for strategic alliances, and attracting further capital (Suchard, 2009);

as well as positively affect the start-up's internationalization (Lockett, Wright, Burrows, Scholes, & Paton, 2008). Due to capital acquisition early stage venture become *a financial stable subject*. That is a main constituent in becoming *reliable business partner*. All mentioned above are the prerequisites for entrepreneurial early stage venture to gain competitive advantage.
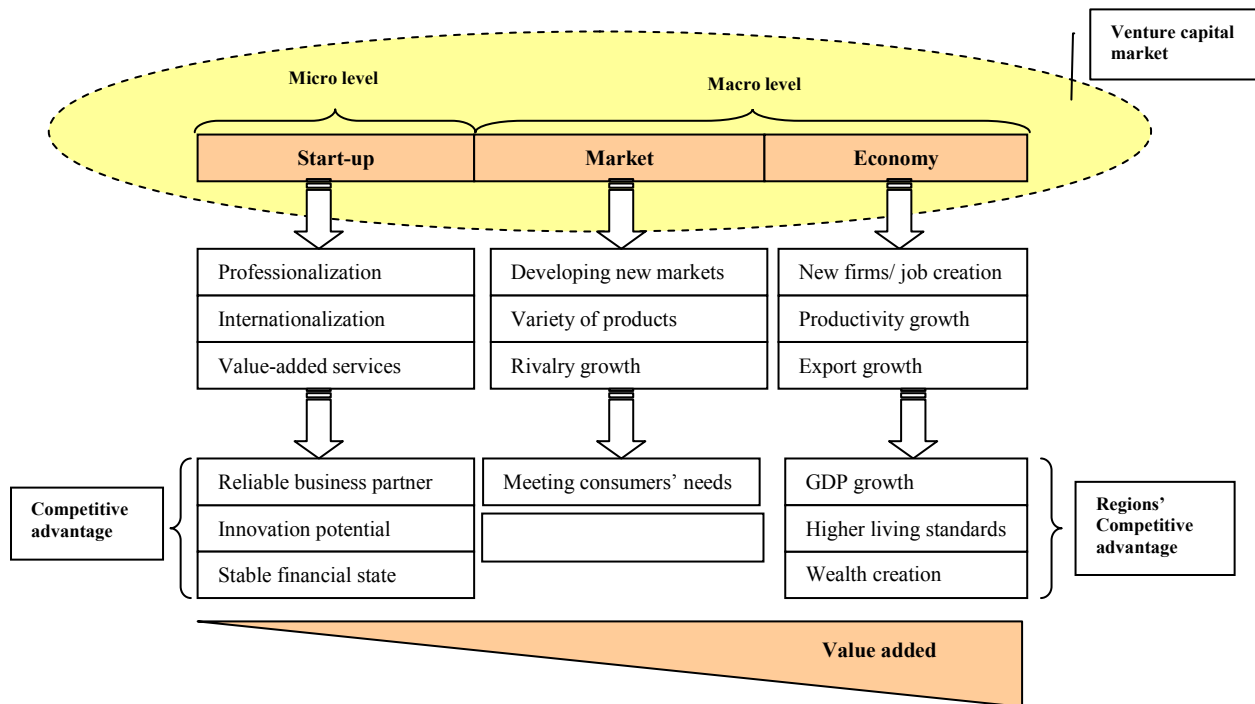
Figure 1. A catalyst role of venture capital on start-up, market and economy (comprised by authors)

At the perspective of market, a catalyst role of venture capital results in development of new markets and industry as well. Start-up with its' brand new products develops new markets and expands the scale of products as well as enhances the rivalry in the market. "It was found that competition intensity can be described by these main factors: market shares distribution, market rate of growth, market profitability" (Snieska, 2008). All mentioned above, results in meeting consumers' needs and expanded markets' boundaries. "Meeting requirements of consumers the interests of other groups and members of the society must be considered, and it is necessary to find out these interests during interactions with stakeholders" (Juscius & Snieska, 2008).

A catalyst role of venture capital on Economy results in creation of new entrepreneurial *companies* and at the same time *creation of jobs'*, as well as potential export growth. In turns of that economical situation of region improves, as the GDP is growing. Bygrave & Timmons (1992) contend that venture capital investments have resulted in "creation of hundreds of thousands of new jobs, new expenditures for research and development, increased export sales, and payment of hundreds of millions of dollars in state and federal taxes".

Wealth creation is the main aim of capital creation (Van Auken, 2002). An investors' wealth covers the bigger

return on investment, meanwhile start-up benefits acquiring capital and finally the region wealth is in terms of job creation, infrastructure development and growing investments in R&D.

Finally, venture capital impact on region's competitiveness covers: GDP growth, higher living standards and wealth creation, whereas the start-up's competitive advantage covers innovation potential, stable financial state as well as becoming reliable business partner.

Conclusions

To sum up the theoretical background of venture capital impact on the early stage business development, few notable notions must be mentioned. Firstly, venture capital is playing very important role in developing new venture as supplier of money and consultancy provider on product or/and business development issues. Secondly, a catalyst role of venture capitalist results in growing value–added for the early stage venture, market and Economy as well. Financing and consulting the young firms venture capital spurs the development of industry and gives the rise of overall economy.

Referentes

1. Acs, Z. J., Desai, S., & Klapper, L. F. (2008). What does "entrepreneurship" data really show? *Small Business Economics, 31*(3), 265-281.
2. Armstrong, C., Davila, A., & Foster, G. (2006). Venture-backed private equity valuation and financial statement information. *Review of Accounting Studies, 11*(1), 119-154.
3. Boguslauskas, V., & Kvedaraviciene, G. (2009). Difficulties in identifying Company's Core Competencies and Core Processes. *Inzinerine Ekonomika-Engineering Economics*(2), 75-81.
4. Bottazzi, L., Da Rin, M., & Hellmann, T. (2008). Who are the active investors? Evidence from venture capital. *Journal of Financial Economics, 89*(3), 488-512.
5. Buoziute-Rafanaviciene, S., Pundziene, A., & Turauskas, L. (2009). Relation between the Attributes of Executive Successor and Organizational Performance. *Inzinerine Ekonomika-Engineering Economics*(2), 65-74.
6. Bygrave, W., D., & Timmons, J., A. (1992). Venture Capital at the Crossroads: Harvard Business School Press.
7. Caselli, S., Gatti, S., & Perrini, F. (2009). Are Venture Capitalists a Catalyst for Innovation ? *European Financial Management, 15*(1), 92-111.
8. Chahine, S., Filatotchev, I., & Wright, M. (2007). Venture capitalists, business angels, and performance of entrepreneurial IPOs in the UK and France. *Journal of Business Finance & Accounting, 34*(3-4), 505-528.
9. Fitza, M., Matusik, S. F., & Mosakowski, E. (2009). DO VCS MATTER? THE IMPORTANCE OF OWNERS ON PERFORMANCE VARIANCE IN START-UP FIRMS. *Strategic Management Journal, 30*(4), 387-404.
10. Florida, R., & Smith, D. F. (1993). VENTURE CAPITAL FORMATION, INVESTMENT, AND REGIONAL INDUSTRIALIZATION. *Annals of the Association of American Geographers, 83*(3), 434-451.
11. Freear, J., Sohl, J. E., & Wetzel, W. E. (1994). ANGELS AND NON-ANGELS - ARE THERE DIFFERENCES. *Journal of Business Venturing, 9*(2), 109-123.
12. Garvi, M. (2007). Venture Capital for the Future, *Implications of Founding Visions in the Venture Capital Setting*: JIBS Dissertation Series No. 039.
13. Gompers, P., Alan, & Lerner, J. (2004). The Venture Capital Cycle (2 ed., pp. 569).
14. Gompers, P., Lerner, J., & Scharfstein, D. (2005). Entrepreneurial spawning: Public corporations and the genesis of new ventures, 1986 to 1999. *Journal of Finance, 60*(2), 577-614.
15. Harrison, R., & Mason, C. (1993). FINANCE FOR THE GROWING BUSINESS - THE ROLE OF INFORMAL INVESTMENT. *National Westminster Bank Quarterly Review*, 17-29.
16. Hellmann, T., & Puri, M. (2000). The interaction between product market and financing strategy: The role of venture capital. *Review of Financial Studies, 13*(4), 959-984.
17. Hellmann, T., & Puri, M. (2002). Venture capital and the professionalization of start-up firms: Empirical evidence. *Journal of Finance, 57*(1), 169-197.
18. Isaak, R. (2009). From collective learning to Silicon Valley replication: The limits to synergistic entrepreneurship in Sophia Antipolis. *Research in International Business and Finance, 23*(2), 134-143.
19. Juscius, V., & Snieska, V. (2008). Influence of corporate social responsibility on competitive abilities of corporations. *Inzinerine Ekonomika-Engineering Economics*(3), 34-44.
20. Lockett, A., Wright, M., Burrows, A., Scholes, L., & Paton, D. (2008). The export intensity of venture capital backed companies. *Small Business Economics, 31*(1), 39-58.
21. Makela, M. M., & Maula, M. V. J. (2006). Interorganizational commitment in syndicated cross-border venture capital investments. *Entrepreneurship Theory and Practice, 30*(2), 273-298.
22. Mason, C., & Harrison, R. (1993, Jun 25-26). *THE ROLE OF INFORMAL AND FORMAL SOURCES OF VENTURE CAPITAL IN THE FINANCING OF TECHNOLOGY-BASED SMES IN THE UNITED-KINGDOM.* Paper presented at the Conference on New Technology-Based Firms in the 1990s, Manchester, England.
23. Mason, C., & Harrison, R. (2003). Closing the regional equity gap? A critique of the Department of Trade and Industry's regional venture capital funds initiative. *Regional Studies, 37*(8), 855-868.
24. Mason, C. M., & Harrison, R. T. (1995, Sep). *Business angel networks and the development of the informal venture capital market in the UK: Is there still a role for the public sector?* Paper presented at the Conference on Financing SMEs, Brussels, Belgium.
25. Snieska, V. (2008). Research into International Competitiveness in 2000-2008. *Inzinerine Ekonomika-Engineering Economics*(4), 29-41.
26. Sohl, J. (2005). The importance of angels in starting a US biotech venture. *Nature Biotechnology, 23*(2), 263-264.
27. Soriano, D. R. Management factors affecting the performance of technology firms. *Journal of Business Research, In Press, Corrected Proof.*
28. Suchard, J. A. (2009). The impact of venture capital backing on the corporate governance of Australian initial public offerings. *Journal of Banking & Finance, 33*(4), 765-774.
29. Van Auken, H. (2002). A model of community based venture capital formation to fund early-stage technology based firms. *Journal of Small Business Management, 40*(4), 287-301.

Vytautas Snieška, Vitalija Venckuvienė

Rizikos kapitalas – katalizatorius ankstyvojo etapo verslo plėtrai

Santrauka

Rizikos kapitalo išskirtinis bruožas – spartaus augimo potencialą turinčių įmonių finansavimas. Sėkmingoms inovacijoms reikalingos investicijos, kurios ne visada prieinamos jaunoms, perspektyvioms, technologinės pakraipos įmonėms. Finansinės institucijos dažnai dėl įmonių ankstyvos stadijos neteikia kreditų rizikingoms, nelikvidžioms įmonėms. Šiame etape rizikuoti ima tik patyrę verslo plėtros ekspertai - rizikos kapitalo investuotojai. Kapitalo investuotojų rinka apima neformalius rizikos kapitalo investuotojus, vadinamuosius - verslo angelus ir formalius - rizikos kapitalo fondus ir viešojo sektoriaus organizacijas.

About the authors

Vytautas Snieska, Prof. Dr. of Social Sciences (Economics), Kaunas University of Technology, Faculty of Economics and Management, Head Department of Economics and International Trade, vytautas.snieska@ktu.lt, +370 37 300576.
Vitalija Venckuviene, PhD student of Social Sciences (Economics), Kaunas University of Technology, Faculty of Economics and Management, Department of Economics and International Trade, vitalija.venckuviene@stud.ktu.lt, +370 61526636.

OUTSOURCING TRANSACTION COST STRATEGY MODELS AND THEIR ELEMENTS IN THE CONTEXT OF THE GLOBAL MARKET

Vytautas Snieška, Ligita Vasiliauskienė

Kaunas University of Technology, Lithuania

Abstract

Purpose of the article - to compare the outsourcing transaction costs models and their elements which are found in the economic literature in the context of the global market.
The object of the research - outsourcing transaction cost strategy models.
The aims of the article:
    1.   To carry out the research of transaction cost-forming models and their elements and assess their strengths and weaknesses.
    2.   To summarize and identify the main characteristics of the analysed outsourcing transaction cost strategy models.
    3.   The authors analyse the data of the companies that have outsourced their information technology functions and the dynamics of income change as far as it is related to GDP and time, and between businesses and the GDP.

Keywords
Outsourcing, transaction costs, strategic models, global market.

Introduction

In nowadays economy the service sector has become the dominant type of activity, both in quantitative terms and their impact on people's daily life (Vengriene, 1998). The benefits are clearly understood because in today's world people can no longer carry out everything themselves and transfer peripheral functions to others. It is also happening in business, companies have to focus on their key objectives, and internal, non-core company processes are transferred to other companies with all the responsibilities included. This is called outsourcing. This concept is relatively new but increasingly used in the international market, especially in the sphere of information technology.

The authors Snieška and Vasiliauskienė (2008) argue that in recent years, scientists have taken the note of the balance outsourcing, highlighting the compatibility between large and small specialized companies, and maintenance costs resulting from the improper contract award and search costs. This allows the interaction of intermediary manufacturers, service providers and end-producers. This interactivity can be interpreted as the compatibility of the process. Business is a wide range of services, which companies usually consider when deciding whether to transfer a part of business services outside or not.

The object of investigation -the models of outsourcing transaction cost strategy.

Article scientific novelty is that the research is significant for cost-based business decisions of any company. However, it would be groundless to state that cost factor is the only crucial one - quality and risk, past experience, political and individual factors also strongly affect the decisions of the managers of the companies. The last factors can also be attributed to the motives for creation an outsourcing.

The research methods used in the article:
    1.   For the research and analysis of the theoretical aspects of the transaction cost economy, the authors used the following methods: systematic, comparative and logical analysis of scientific literature.
    2.   The study was based on the data of the Statistics Department of the Republic of Lithuania, Statistics Department of Europe, the Bank of Lithuania and the World Bank. This data was used for carrying out the analysis of the most important parameters of the external economic relations of the country in the period of 2000–2008, focusing on the relation to GDP

The factors that determine the choice of outsourcing

In all cases, the success of outsourcing depends on three factors: the client's willingness to optimize business processes, the training of the staff involved, information and the ability of the client to manage these newly induced business processes. For the professionals from outside business success depends on their skills in areas such as negotiation, communication, project management, ability to understand and, above all, willingness to be flexible and company that responds to business needs. Previous studies only revealed the issues related to traditional outsourcing, but there is little research to analyze and discuss the factors that should be taken into account before making the decision of business service outsourcing. The paper sets out the factors affecting the decisions of business service outsourcing and presents the research which enables companies both to make better decisions for business service outsourcings and to derive maximum benefit from it.

The research has revealed that the strategy of outsourcing transaction costs includes not only the selection of the most appropriate model for the certain company. The analysis has shown that outsourcing transaction cost strategy is significantly influenced by internal and external environmental factors, however, the economic literature is lacking in methods, combining the most important aspects of factor identification, influence assessment and outsourcing transaction cost strategy formation to improve the quality and efficiency of outsourcing decisions.

It is important to determine which factor is important to the changes of outsourcing transaction cost strategy and which factor does not significantly affect it. Therefore the structure of outsourcing transaction cost strategy model is proposed as methodologically sound and integrated system to connect conjunctive and inter-related elements which are mutually supportive and reinforcing.

Due to the large number of environmental factors, it is proposed to distinguish two assessment parts of outsourcing transaction cost strategy – they are internal and external. The influence of the external environment on outsourcing transaction cost strategy is researched distinguishing between macro-economic factors of the host country, the factors regulated and influenced by the government of the host country, the factors of international global market, the macro-economic factors of the host country, while the internal environment is analysed by exploring industry factors and company-controlled factors and their impact. The biggest problem identifying the most important factors which influence outsourcing transaction cost strategies is disassociation from the factors which are not affective or informative. At this stage it is important to choose an appropriate method to reasonably identify the main factors influencing outsourcing transaction cost strategy.

In the process of transaction cost outsourcing there has been implemented an appropriate control mechanism, which provides information about how outsourcing transaction costs strategy matches the objectives. This feedback is very important for companies not only in initiating innovation, but also caring about its implementation and development. The feedback is ensured by the assessment of the compliance with the objectives of the company and the analysis of the criteria of quantitative and qualitative satisfaction of outsourcing transaction cost strategy performance.

Studies have shown that the investigating new methods and changing trends, service providers can identify the ways to create additional value to customers in order to expand traditional services. What can the client expect from the legal outsourcing partnership? It is as follows:

- ✓ Strategic perspective. The customer should provide a business strategy that is consistent with company objectives.
- ✓ Consistency in the work. Streamline operations to reduce costs.
- ✓ The transition to new opportunities. The Partnership defines the overall objectives, strategy implementation and continuity of services.

Thus, the provider should enhance their investments in technology - it should keep much of the existing innovation and bring benefits to the client, as well as the service provider must be qualified.

Conducted an analysis of scientific literature has shown that there are many reasons why outsourcing has become an important business planning activity. There are strategic and economic reasons and important trends, which lead to the current and future success of outsourcing. One of the reasons why outsourcing is an important issue in every organization is that all companies plan their activities for several years to come, develop strategic plans such as profit, quality standards, etc. It is therefore particularly important to decide whether the company will focus on all the internal processes or will trust outside suppliers. If the company wants to focus on the development of a new product, then all resources should be apportioned to new technologies and production while secondary processes should be transferred to external service providers.

According to Williams Mullin (2008), "If you do not train your employees that they meet high standards for commercial reasons, of course, you should refer to the strategic marketing plans". It is worth mentioning that outsourcing has become an integral part of business and the right decision in planning the company's strategies and plans.

According to Grossman and Helpman's (2002) theoretical model, outsourcing equilibrium in industry highlights the compatibility of maintenance costs of large and small specialized companies, when these costs result from the improper contract award and the search friction. This industrial approach is very useful to determine the limited implementation of market structure impact in dominating enterprises of the vertical structure. In addition, this model allows interpreting the interaction between the intermediate manufacturers or service providers and final manufacturers as the compatibility process.

The analysis leads to the conclusion that companies usually consider these factors when deciding whether to transfer a part of business services outside or not. This allows them to better discern differences between different types of business service outsourcing. Many companies try to cut costs, so choose outsourcings primarily in order to reduce labour costs. However, this hypothesis is not suitable for high-skill business services area, although it may be easily adapted to low-skilled service delivery. Also the influence of the company size factor may vary depending on the distance between core and outsourced business activities. Thus, the scientific literature is largely limited to the two extreme solutions - to bring some business service to the outside or not. Meanwhile, in practice the cases of partial business service outsourcings are more likely, which should also be taken into account.

According to Grossman and Helpman's (2002) theoretical model, vertical integration or outsourcing are presented as a balance. On the one hand, vertical integration involves management costs of a bigger and non-specialised company. As a result, specialized producers gain more advantages in terms of costs than the vertically integrated company. On the other hand, the company that decides to transfer some part of business services to the outside, face the costs of the potential service provider search, as well as the costs of supplier maintenance and the costs of incomplete contract. Therefore, in accordance with the analysis of the theoretical model, an industrial enterprise is a five-step sequential process:

- ➢ entrance, which requires certain fixed costs;
- ➢ partner search, which requires additional fixed cost;
- ➢ production or supply of intermediate goods or services;
- ➢ negotiations;

➢ production or delivery of finished goods or services.

In the second stage the recipient and supplier rarely coordinate their interests. Compatibility process depends on the degree of product differentiation. Therefore, the expected profit from outsourcing depends directly on the likelihood of compatibility, which is defined by the industry equilibrium. However, such an interpretation ignores the industrial environment in which firms are interrelated and interdependent.

Conducted analysis of scientific literature has revealed that Grossman and Helpman's model relies on two variables: the number of suppliers and the degree of competition in the industry. However, if the first positively affects outsourcing probability, the degree of high competition in the final product market confidence is not defined. It depends on the balance between cost advantages and volume diseconomy in specialized and vertically integrated companies. Therefore, it can be concluded that this model can not be considered a comprehensive theory of vertical integration. It was found that the general result of this theoretical model is that the industry where are vertically integrated and specialized firms, a mixed equilibrium can not be expected or it is very fragile. The analyzed Grossman and Helpman's theoretical model is also appropriate for the analysis of business services designed for production companies.

On the base of the analysis, it can be argued that the decision to transfer a business service is also influenced by specific investment needs. For example, the legal advice or software maintenance services call for specific measures and staff, so the introduction of such investments within the company would cost a lot. That is why companies are more likely to use external services. On the other hand, the quality of specific services received from the outside is difficult to control (for example, it is difficult to control the quality of tax advice), and thus increases the likelihood of imperfections in the contract. In order to reduce this likelihood companies often choose a not-too-large proportion of services carried out internally.

In addition to the compatibility factor, the balance still depends on the total number of enterprises in the market. Doubling the number of firms on the both sides of the contract will increase the number of partnerships and serve outsourcing equilibrium concepts. Thus, the economy and positive economic impact helps encourages outsourcing development.

In conclusion it can be stated that the biggest part of attention is paid to cost reduction and operational efficiency. In order to increase the client's business performance and technological innovation, the business benefits and mutual goals, the most important issues of outsourcing can be identified:

✓ The level of service, assets, personnel, price and payment, warranty and liability, dispute resolution mechanisms, termination, intellectual property issues and information security issues.

✓ Division of labour. If the task has been organized in one or more undertakings, depends on how many people specialize.

✓ Competency Management.

✓ Partnership. The most important issue is to determine whether relationships between the vendor and the client are effective. Marshall Lamming, Fynes and De Burcei, (2004) identify the four stages of the external benefits, which are shown in Table 1.

Table 1

The description of the stages of external benefits (according to Marshall, Lamming, Fynes, De Burcei, 2004)

Stage	Activities / Features
Initialization phase	Ideas generation, formation, reasoning, further evaluation.
Assessment stage	Evaluation of internal and / or external options, formal or informal, probably stop the process.
Control Phase	Human and physical asset transfer.
Stage results	It is designed for debate and possible termination, continuation or renewal of a contract.

Transaction cost economics allow us to further look into the welfare incentive effects of specialization, but also limit the extent of specialization (Williamson, 1998). In transaction costs economic there is a clear link between transaction costs and production efficiency. When a transaction is simpler, the same transaction cost factors facilitate the transaction. But if the transaction is more complicated then more complex contracts should be applied. The procedure of complex contracts increases the transaction costs.

Coase (1937) introduced the concept of transaction cost economies, which states that operating in the market includes additional costs, such as information search, negotiation and award of contracts and signing costs. These costs, while organizing the activities under the supervision of professionals, can be eliminated or reduced. This concept has a number of researchers in the investigation. Williamson has developed the theoretical foundations of traditional industrial and commercial processes and applied them to different forms of contracts. The main concepts of the transaction cost strategy formation consist of the following elements:

✓ transaction is the basic unit of the analysis;

✓ key dimensions on which transfers differ are frequency, uncertainty, and in particular the asset specificity;

✓ each single management approach is defined as a certain set of characters, determining the differences of structural costs and capacities;

✓ a specific legal form of contracts supports each single management approach;

✓ managers choosing governance structures, behave in such a way so that they would reduce transaction costs;

✓ transaction cost theory includes the prognosticated interpretation of institutional environment, based on the parameters of change, which may lead to changes in management costs;

✓ transaction cost economics is the use of institutional analysis. (Williamson and Masten, 1995;

Williamson, 1996).

Here the direct costs are balanced against the possible alternatives, hypothetical ideas are considered to be the right choice, and performance test is the main way to find suitable alternatives.

Based on an analysis of the research, it can be stated that the economics of transaction cost strategy formation is used making the decision of business service outsourcing as the most effective possible solution.

The structures and elements of transaction cost models

It should be noted that currently outsourcings arose particularly in information technology markets in Lithuania and throughout the world. IT outsourcing not only provides additional benefits to consumers and producers, but also helps to reduce the costs of information collecting, control and transaction. The sector of outsourcing related services is continuously and rapidly expanding.

Authors Boer, Ganta, Arroyo (2006), have analysed different models and found that all models consist of:
  ✓ Determination of basic skills and strategies;
  ✓ Evaluation of general expenses;
  ✓ The analysis of suppliers and competitors.

Development of information technology can reduce transaction costs and coordination costs (Argyris, 1999; Garicano and Kaplan, 2001, Baker and Hubbard, 2002b), thus market transactions between firms have been facilitated. According to Snieška (the article "Research in the International Competitiveness in 2000-2008"), an intermediary changes the transaction costs of a market by buying from suppliers at one price and selling to a consumer at a different price. Intermediaries may be in better position to lower transaction costs than a supplier or a consumer. Since intermediaries are involved in many repeated transactions, they develop a set of experiences and relations that may lower the transaction costs. Furthermore, the intermediary could invest in technology that requires large fixed costs, but reduces marginal costs for additional transactions (Snieska, 2008).

The selection of effective market demands forecast methods, and their application can reduce the uncertainty of decisions. The choice of the forecasting method, if it is based on several criteria, provides a comprehensive method for evaluating the prognosis. Forecast accuracy is the period required for the initial quantity of data, forecasting costs, outcomes of development and adaptation level (Pilinkiene, 2008).

The analysis of the scientific literature has revealed that the companies should assess what core competencies will be developed the most, provide long-term strategies, objectives and business plans. Next step is to evaluate current and future revenue and expenses. No less important is the third phase, when the company should carry out a competitive analysis and market testing of existing suppliers and their proposed solutions.

Gottschalk, Solli-Sæther (2006) proposed the three-phase model of outsourcing relationship evolution (see Figure 2). The purpose of the model is twofold:
  1. To understood the current situation in respect of a particular phase and to develop strategies;
  2. To skip to the next stage in the future.

This model is based on a number of management theories. The first phase is the price stage. This stage is based on transaction cost theory, neoclassical economic theory, contract theory, the theory of enterprise boundaries and agencies. The second stage is the stage of resources. This stage is based on the fundamental theories and resource based theories. The third and final stage is the stage of the partnership, which is based on partnership and alliance theory, the relative exchange theory, stakeholder theory and social exchange theory (Gottschalk, Solli-Sæther, 2006).
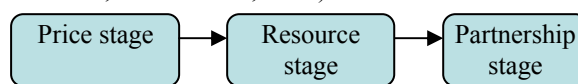

Figure 2. The model of outsourcing relationship evolution (according to Gottschalk, Solli-Sæther, 2006)

Price phase. Initially, the main problem of IT outsourcing is cost. If companies want to offer products and services to the market, they must have an economic or productive advantage. This raises the question of whether to provide services to the outside, or if the market can produce products and services at lower prices than the domestic market. Concerning an IT company, it will assume the IT functions internally if this has production cost advantages and the functions will be available to the outside when the market can offer production cost savings. However, IT leads to additional costs, which are called transaction costs. Transaction costs arise in the event of exchange between the client and supplier. According to the transaction cost theory, transaction costs are positively related to:
1. The need to invest in fixed assets;
2. Irregular transactions;
3. Task complexity and uncertainty;
4. Difficult to calculate the results of the task;
5. Independence from other transactions.

Resource stage. The central tenet of the resource theory is a unique competitive advantage of an organisation. The source of this advantage is both tangible and intangible assets of the organisation. Resource-based theory of the organization includes collection of resources, unevenly distributed throughout the home and between industry sectors. The potential value of outsourcing is determined by three factors: the characteristic of the customer, the vendor-client relationship and the characteristics of the vendor. The main characteristic of the customer is an understanding how to manage resources, which are not in his possession. The vendor-client relationship is a formal (conventional) aspect. The third factor which determines the value of outsourcing is capacity of the supplier. Important characteristics of the vendor: technical competence, ability to understand client's business management processes Gottschalk, Solli-Sæther (2006). There are three additional vendor competences:
1. IT staff development;
2. The development and dissemination of the techniques;
3. Customer Relationship Management. Levin, Ross (2003).

When the seller's value proposal is successful in the customer organization, and the client organization can work on its core competencies, then the relationship is

ready to move from the resource stage to the partnership stage.

Partnership stage. The partnership is not such strictly defined system of the analysis as other theories, like transaction cost theory or the theory of core competencies. Indeed, the word partnership is more for everyday use and is linked to easily understood attributes that may be characterized as the relationship between two or more countries. The partnership has been repeatedly described as an important outsourcing function. Stakeholder theory is concerned with the balance of interests.

Authors Koh, Ang, Straub (2004) broadly define partnership as a joint effort between two or more companies to cooperate in achieving of the agreed goals, which could not be achieved operating separately. There are four different groups of customers - IT stakeholders and three groups of suppliers - IT stakeholders. The group of senior managers identify the customer, customer senior IT manager, customer IT staff, customer IT users and suppliers, managers, vendor accounts and the staff of IT supplier, Willcocks (2000).

The analysis of the scientific literature has shown that outsourcing maturity model acts when operational costs go down, the performance becomes more efficient and it is possible to focus on business productivity, technological innovation and business benefits and so achieve mutual goals between the client and supplier. Successful IT relations are related with exhausted possibilities of outsourcing and avoiding of external threats. If the provider and the client agree on the costs, then they join forces to identify and provide economic benefits such as reducing transaction costs. If they agree to go to the stage of resources, then the seller has to make strategic decisions for customer's needs. And when they reach the phase of mature relationship, they both have to work and social exchanges have to be successful.

In conclusion it can be argued that the expenditure phase is associated with high economic value and low transaction costs. Resource stage is associated with access to vendor's resources, innovation, strategic resources and basic skills development. The third and the final phase of the partnership is linked with economic exchange and mutual relations.

Mintzber; Raisinghan, Theoret (1976) identify the fact that the decision-making process primarily consists of the recognition that the decision is necessary, to clarify and identify the problems and possible solutions. Other stages consist of the solution changes, identification of the best solutions and finally the results are evaluated the final stage of choice is reached. Outsourcing decision making procedures are as follows (see Figure 3.):
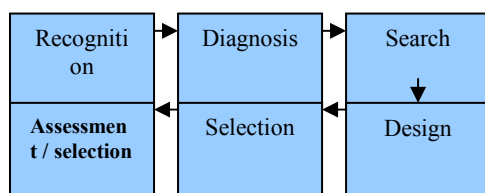

Figure 3. Decision-making procedures (according to Mintzber, Raisinghan, Theoret 1976)

One of the factors of outsourcing decision is that the company which buys IT services from outside does not need to worry about the attraction and maintenance of IT professionals, their development, adequate equipment acquisition and upgrading, because these processes are carried out by IT service provider. Therefore, the organization can focus on internal resources and direct them to those areas in which the company specializes. External IT service contracts often provide a choice of fixed or variable costs. Outsourcing allows the purchase of computer support for a fixed monthly fee, so companies can better plan their budgets. In addition, when the need disappears or the contract is over, the organisation can simply stop buying the service, contrary than in the case the organization itself invests and buys equipment and employs people. Another major positive factor is the quality of the service. External IT service companies have more experience in dealing with rented processes than internal departments of the company or individual employees, because service providers have access to broad internal resources. In addition, these companies have their workers constantly exposed to different customer problems and new technologies, and customer solutions are prepared prior to their need. One more advantage of external IT services is clear responsibility. Transferring of the administration of different software and hardware to a single supplier allows one to reduce the time needed to discover and eliminate the problem. Analysing the technological aspect of the outside IT service procurement, it should be clearly defined whether IT services contracts will be a one-off or long-term cooperation between the service provider and the hiring organization.

The companies focus on competency and the likelihood of the quick and significant cost reduction. Volume determination, selection processes and payback calculation is often not justified. They just adopt a provision that outsourcing in principle is useful and do not justify this choice in detail. In this case, the companies do not clearly address the risk, which occurs when the outsourcing relationship begins without appropriate prior training and strategic planning. This prevents the expectations Boguslauskas, Kvedaraviciene, (2008).

Practical and theoretical application of outsourcing

Outsourcing has become one of the most important characteristics of corporation behaviour in the world since 1990. Outsourcing changes the limits of business and plays an important role in adapting to the global economy in which increasing competition forces companies to seek for more efficient and more flexible working methods. Business service outsourcing is currently one of the most dynamic areas of the economy. Although outsourcing decisions are often understood as a complete solution, but the effects of some outsourcing promoting factors may vary depending on the service which is transferred out.

In order to reflect the importance of outsourcing transaction costs for businesses and the national economy, on the basis of the Department of Statistics of the Republic of Lithuania, the Department of Statistics of

Europe, The Bank of Lithuania and the World Bank the authors carried out the analysis of the most important parameters of external economic relations in the period of 2000-2009, focusing on the Lithuanian-to-GDP ratio and change of their dynamics in time, assessing the contribution of different service sectors, highlighting the importance of the IT service specificity, identifying outsourcing incentives for businesses.

The research of outsourcing services is based on the analysis of 9 different IT business services. These are telecommunications (J61), computer programming, consultancy and related activities (J62), computer programming activities (J6201), computer consultancy activities (J6202), computer facilities management (J6203), other information technology and computer service activities (J6209), information service activities (J63), data processing, web server services (web hosting) related online activities (J631), other information service activities (J639). This is the vast majority of the kinds of business services under the classification of economic activities in Europe. The research includes the dynamics of GDP in time, as well as between businesses and the GDP, sales income dependence on GDP and sales income dynamics each year, highlighting the importance of the specificity of each service, economic growth, pace and quality which depends on the capacity of all national economics and the Government economic policy which is a wide range of policy mix such as: anti-crisis policy, antiinflation, monetary, fiscal policy. Besides, a substantial degree of economic growth depends on foreign economic and political factors. After that the authors will present the interdependencies between the outsourcing of each service type, sales revenue and GDP, the number of enterprises and GDP, annual sales revenues and years, the number of enterprises and years. At last, the authors graphically present linear regression functions for each type of the service. Regression functions have been used to assess the accuracy of the determination coefficient (called the R-squared value). Determination coefficient is a proportion of a part of variation, explained by the regression function, and all variation (E. Bagdonas, 2008).

The study has found that for telecommunication services (J61) the interdependence between the sales revenue and GDP is close (determination coefficient $R^2 = 0.97$). When GDP increases by one million litas, sales revenue has tended to increase 0.022 million LTL (see Figure 5). So the linear regression function shows that the sales revenue has tended to increase on the average 154 million LTL annually.
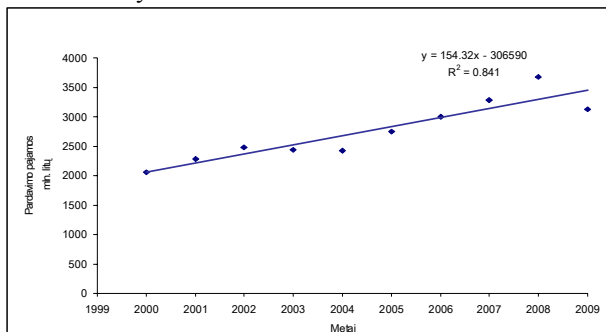

Figure 5. The dynamics of sales income in telecommunication services

According to the data it can be noted that the fastest growing sectors of Lithuanian economy are trade and construction, and the latest is one of the main sectors that use outsourcing services. This sector was marked by the growing productivity of the most factors, the highest return on investment capital and the largest capital investment contribution to growth. Conversely, those sectors which have recorded negative growth, showed the negative rates of productivity growth.

Despite rapid development, 2004 - 2008 year of Lithuanian economy highlighted outsourcing factors which may have an adverse impact on the country's economic growth sustainability in the future:

✓ labour supply and supply gap in certain sectors of the economy;

✓ emigration;

✓ rapid real estate price increases;

It should be noted that in the period of 2004 – 2008 market conjuncture was favourable to the Lithuanian economy, but a positive process of catching the world and neighbouring markets was slowed down due to the inflation caused by high oil prices rising. During this time, the rapid growth of Lithuanian economy increased both household income and business profits. But it also highlighted the factors that have an increasing impact on the long-term prospects of the economy of the country:

✓ growing labour shortages;

✓ emigration;

✓ rising commodity prices (which stimulated outsourcing development);

✓ imbalances of the real estate market.

The research has revealed that the revenue of computer programming, consultancy and related activities (J62) has tended to linearly ($R^2 = 0.9$) go up when GDP increases (when GDP increased by one million LTL revenue increased by an average of 0.010 million litas). It needs to be noted that with growth of GDP, computer programming activities (J6201) grew significantly faster than the computer consulting work (J6202) or computer facilities management (J6203) (see Figure 6).
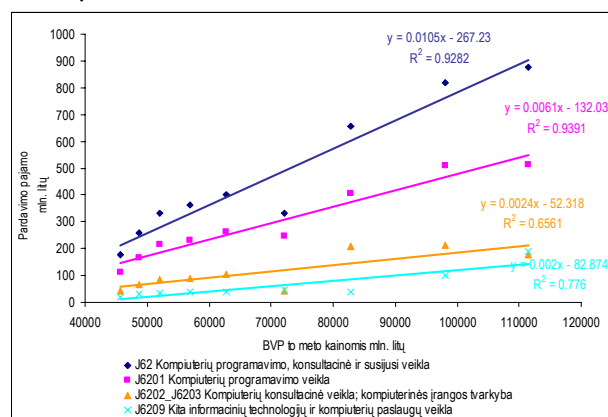

Figure 6. Interdependence of GDP and the income from computer programming activities

The research has shown that computer programming, consultancy and related activities (J62) had a tendency to an average yearly increase of 80 million litas. It should be

noted that computer programming activities (J6201) grew significantly faster than the computer consulting work (J6202) or computer facilities management (J6203) (see. Figure 6). There exists close linear interdependence between sales revenue and GDP (determination coefficient R ² = 0.87).
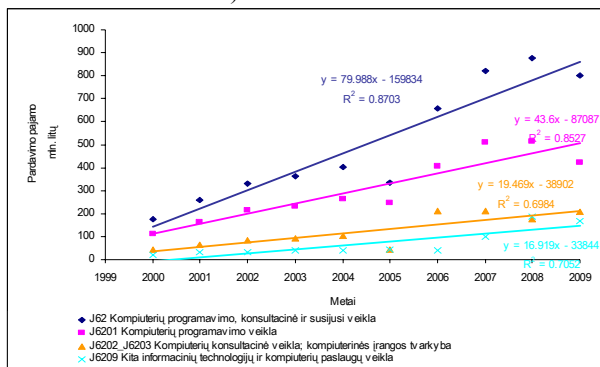

Figure 7. The dynamics of computer programming income

The figure shows that the variation in the number of enterprises little depends on GDP (see Figure 8) and the number of companies in time varied in an average of 20 (see Figure 9).
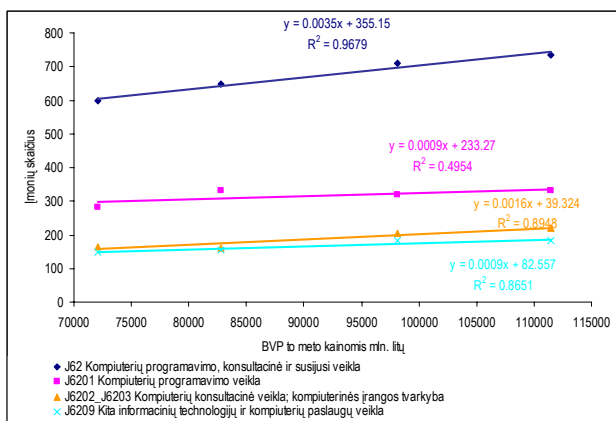

Figure 8. Interdependence of the number of computer programming enterprises and GDP
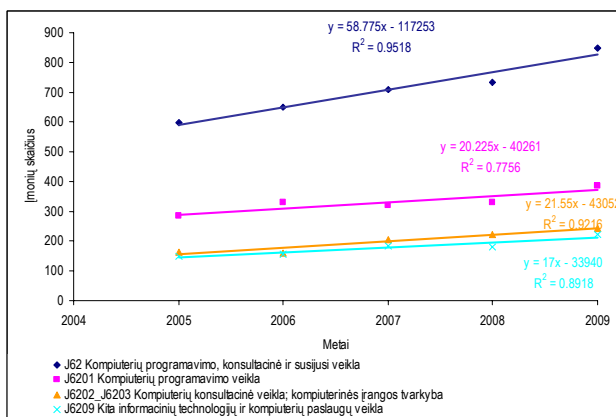

Figure 9. The dynamics of the number of computer programming enterprises

Lithuanian economy expanded rapidly in 2007 - real GDP increased by 8.8 per cent per year. The main factor for economic growth was growing domestic demand, driven by the increase of the household and corporate income, active borrowing and better use of European Union funds. Rapid growth of outsourcing continued to promote the volume of labour force and increased participation in the labour market. Sluggishness in economic activity was also felt in the first quarter of 2008, when domestic demand continued to increase significantly, but since the end of 2007, the growing evidence suggested the transition of the economics of the country to a slower growth phase.

According to the research, it can be stated that the information services business (J63) include such dominating activities as the data processing, servers, services (hosting) (J631). Other information service activities (J639) are represented only by a small proportion of all information services and they practically do not depend on the volume of GDP. The interdependence between sales revenue and GDP is middling close (determination coefficient R ² = 0.58). With the increase in GDP by one million litas, the sales revenue tends to rise 0.001 million LTL (see Figure 13). As it can be seen (see Figure 14), service sales income tended to rise an average of 9.66 million Lt annually, and the sales income in data processing, web server services (web hosting) related online activities (J631) increased 9.16 million Lt and the least increase is characteristic to other information service activities (J639) – it is 0, 49 million Lt.

Companies, including the ones which provide outsourcing services, have earned record profits, but, considering the expected slower growth of the economy, corporate profitability could not grow as fast. Due to the favourable macroeconomic conjunction the profit of non-financial agencies significantly exceeded the country's economic growth, like in previous periods. In 2007 new businesses continued to be actively developed and the number of bankrupts was smaller. Profitable business was conducted by 1 percentage point more companies than a year ago, and the part of bankrupt enterprises, compared to the number of all companies, was one of the lowest in the entire observation period. The intensive use of labour resources in the country and increasing activity caused quite a significant increase in labour and employment in the first half of the year, and unemployment has been historically low. Greater involvement of people in the labour market partly contributed to the continued rapid economic growth, but employment growth did not reduce the tension in the labour market. For this tension and institutional factors (salary increases for some public sector employees) overall wage levels continue to show strong growth. Annual average inflation in 2007 increased steadily. This increase is mainly influenced by raising both prices of food and wage costs. The influence of industrial commodity prices on overall inflation remains close to zero. Overall inflation is much more influenced by rising of service prices, which has encouraged businesses to use outsourcings.
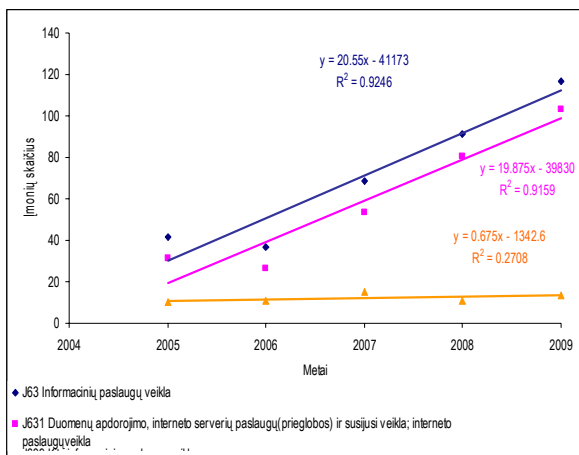
Figure 10. The dynamics of the number of information service enterprises

Figure 10 shows that the number of enterprises during the year shows a linear trend (R ² = 0.92) of increase.

In conclusion, after that analysis of the structures and elements of transaction cost models, it can be stated that:

- ✓ outsourcing transaction costs model structures are of discontinuous nature, highlighting only one-way relation between their connecting components;
- ✓ outsourcing transaction cost models are not sufficiently detailed and informative, they would rather include superficial analysis of the outsourcing strategy dependence on various external and internal environmental factors, without integrating the treatment of isolated factors;
- ✓ outsourcing assessment strategies are not included, which means the roughness of outsourcing transaction costs models and their limited practical implication.

Conclusions

After the analysis of the theoretical concepts of outsourcing transaction costs strategies and models, the following conclusions can be made:
1. Outsourcing concept the most objectively reflects the other definitions of outside benefits, so it can be treated as the main statement which can be used for naming enterprises as outsourcing organizations meaning the fact that the goods or services are procured from external sources, and thus all the functions and responsibilities are also transferred.
2. Outsourcing is a modern management strategy, the essence of which is that all activities which are not directly linked to the main activity of the company, are transferred to a partner from outside, so the company can concentrate its resources and funds in the areas that are essential for its core activities and where it gains competitive advantage.
3. Outsourcing services can be divided into two groups:
         -Full or strategic outsourcing services (called Strategic Outsourcing) – the projects (where, for example, client's all information technology infrastructure or its selected areas are transferred to an

outsourcing supplier). Such projects usually have special financing conditions and models.
         - Selective outsourcing services (e.g. when an external company allows to transfer for control the certain selected areas of information technology such as managing networks or Internet infrastructure).
4. The analysis of the environment of transaction cost strategies is proposed to be carried out by distinguishing macro-economic factors of the host country, the factors, regulated and influenced by the government of the host country, the factors of the international global market, industry factors and company-controlled factors.
5. On the basis of the analysis of the scientific literature the following key factors of outsourcing transaction cost strategy environment have been identified:

- ✓ *the host macro-economic factors* - governmental control and regulations, legal aspects, cultural exchange, import / export permits, fees, charges / legal framework, foreign currency;
- ✓ *the host government-regulated and influential* factors - the assurance of quality in the country, direct acquisition costs, transportation costs, the level of risk, job creation / loss;
- ✓ *international global market factors* - labour costs, external trade and coherence, cultural differences, trust / social capital, politics / corruption, consumer preferences;
- ✓ *firm factors* - time costs, hidden costs, stock price changes, expense control cost, the effectiveness of process conversion, technical assistance, concentration on effective management;
- ✓ *company-controlled factors* - installation / maintenance costs, training costs, search and information costs, trust / supplier relationships, internal marketing consistency, the level of risk, the reputation / brand issues, the organizational culture.

4. It has been identified that institutions play a key role in the transaction cost economy. Different authorities can create different types of transaction costs. Transactions are usually conducted under formal or informal contracts. The transaction cost economic model is used for making the decision of outsourcing as the most effective possible solution. Although transaction cost economics explores the conditions of *exchange* between enterprises, this approach is more sophisticated as more attention here is paid to the quality of available or acquired resources. Valuable resources should be kept within the company, and less valuable resources – should be transferred to outsourcing suppliers. Although the available information enables to better develop and support the methods of transaction cost reduction, the traditional transaction cost economics focuses on industrial production, in which the company must invest specific assets. In the case of providing services, the subject of the transaction is the service with all essential elements, necessary for performance, such as time, required skills and qualifications, the knowledge value and so on.

References

1.Bartkus E. V.; Jurevicius V. Production outsourcing in the international market// Inzinerinė ekonomika. ISSN 1392-2785. KTU, 2007 (No 1/51), p. 68.

2.Boer, L.; Gaytan, J.; Arroyo, P. A satisficing model of outsourcing// Industrial Management & Data Systems. 2006 (No 5/11), p. 445.

3.Bogulauskas V.; Kvedaravicienė G. Strategic outsourcing plan and the structure of outsourcing process// Inzinerinė ekonomika. ISSN 1392-2785. KTU, 2008 (No 3/58), p. 65.

4.Coase, R.H. (1937), „The nature of the firm", Economica, November, pp.386-405.

5.Gottschalk, P.; Solli-Sæther H. Maturity model for IT outsourcing relationships// Industrial Management & Data Systems. 2006 (No 2/106), p. 1-6, 11.

6.Feenstra, R., and G. H. Hanson (1999): „The impact of outsourcing and high-technology capital on wages: estimates for the United States, 1979-1990," Quarterly Journal of Economics, 114(3), 907940.

7.Grossman, Gene M., ir Elhanan. Helpman, 2005. Outsourcing global economy. Review of Economic Research, Nr.72 (2005), p.135–159.

8.Grossman, S., ir O. Hart (1986): „Property costs and benefits are: vertical and horizontal integration of theory" political economy journal, Nr.94, p.85–120.

9.Koh, C.; Ang, S.; Straub, D.W. IT outsourcing success: a psychological contract perspective// Information Systems Research. 2004 (No 4/15), p. 73.

10.Pilinkiene V.; Market Demand Forecasting Models and their Elements in the Context of Competitive Market// Inzinerinė ekonomika. ISSN 1392-2785. KTU, 2008 (No 5/60), p. 25.

11.Levina, N.; Ross, J.W. From the vendor's perspective: exploring the value proposition in information technology outsourcing// MIS Quarterly. 2003 (No 3/27), p. 64.

12.Earl, M.J. (1991), „Outsourcing information services", Public Money and Management, Autumn, pp.17-21.

13.Snieska V. Research into international competitiveness in 2000–2008// Inzinerinė ekonomika. ISSN 1392-2785. KTU, 2008 (No 4/59), p. 41.

14.Snieska V. The role of knowledge process outsourcing in creating national competitiveness in global economy// Inzinerinė ekonomika. ISSN 1392-2785. KTU, 2007 (No 3/53), p. 40.

15.Vasiliauskiene, Ligita; Snieska, Vytautas. Transfer costs of production companies outsourcing. The case of Lithuania // Economics and management- 2008.

17.Vengrienė, B. The service economy: the training tool. Vilnius, 1998. ISBN 998619296X

16.Shniederjans, M. J.; Shniederjans, A. M.; Shniederjans, D. G. Outsourcing and insourcing in an international context. London, 2005. ISBN 0765615851

18.Williams, A.; Mullin, R. The handbook of field marketing: a complete guide to understanding and outsourcing face-to-face direct marketing. London, 2008. ISBN 0749450258.

19.Williamson, O.E. (1975), Market and Hierarchies: Analysis and Antitrust Implication, Free Press, New York, NY.

20. Williamson, O.E (1975), "Markets and Hierarchies, The Free Press, New York, NY.

21. Williamson, O.E (1981), "The modern corporation: origins, evolutions, attributes", Journal of Economic Literature, Vol.19, p.68.

22.Willcocks L. ir Choi C.J., (1995). Cooperative partnership and the overall information technology outsourcing from contractual obligations to the strategic alliance" European Management journal, Volume 13, Nr.1, p. 3-61.

23. Williamson, O.E (1979), "Transaction cost economics: the governance of contractual relations", Journal of Law and Economics, Vol.22,p. 66- 78.

Vytautas Snieška, Ligita Vasiliauskienė

Išornaudos sandorio kaštų modeliai ir jų elementai globalinės rinkos kontekste

Santrauka

Straipsnyje nustatomi veiksniai, turintys poveikį verslo procesų išornaudos sprendimui bei pristatomi sandorio kaštų išornaudos modeliai ir jų elementai, kurie įgalina padėti bendrovėms priimti geresnius verslo paslaugų išornaudos sprendimus, ir gauti kuo daugiau naudos iš verslo paslaugų išornaudos.Ankstesni tyrimai nagrinėjo tiktai klausimus, susijusius su tradicine išornauda, tačiau yra mažai tyrimų, analizuojančių ir diskutuojančių veiksnius, į kuriuos turėtų būti atsižvelgta priimant verslo paslaugų išornaudos sprendimą.

Remiantis atliktais tyrimais, galima teigti, kad sandorio kaštų išornaudos strategijos formavimas apima ne tik įmonei tinkamiausio išornaudos metodo parinkimą. Tyrimo analizė parodė, kad išornaudos sandorio kaštų strategijai didelį poveikį daro įmonės išorinės ir vidinės aplinkos veiksniai, vis dėlto, ekonominėje literatūroje pasigendama metodikos, apjungiančios svarbiausių veiksnių identifikavimo, jų poveikio vertinimo bei išornaudos sandorio kaštų strategijos formavimo aspektus, leidžiančius padidinti priimamų išornaudos sprendimų kokybę ir efektyvumą. Analizuojami duomenys įmonių iškėlusių informacinių technologijų funkcijas, tyrimo metu analizuojamas pajamų dinamikos kitimas nuo BVP ir laiko, taip pat tarp įmonių skaičiaus ir BVP, pardavimo pajamų su BVP priklausomybė, pardavimo pajamų ir metų išryškinant kiekvienos paslaugos specifiškumo kriterijaus svarbą, ekonominį augimą, jo tempą ir kokybę, kuri priklauso nuo visos valstybės ūkio pajėgumo, nuo vyriausybės vykdomos ekonominės politikos.

About the authors

Vytautas Snieška Prof. Dr. of social sciences (economics), Kaunas University of Technology, Economics and Management Faculty, Head of Economics and International Trade Department; +370 37 30 05 75, e – mail vytautas.snieska@ktu.lt

Ligita Vasiliauskienė PhD student of social sciences (economics), Kaunas University of Technology, Economics and Management Faculty, Economics and International Trade Department; +370 37 30 05 75, e–mail ligita.vasiliauskiene@ktu.lt

REFLECTION LEVEL AS THE INDICATOR OF THE RELATIONSHIP BETWEEN THE TEACHER'S EDUCATIONAL COMPETENCE AND LEARNING ENVIRONMENT

Brigita Stanikūnienė

Kaunas University of Technology, Lithuania

Abstract

The article presents the theoretical substantiation of the relationship between higher education teacher's educational competence and his learning environments. The reflection skills as an important part of educational competence help a teacher to effectively identify the learning instances in his learning environments, and in turn the reflective learning experience enriches his educational competence: a teacher is able to better organize his educational environment for students and develop their meta-learning competence. Since the reflection skills are modeled into four levels, the following question is considered in this article: *what qualitative differences may exist between the teacher's educational competence and his/her learning environments in case of different reflection level?* The article consists of three parts: the first part is devoted to the explanation of interrelatedness of reflection and learning processes. The second part reveals the discussion on the levels of reflection referring to the context of higher education teacher's educational competence/ or context of his /her activity. The last part of the article defines the qualitative differences in the relationship of teacher's educational competence and his/her learning environments attributed to different reflection levels.

Keywords
Reflection, higher education teacher, educational competence, teacher learning, learning paradigm

Introduction

of studies that have viewed reflection as an important tool for teacher competence development (Calderhead, Gates, 1993; Gibbs, 1988; Freese, 2006; Hardy, 2009, Hatton, Smith, 1995; Laurilliard, 2008; Moon, 2008; Smyth, 1989). However, taking into account the challenges of learning paradigm, the requirement for higher education teacher to become reflective and be able to develop meta-learning skills, the concept of teacher competence inevitably embraces the understanding of contemporary *educational competence* instead of traditional pedagogical competence. The educational competence of higher education teacher is defined as the set of knowledge, skills, abilities, personal traits, learning-in-action experience and learning paradigm based attitudes that influence teacher's successful academic activities with the outcome of helping a person (students) to learn both in the formal education system and in a self-directed way when a person is able to organize and manage his learning process in different learning environments (Jucevičienė, Stanikūnienė, 2003).

Reflection skills, in this context, contribute in a double sense: first, reflective inquiry helps a teacher to develop intellectually, to examine his/her own ideology, to enhance professional practice by exploring the learning environments and in that way to improve the educational competence; second, the enriched educational competence allows a teacher to educate his/her students as reflective learners who study for understanding and perceive their own learning processes. In other words, a higher education teacher by reflecting on his/her professional practice and the ways his students learn gains valuable experience and knowledge on the ways the understanding is being constructed. This is in line with the constructivist approach to learning. More than that, this teacher becomes able to transfer this knowledge on learning to students and as if prepares them for being the self-directed learners after they graduate the university and the formal education is over. The development of teachers and students' meta-learning competence meets

The scientific discussion on teacher reflection in their professional practice considers a number the concept of lifelong learning. The latter claims that people (teachers as well) continue to learn in different learning environments during the life span.

The concept of learning environment has been deeply discussed in the works of De Corte (2003), Jucevičienė (2007), Entwistle, McCune, Hounsell (2003), Tautkevičienė (2004), Lipinskienė (2008), etc. However, in most cases the scientific research was limited to the exploration of students' learning environments and the possibilities to enrich them. Having evaluated the main spheres of higher education teacher's activity (e.g. teaching, research, professional services for community, etc.) and the activities he/she carries out outside the higher education institution as well as different roles he/she takes in life, the theoretical model of teacher's potential learning environments was theoretically substantiated (Jucevičienė, Stanikūnienė, 2007).

The effective exploration of learning environments depends on the learner's self-motivation for learning, learning goals, previous experience, competence and abilities to critically reflect on the information and new knowledge. Assuming that the contemporary higher education teacher should be eager and self-motivated for own competence development, the reflection skills become the essential factor for successful exploration of his/her learning environments.

The researchers (Hatton, Smith, 1995; Mezirow, 1991; Habermas, 1973; Van Manen, 1977, etc.) have elaborated the types or levels of reflection and suggest that there are different conditions in which reflection is applied. Each reflection level represents different perspectives of exploring learning environments and identifying learning instances. It implies that each reflection level embraces different kind of teacher's learning in the activity and the ways his/her educational competence is enhanced.

However, the fact is that there is relatively little concern for finding *what qualitative differences may exist between the teacher's educational competence and his/her learning environments in case of different reflection level.*

Therefore, *the aim of the article* is to theoretically substantiate the reflection level as the indicator for the qualitative difference in the relationship between teacher's educational competence and his/her learning environments. The article consists of three parts. First, the interrelatedness of reflection and learning processes with the reference to teacher competence development is discussed. Second part of the article reveals the discussion on the levels of reflection referring to the context of higher education teacher's educational competence/ or context of his /her activity. The last part is devoted to defining the qualitative differences in the relationship of teacher's educational competence and his/her learning environments attributed to different reflection levels. The method applied is the analysis of research literature.

The interrelatedness of learning and reflection concepts in the context of teacher's professional development

The research literature assumes that reflection is closely related with the concept of learning. Most often is it concerned with the well known concept of the experiential learning which refers to the organization and construction of learning from observations that have been made in some practical situations. Reflection is considered as a kind of tool for enabling this experiential learning. However, as Moon (2008, p.101) claims, the researchers of experiential learning lack a more precise explanation on the relationship of reflection in learning. They do not take into account the constructs of deep and surface learning and do not consider the higher level learning that is critical in higher education and university teacher learning as well. Boud, et al (1985), Mezirow (1990), Habermas (1973), Brookfield (1995) and other researchers relate higher level learning to the concept of critical reflection. Moon (2008) adds that the understanding of higher level learning is also based on the writing of Ausubel (meaningful learning) and constructivist approach to learning, works of Ramsden, Marton, Hounsell, Entwistle referring to student learning in higher education.

The consideration of the interrelatedness between reflection and learning requires the understanding on higher level learning with the reference to teacher's competence development.

Having made a detailed research literature analysis, Moon (2008) identifies the main five stages of learning: *noticing, making sense, making meaning, working with the meaning, transformative learning*. Noticing implies that a person perceives new information, because it has attracted his attention and /or emotions and he wants to link it with what is already known. Making sense is understood as "a process of becoming aware of coherency in the material of learning and slotting ideas together" (Moon, 2008, p.142). In this stage a person gains a holistic view of the incoming information (material), but he does not relate it to his previous knowledge. In making meaning stage the new material is assimilated (as Piaget claims) into person's cognitive structure, i.e. a person relates the new information to what he knows. The meaningful learning occurs when the

old and new ideas are well integrated and linked. The stage of working with meaning implies that a person is eager to gain more clear understanding of new knowledge, he wants to check the details or even searches for new external information to make his understanding more precise. A person summarizes the ideas, makes conclusions, thinks over, makes judgements, integrates meanings, etc. Argyris and Schon (1974) name this process as bringing tacit knowledge into conscious level. Moon (2008) explains that in this stage a learner is able to give appropriate explanations on the material learned and to generate new meanings. The last stage of transformative learning implies that a person is able to critically evaluate his possessed knowledge, the frames of references, the processes of learning and understanding. According to Candy (1991), Kitcheher, King (1990), Smith (1990) and others, this is meta-learning that helps a person to consciously understand the origins of his understanding, the ways he reasons, makes arguments, solves problems and learns. The presented learning levels indicate that the higher level learning that is critical for teacher's competence development occurs in the last two stages. The latter embrace the concept of reflection as it is discussed in a wide range of academic literature.

Referring to the context of higher education teacher competence, we may assume that "working with the meaning" and "transformative learning" stages embrace the reflecting on teacher and student learning processes, the teaching models or theories built in teacher's practice with the purpose to change the future performance and to improve teacher's meta-learning competence[1]. (Stanikūnienė, 2007). The transformative learning is especially in accord with the reflection on teacher's the self since it enables a teacher to take a critical overview of his professional situation and the personal action theories. This could lead to self-development and even to emancipation. In Mezirow's (1991) use of terms it means becoming aware of how and why teacher's presuppositions have come to restrain the way he sees and understands the surrounding world.

So, reflection in this case is treated as a tool that facilitates teacher's learning from his practice towards the outcome of his "the self" and competence development and specifically his educational competence.

The discussion on the interrelatedness between reflection and higher level learning calls for further inquiry on the possible differences in the ways reflection is used or applied by university teacher and the implications for his educational competence in case of each reflection level.

Levels of higher education teacher reflective learning in practice

The theoretical substantiation of university teacher's reflection levels is based on the works of Hatton, Smith (1995), Mezirow (1991), Habermas (1973), Van Manen (1977) who were greatly concerned about the qualitative differences in reflecting. The analysis allows discerning

---

[1] Higher education teacher's meta-learning competence is defined as competence of managing and developing the reflective learning activities, exploring the ways people learn and transforming the cognitive ways and methods his teaching practice is based on.

at least four levels of reflection: *technical, dialogue, critical reflection and reflection-in-action* They are analyzed by evaluating four criteria: *the object of reflection, the inquiry process, the changes* as the results of reflection and *the goal and characteristics of learning* that guides reflection. The detailed summary is presented in Table 1.

The levels of technical, dialogue and critical reflection are presented in their developmental sequence. Each level of reflection embraces the characteristics of the preceding level. So, the highest level of reflection is *reflection-in-action* when the professional engages in simultaneous reflecting and doing, implying that he has reached a stage of competence where he is able to think consciously about what is taking place and modify actions virtually instantaneously. This reflection level is perceived as the most difficult to practice because an individual reflects on his activity at the same time referring to different levels of reflection (technical, dialogue or critical) in a situation at hand. As Hatton and Smith (1995, p.15) claim, a teacher is able "consciously to think about an action as it is taking place, making sense of what is happening and shaping practical steps using multiple viewpoints as appropriate".

.

The level of **technical reflection** may be described as *descriptive reflection* (Hatton, Smith, 1995) or *the reflection on content* (Mezirow, 1991) that is mainly oriented to analyzing specific tasks or problems. A teacher deals with the specific situation and his behaviour in this specific situation; he does not search for variations of interpreting this situation in a different perspective. The focus is on effective application of skills and technical knowledge, on cognitive aspects of teaching. A teacher is not reflective in the sense higher learning levels demand, he is unable to prove his educational competence since he shows no attempt to provide justifications for his behaviour, does not question his personal beliefs and theories of acting. Cranton (2000) submits the example of this reflection: a teacher analyses the concrete action strategies in his teaching, he is interested in the effectiveness of teaching methods he applied, in the way the student assessment was carried out, etc. the following questions may be raised: *How to choose among the existing range of teaching methods? What evaluation method is the most suitable for my course? How to evoke students' interests in the learning material I present?* A teacher does not inquiries in the way he learns or his students construct the understandings. The higher level learning is not occurring

Table 1

Levels of reflection

REFLECTION LEVELS	NON-REFLECTIVE LEVEL *(descriptive writing)* routine work and reasoning without change (Hatton, Smith; Bateson)	TECHNICAL *(descriptive)* technical decision making in specific situations (Schon, Van Manen, Mezirow, Bateson)	DIALOGUE *(practical)* evaluation of contradictory attitudes and analysis of alternative decisions (Van Manen, Hatton, Smith)	CRITICAL (Brookfield, Gore, Zeichner, Smith, Lovat, Van Manen, Mezirow)	REFLECTION IN ACTION (Schon, Argyris)
Reflection object (where is the focus during the reflection on activity)	Statements of facts and events	Work tasks, e.g. the planning of a lesson, evaluation procedures. The content of event is analysed and its technical aspects; e.g. teaching aids and methods, their effectiveness, time management in a lesson, etc.	The relations between means and ends; assumptions and values that determine means and ends; activity results. The questions are: *how* and *in what way?* Individual's action strategies and situation setting.	Moral, ethical, cultural and historical aspects of activity, The questions are: *why and what for?* Individual's values the activity rests on, meaning of professional role, the implicit knowledge.	The spontaneous problems in the activity. Knowing in action.
Inquiry process	There is no inquiry, no questions are formulated. The general conclusions are made. Other people are blamed for problems.	The questions are closely related to specific situation when consequences are unexpected or negative. When the problem becomes clear, the further inquiry is not carried out. Interpretation and evaluation is done from personal perspective.	Open questions invite for deeper inquiry. The questions addressed to other people, the ideas of others are considered. A variety of reasons for acting are highlighted. The contradictory views are taken into account, alternative decisions are explored.	Deep and detailed inquiry with the fundamental questions that share doubts on status quo. The analysis of situation setting, the context and existing ways of knowing and acting takes place.The alternative ways of reasoning, cognitive methods are revealed	The modelling of diverse perspectives from the previous reflection levels and their application at the instance of acting. Instantaneous experimentation.
Change (in what ways the inquiry changes activity situation and the model of action)	No change. This is a distance between the activity situation and the self.	**Reacting** – new action strategies are chosen within the same unchanged setting of situation.	**Reframing** – the situation setting is reflected upon and changed. This implies the development of new action strategies and their testing.	**Transformation** – the activity of an individual fundamentally changes since he/she alters personal theory the activity rest on.	**Transformation in a moment**, which takes place at the instance of acting
Learning goal and characteristics	Learning does not take place.	Learning goal – to become competence to choose among the possible known ways of acting. The development of main skills and transferable abilities. – stages of noticing and making sense.	The development of self-concept, the understanding of one's new actions and the environment: Higher level learning is observed: stages of making meaning and working with meaning.	Learning to develop and test new theories-in-action. The fundamental changes in reasoning modes and the value basis for activity. Higher level learning: working with the meaning and transformative learning	New practical knowledge and skills for acting in the unforeseen future situations. Higher level learning: working with the meaning and transformative learning

On the **dialogue reflection** level a teacher starts analysing his situation setting and looks for new action strategies; however, the action model remains unaffected.

The teacher usually reflects on the technical knowledge (gained in technical reflection level) he applied in one or other situation. For instance, a higher education teacher may focus on improving his subjects taught and the

enrichment of the educational environment, but without deep inquiry into personal action theories and the assumptions his actions rest on, he is not able to assist a student in developing meta-learning competence and empowering for self-directed learning. The teacher may understand his subject not only in the context of study programme. He collaborates with the colleagues, starts

exploring the self and the standards of his actions. He is interested in how others see him as a professional.

Mezirow (1991) names it as *reflection of process* with the outcome of deeper understanding what action strategies could be applied according to the nature of problem or situation at hand. Hatton and Smith (1995) give the following example of teacher's dialogue reflection which helped to recognise the inconsistencies: *"While I had planned to use mainly written text materials I became aware very quickly that a number of students did not respond to these. Thinking about this now there may have been several reasons for this. A number of the students…may still have lacked some confidence in handling the level of language in the text. Alternatively a number of students may have been visual and tactile learners. In any case I found that I had to employ more concrete activities"*. We may assume that the "working with the meaning" takes places, but the qualities of "transformative learning" are not achieved yet.

The levels of *critical reflection and reflection in action* enable a teacher to meaningfully act and learn as a learning paradigm calls for. On these levels of reflection the construction of new meanings, the recognition and development of one's personality and reasoning, the analysis of implicit knowing and the change of action model take place. So, the "transformative learning" takes place.

Critical reflection helps to "see" the old-fashioned" ways of reasoning, the habitual ways of acting. Teacher constructs new meanings of his professional role and practice, he questions "why I do act in this particular way?" The special attention, as Gore, Zeichner (1991) claim, is paid to the goals, ethical criteria and values of activity. Smith (1991) presents the example of teacher's critical reflection: *"What must be recognized, however, is that the issues of student management experienced with this class can only be understood within the wider structural locations of power relationships established between teachers and students in schools as social institutions based upon the principle of control"*

A teacher may be involved into considerations about whether his professional activity is equitable and just. Usually this kind of reflection is oriented to the improvement of practice and development of competence. Critical reflection, as Farrel (1998) notes, involves conscious recall and examination of the teacher's experience with the aim of future planning and development.

Each level of reflection indicates a different quality of the higher education teacher's educational competence. In this sense the levels of technical and dialogue reflection do not correspond to the concept of a teacher's reflective learning based on the learning paradigm, i.e. teacher is not actively involved into developing his meta-learning skills. Only in critical reflection and reflection-in-action level a teacher may perceive the inconsistencies existing in his practice and to become aware of the need to develop his educational competence so that his educational environment for students' would be enriched.

The theoretical substantiation of the qualitative differences in the relationship of teacher's educational

competence and his learning environments attributed to different reflection levels

The relationship between higher education teacher's educational competence and learning environments is highlighted through the teacher's skills of reflective inquiry. These skills are the important part of teacher's educational competence. They help a teacher to notice the learning instances and to use the learning possibilities in learning environments. More than that, the experience of this reflective learning enriches teacher's educational competence, i.e. he is empowered to better understand learning processes, to develop students' meta-learning competence and to apply this reflective learning experience back into his educational environment. The teacher's reflective skills are encoded into four different reflection levels described above, thus this implies that the qualitative differences of recognizing and using learning environments may be observed. In other words, the higher level of reflection a teacher applies, the better possibilities for exploring his learning environments and developing his educational competence exist.

In should be worth noticing that despite the reflection level, a higher education teacher may act in various learning environments. The refection level does not limit the number of possible learning environments; instead, it determines the quality and deepness of reflective learning in learning environments.

The following peculiarities of the relationship between higher school teacher's educational competence and learning environments were theoretically substantiated on the grounds of different reflection levels:

- *In technical reflection level* teacher's learning is more accidental and unplanned; a teacher is not motivated for exploring his learning environments, he evaluates the existing problems in a very specific situation of activity and relies on his own existing experience and knowledge. The surface of learning environment is explored with the emphasis on specific facts and events (*What has happened? What were my actions? how should I perform better with the competence I have?*). The teacher's activity is quite individual, not based on discussion or searching the judgements in other people's experiences.

This means that a teacher is not eager to actively search for new information in his learning environments. If the external information is available for a teacher, he assimilates it as it is without deep inquiry. In this case most probably a teacher does not integrate the knowledge from quite different learning environments (LE): for example, leisure activities as LE and academic activities as LE. He clearly distinguishes among his roles: me as a higher education teacher, me as a community member, etc.

- In *dialogue reflection level* a teacher starts perceiving that new information and experience may be gained by means of communicating with other people, in collaboration activities and discussions. This motivates him for identifying and exploring learning environments where interaction and learning from other persons prevails. Collaboration is a tool for increasing the scope of knowledge from other people. Teacher gathers the information he is interested in. The learning experience,

however, is then individually reflected upon; a teacher is not involved in meta-learning activities since he is not interested into the ways people reason, learn and construct personal knowledge. Unfortunately, he is not involved into questioning like this: *"Why do you reason in this way?, What makes you think that your solution is relevant? etc.* A teacher usually notices the experiences similar to his ones: he analyses the ways people act in the same situations he encounters. He is interested in their action strategies, the means and tools applied, the goals set, but asks no questions about the moral and ethical aspects of activity, the values that guide human action. There is no aim of exploring the ways people reason, learn and construct meanings.

So the dialogue reflection level indicates the lack of teacher's creative thinking and innovative considerations, because he tends to choose among the action strategies he is used to apply and does not question the possibility of applying something innovative in his practice. This in turn may hinder the deeper exploration of certain learning environments, especially related to the research activities and partnership with the worldwide academic community. The activities in these learning environments emphasize the critical overview of the existing scientific knowledge, the abilities of critical evaluation of one's own research results and comparison with the works of other scientists.

- *Critical reflection* enables a teacher to intentionally explore and understand his own reasoning methods and the limits of his knowing. This understanding stimulates for further search of learning instances in learning environments; the new understanding and experience are actively tested in activity situations, so new possibilities for learning from activity and during activity emerge and the learning itself becomes more self-directed.

Critical reflection, as it was mentioned above, enables a teacher to reveal the possible inconsistencies between his attitudes and declared values and his real practice. Involved in the critical inquiry a teacher expresses the doubts about his routine, habitual ways of acting. And this uneasiness encodes the further search for new information and the best practices in different learning environments. The strive to improve his educational competence and in that way to create a more effective educational environment for his students, motivates a teacher to integrate different types of knowledge and experience gained from different learning environments. For example, a contemporary higher education teacher enriches the content of subject taught with the latest results of his own research as well as the results of worldwide academic community.

The main difference between the dialogue and critical reflection is that the latter reflection is not so individualistic in nature. It requires the public testing of the assumptions, the discussions to validate the emerging new understandings. In this case, a teacher does not rely on the traditional sources of learning and information (e.g. books, publications), the research activities or/and the participation in teacher education events (e.g. courses, seminars). Instead, the reflective teacher is eager to actively communicate and learn from competent professionals and prominent members of society by participating in different events unrelated to his professional activities: *city events, conferences, public lectures, summer schools, forums on Internet, activities of public non-governmental organizations, club activities, etc.* Even teacher's family, friends, his travelling activity or leisure activity may become his potential learning environments.

The teacher like this will assume that his *students* are the unique source of learning, so the discussions on the ways they learn, on the experience of previous learning, on their expectations and personal learning goals may contribute immensely to teacher's understanding what his educational environment should be. The work and discussion with the students may transcend the classroom activities and "enter" new learning environments related to teacher's activities like *teacher as consultant and mentor of students, teacher as leader of students' informal activities, teacher as organizer of other academic activities (e.g. student competition events, students scientific conferences, student preparation for exchange studies abroad, etc.).*

Critical reflection implies that all the new experience and knowledge constructed is to be validated in real activity context. Therefore, a teacher applies the reflective learning experience he gained by different ways (reading, communicating, participating, and performing) in the teaching process. In this way he is able to explain to his students that along the formal way of studying other forms of informal learning exist and enhance human understanding about the surrounding world.

- Reflection-in-action placed a teacher at the constant interaction with his learning environments; he critically considers this interaction and the experience of reflection learning in activity and during activity. As in the case of critical reflection, the testing of new personal knowledge in new contexts expands the number of learning environments. The professional who is able to reflect while acting is competent to act in the unforeseen situations. He is able to experiment, combine the experience from different learning environments. In this case, we may assume that the educational environment created by a teacher for his students will be enriched with the unique case studies, i.e. a teacher presents the variations of learning situations from his personal learning environments that are not necessarily related to his role as higher education teacher.

So, the main point of this discussion is that the relationship of higher education teacher's educational competence and his learning environments is defined through the skills of reflective inquiry that identify not only the interrelatedness of these concepts, but also the qualitative dimensions of this relationship. The reflection skills that are modelled into four levels of reflection enable a teacher to identify the learning instances in his learning environments, to analyse them and receive different outputs of this reflective inquiry. The higher level of reflection a teacher uses in his activities, the better educational competence he obtains, i.e. he identifies the bigger possibilities for his informal learning, integrates experience from different learning environments and creates more learning possibilities for his students by applying the reflective learning strategies and experience in educational environment.

Conclusions

- The analysis of research literature states that reflection a higher education teacher aims to apply in his practice is closely linked with the higher level learning and involves the stages of „working with meaning" and „transforming learning". These are characterized by the meaningful, creative, critical review of one's activities with the outcomes such as new understanding of actions with the intention for future improved performance, self-development and emancipation.

- Higher education teacher's reflective learning in his practice is modeled into four reflection levels – each of them indicates the differences in a way teacher uses and develops his educational competence:
  - on technical reflection level he does not intend to change the setting of his practice, there is no inquiry into learning processes; instead the technical aspects are reflected on and new action strategies are chosen.
  - on dialogue reflection level a teacher starts reflecting on the nature of his practice with the emphasis on the improvement of his educational environment, but not the meta-learning of his students.
  - on critical reflection level and reflection-in-action a teacher analyses the value basis of his practice, his learning strategies and reasoning modes. The meta-learning competence is developed and new understandings are tested in educational environment for students.

- The theoretical analysis revealed that the differences in reflection skills determine the following differences in the relationship between the teacher's educational competence and learning environments:
  - The higher level of reflection, the better manifestation of teacher's educational competence with the emphasis on meta-learning competence development both of the teacher and his students;
  - The higher level of reflection, the bigger number of potential learning environments a teacher assumes as relevant for his informal learning.

References

1. Argyris, Ch., Schon, D. Theory in Practice: Increasing Professional Effectiveness. San Francisco: Jossey – Bass. 1974
2. Bateson, G. Steps to an Ecology of Mind. New York: Ballantine Books. 1972
3. Boud, D., Keogh, R., Walker, D. Promoting reflection in learning: A Model. In Boud, D., Keogh, R., Walker, D. (Eds.). Reflection: turning Experience into Learning (pp. 18-40). London: Kogan Page. 1985
4. Brookfield, S. Becoming a Critically Reflective Teacher. San Fransisco: Jossey – Bass Publishers. 1995
5. Calderhead, J., Gates, P. (Eds.) Conceptualizing Reflection in Teacher Development. London: Falmer Press. 1993
6. Candy, P. Self-direction for Lifelong Learning. A Comprehensive Guide. San Fransisco: Jossey – Bass Publishers. 1991
7. De Corte, E. Designing Learning Environments that Foster the Productive Use of Acquired Knowledge and Skills. In E.De Corte et al (Eds.), *Powerful Learning Environments: Unraveling Basic Components and Dimensions* (pp. 21-33). Oxford: Elsevier Science Ltd. 2003
8. Entwisle, N., McCune, V., Hounsell, J. (2003). Investigating Ways of Enhancing University Teaching – Learning Environments: Measuring Students' Approaches to Studying and Perceptions of Teaching. In E.De Corte et al (Eds.), *Powerful Learning Environments: Unraveling Basic Components and Dimensions* (pp. 89-107). Oxford: Elsevier Science Ltd.
9. Farrell, T. (1998). *Reflective Teaching: The Principles and Practices.* Prieiga per Internetą: http://exchanges.state.gov/forum/vols/vol36/no4
10. Freese, A.R. Reframing one's teaching: Discovering our teacher selves through reflection and inquiry, *Teaching and Teacher Education*, 22 (1), 2006. P. 100-119.
11. Gibbs, G. *Learning by Doing. A guide to teaching and learning methods.* Birmingham: SCED, 1988.
12. Gore, J., Zeichner, K. Action Research and Reflective Teaching in Preservice Teacher Education: A Case Study from the United States. *Teaching and Teacher Education,* 7(2), 1991. 119-136.
13. Habermas, J. *Theory and Practice.* Boston: Beacon Press Hatton, N., Smith, D. (1995). *Reflection in Teacher Education: Towards definition and Implementation.* Teaching and Teacher Education, 11 (1), 1973. 33-49.
14. Hardy, S. Teaching Mediation as Reflective Practice. *Negotiation Journal,* Vol. 25 (3), 2009.385-400.
15. Hatton, N., Smith, D. *Reflection in Teacher Education: Towards definition and Implementation.* Teaching and Teacher Education, 11 (1), 1995. 33-49.
16. Jucevičienė, P. *Besimokantis miestas.* Kaunas: Technologija, 2007.
17. Jucevičienė, P., Stanikūnienė, B. The university teacher's educational competence in the context of learning paradigm, *Social sciences*, Vol. 1(38), 2003. 24-29.
18. Jucevičienė, P., Tautkevičienė, G.. Universiteto bibliotekos mokymosi aplinkos samprata. *Pedagogika: mokslo darbai,* 71, 2004. 101-105.
19. Kitchener, K.S., King, P.M.. The reflective judgment model: Transforming assumptions about knowing. In J.Mezirow (Ed.), *Fostering Critical Reflection in Adulthood.* San Francisco: Jossey-Bass, 1990.
20. Laurillard, D. The teacher as action researcher: using technology to capture pedagogic form, *Studies in Higher Education,* 33(2), 2008. 139-154.
21. Lipinskienė, D., Vingilytė, J. *Empowerment and creation of empowering environment: theoretical background.* // Changes in Social and Business Environment : Proceedings of the 1st international conference, November 17-18, 2006, Lithuania / Kaunas University of Technology, 2006. p. 120-124.
22. Mezirow, J. *Transformative Dimensions of Adult Education.* San Fransisco: Jossey – Bass, 1991
23. Moon, J.A.. Reflection in Learning and Professional Development: Theory and Practice. London: Routledge Falmer, 2008
24. Smith, D. Educating the Reflective Practitioner in Curriculum. *Curriculum,* 12(2), 1991. 115-124
25. Smyth, J.. Developing and Sustaining Critical Reflection in Teacher Education. *Journal of Teacher Education,* March-April, 1989, pp.2-9.
26. Stanikūnienė, B. *Aukštosios mokyklos dėstytojo edukacinės kompetencijos ir mokymosi aplinkų santykis.* Daktaro disertacija, Kauno technologijos universitetas, 2007.
27. Stanikūnienė, B., Jucevičienė, P. The theoretical model of the potential learning environment of higher education teacher. // Changes in Social and Business Environment : proceedings of the 2nd international conference, November 8-9, 2007, Panevėžys, Lithuania : selected papers / Kaunas University of Technology, 2007. p. 260-265.
28. Tautkevičienė, G. *Studentų mokymosi aplinkų susiformavimui iš universiteto bibliotekos edukacinės aplinkos įtaką darantys veiksniai.* Daktaro disertacija, Kauno technologijos universitetas, 2004.
29. Van Manen, M. Linking Ways of Knowing with Ways of Being Practical. *Curriculum Inquiry*, 6, 1977. P 205-28.

Brigita Stanikūnienė

REFLEKSIJOS LYGIS KAIP DĖSTYTOJO EDUKACINĖS KOMPETENCIJOS IR MOKYMOSI APLINKOS SANTYKĮ APIBRĖŽIANTIS RODIKLIS

Santrauka

Straipsnyje akcentuojama aukštosios mokyklos dėstytojo edukacinės kompetencijos ir refleksijos gebėjimų, kaip esminio minėtos kompetencijos elemento, svarba mokymosi paradigmos kontekste. Teoriškai pagrindžiama, kad skirtingi refleksijos lygiai rodo ne tik skirtingą mokymosi veikloje kokybę, bet ir skirtingą dėstytojo edukacinės kompetencijos ir jo mokymosi aplinkos santykį. Straipsnį sudaro trys dalys. Pirmoje dalyje atskleidžiamas ryšys tarp refleksijos ir mokymosi, akcentuojant prasmės kūrimo ir dėstytojo aukštesnio lygmens mokymosi procesus. Antroji dalis yra skirta refleksijos lygiams pagrįsti, išryškinant aukštosios mokyklos dėstytojo veiklos kontekstą ir edukacinės kompetencijos aspektus. Trečioje dalyje teoriškai pagrindžiama, kad kiekvienas refleksijos lygis rodo kokybiškai skirtingą santykį tarp dėstytojo edukacinės kompetencijos ir jų identifikuojamų mokymosi aplinkų. Kuo aukštesnis refleksijos lygis, tuo daugiau mokymosi situacijų dėstytojas identifikuoja savo mokymosi aplinkose, ir, savo ruožtu, mokymosi aplinkose įgyta reflektyvaus mokymosi patirtis praturtina edukacinę kompetenciją, dėstytojas efektyviau tobulina savo edukacinę aplinką kuriamą studentams, ugdo savo ir jų metamokymosi kompetenciją.

About the author

Brigita Stanikūnienė, Dr. in Educational sciences at the department of Management Sciences, Faculty of Management and Administration, Kaunas University of Technology, e.mail: brigita.stanikuniene@ktu.lt, tel. no. +370 612 38080; research interests: teacher education, reflective learning, human resource development in organizations.

APPLICATION OF VIRTUAL LEARNING ENVIRONMENT TOOLS FOR LEARNING IN COOPERATION

Nida Stankevičienė, Aldona Augustinienė, Aušra Židonytė
Kaunas University of Technology, Lithuania

Abstract

The article analyses whether possibilities for cooperation of virtual learning environments are enough applied. In order to find out the opinion of the respondents about advantages of synchronous tools of communication and cooperation when learning in distance, 13 statements were given. Virtual systematic learning where teaching/learning takes place only in distance form exists only in few Lithuanian secondary schools. The study of one case contributed to identifying that the respondents mostly used asynchronous tools, which were more meant to handle information, to evaluate knowledge, to observe the process of learning. The tool of forum as well as conversations in real time, video or audio conferences is not very often used. As group work takes place only in virtual environment and is not formally defined, pupils faced difficulties in identifying their roles in a group, to make common decisions and to understand the importance of a group goal. Main reasons why pupils do not participate in groups could be such that they like working individually, they are occupied enough, thus stronger motivation as well as teachers' encouragement to work together is necessary. The results of surveys show that pupils seldom use synchronous tools. Pupils are not subject to cooperate with each other, their individual benefit, their individual learning is more important for them. It could be explained so that teachers seldom form formal groups of virtual learning environment. When learning in a group pupils care for their own creativity, individual learning, experience acquired by learning in a group. Pupils most positively evaluated feedback of synchronous tools, flexibility of asynchronous tools, possibilities of reflection. Thus, when applying different tools of virtual learning environment, they should be more effectively and purposively exploited in order to induce deeper processes of learning.

Keywords
Virtual learning environment, learning in cooperation, learning environments, distance learning, synchronous and asynchronous tools of virtual learning environment.

Introduction

Implementation of virtual learning environments is an underlying goal of integration of new technologies into general education in most European countries: this is pointed out in the research on implementation and application of virtual learning environments at European schools performed by R. Vuorikari (2003), the analyst of European school network.

Modern educational and information technologies enable educators to create and apply teaching/learning scenarios and methods in educational environment favourable for pupils. The need to involve into educational process more new information technologies that enable learning "everywhere and always" as well the need to teach/learn in more handy forms that contribute to transforming the educational process into social interaction and cooperation increases. Integration of information and communication technologies into educational processes is related to learning paradigm that is more and more emphasised (Jucevičienė, Petkūnas, 2006), and enrichment of the educational environment (E. Butrimienė, N.Stankevičienė, 2008).

Tendencies of learning in cooperation within virtual environment were analysed and described by S. R. Hiltz, (1994), P. Dillenbourg, (1999, 2002), G. Hardaker, D. Smith, (2002), M. M. Kubo, R. Tori, C. Kirner (2002), R. Joiner (2004), V. Dagienė ir kt. (2004; 2005), I. Kollar, F. Fischer (2006), C. A. Collazos, L. A. Guerrero, J. A. Pino, S. Renzi, J. Klobas, M. Ortega, M. A. Redondo, C. Bravo (2007), V. Denisovas ir kt. (2007a; 2007b), S. Kubilinskienė, E. Kirilovas (2007), S. Tseng, C. Tsai (2007), E. Butrimienė, N.Stankevičienė (2008), Z. A. Reis, Z. Karadag (2008), and the authors disclosed features of knowledge production in cooperating within virtual learning environment. Changes of learning paradigm and aspects of knowledge management when learning in cooperation were analysed by R. Kuhlen (2003). M. Teresevičienė, G. Gedvilienė (1999, 2003) analyse learning in group, in cooperation in respect of personality development and alike.

In this context the following **problem questions** emerge: are possibilities of virtual learning environment to learn in cooperation sufficiently used? Are virtual learning environments created qualitatively? This research contributes to evaluating application of different virtual learning environment tools for learning in cooperation, as well as the relations between application of synchronous and asynchronous communication tools of virtual learning environment as well as abilities of learning in a group. **The research object:** application of different tools of virtual learning environment for learning in cooperation.

The aim of the article: to disclose possibilities for application of different tools of virtual learning environment for learning in cooperation.

The research methods.

1. Analysis of scientific literature is applied in analysing possibilities for application of virtual learning environment tools when learning in cooperation.

2. Case study. For the research the virtual learning environment of WebCT, which integrates the most general tools of virtual learning environment, was chosen. Respondents, who learn at a secondary school only by distance method, were chosen.

3. Survey-in-written was carried out in order to identify application of different tools of virtual learning environment for learning in cooperation. Non-standard questionnaire consisted of closed, rating questions.

4. Analysis of the survey-in-written statistical data was carried out by applying methods of statistical and correlation analysis. The data were processed by the software SPSS 12 (Statistical Package for Social Sciences 12).

The first part of the article reveals theoretical possibilities to apply virtual learning environment tools for learning in cooperation. The second part presents results of the case analysis – correlation relations of application of synchronous and asynchronous communication tools in virtual learning environment and abilities of learning in a group.

Possibilities for application virtual learning environment tools for learning in cooperation

By socio-cultural constructivism viewpoint (Vygotsky, 1978), learning is a social process, which emphasises pupil's activity as well as impact and help of social environment, in which a pupil learns. According to the ideas of social constructivism, one of the main goals of virtual learning is to induce active social interaction of pupils and a teacher and to learn in cooperation.

As J. Roschelle and S. Teasley (1995, p. 70) state, „cooperation is coordinated synchronous activity, which is inspired by common wish of process participants to solve a problem". This definition discloses two activities: a problem is being cooperatively solved and decision-making. Both activities require continuous communication, reciprocal understanding of community members.

Learning in cooperation is such model of teaching, which strives not only to help learners to acquire academic knowledge and skills, but also involves important social (communication) aims and objectives (Butkienė, Kepalaitė, 1996). The essential condition for successful development of social abilities within a group is open and earnest communication among group members (Gedvilienė, 2008). During learning in groups, group members make decisions, which are important for group activity to attain common goal. According to V. Stanišauskienė (2006), social competence involves many and different abilities: to communicate, to cooperate and act in social environment as well as to reflect. Person's values are important because they determine reciprocal understanding, maintains closer communication environment, and facilitates the process of learning in cooperation. It is very important that learners would possess the following social abilities and skills: to be able to clearly express own thoughts, to attentively listen, to take responsibility in solving assignments, to agree with others. Prescriptive meaning of learning in cooperation (Dillenbourg, 1999) is learning effectiveness, striving for which it is suggested for two or more people to cooperate.

Psychological meaning of learning in cooperation is descriptive: two or more people learn and cooperation is the means that invokes learning. The phrase *learning in cooperation* defines the situation where it is expedient that interaction of people will evoke learning. However there is no guarantee that this expedient interaction will really occur. It is possible to expand interaction's probability in four ways: (1) by creating internal conditions, (2) by describing roles; (3) by supporting productive interaction with communication means; (4) by monitoring of interaction, feedback and regulation (Dillenbourg, 2000).

In learning by cooperation information and communication technologies can help as cognitive tools, which develop cognitive abilities, and as innovative communication tools, which induce higher level of socialisation. Researches of computerised teaching show that computer environment of teaching/learning stimulates pupil's activity (Scardamalia et al., 1989). Work with computer is interactive: a pupil presses keys and observes the result of this action on computer's screen; in computer environment a pupil is given assignments that require fast reaction – to answer questions, to visit one or another place of the programme. Information educational system based on information communication technologies and computer networks is virtual learning environment (further VLE), in which learning process as well as interaction of learners and educators takes place (Balbieris, Kriščiūnienė, ir kt., 2005 Kubilinskienė, Kirilovas, 2007, Butrimienė, Stankevičienė, 2008).

M. M. Kubo, R. Tori, C. Kirner (2002) get deeper into the expression of cooperation processes in virtual environment. According to them, virtual educational environment of cooperation envisages active cooperation among learners and educators by interacting and hoping to exchange knowledge and to develop abilities. Learning becomes the process, in which participants help each other wishing to attain the goal, exchange experience, dialogue, and discussions of ideas, group achievements as well as individual work, which are also exchanged with the group. In this way knowledge-based corporate interest is being created. In order that learning in cooperation would take place, learners of the course in virtual learning environment need a stimulus, which would induce discussions, quarrels, sharing of suggestions, etc. According to M. M. Kubo, R. Tori, C. Kirner (2002), an educator suggests as many as possible different stimuli (incentives) in order to help learners to create their own knowledge.

The phenomenon of "stimulus and answer" of these scientists remind the theory of behaviouristic stimulus and reaction; however here it is possible to envisage another paradigmatic viewpoint. In this case stimulus and reaction is not considered the basic means of teaching; it is the most important to induce the wish to socially act and cooperate. This phenomenon is based on production of knowledge, abilities, experience, what its is characteristic to constructivist viewpoint to learning. When learning and cooperating in virtual learning environment, externalised knowledge is produced – so this is the meaning of cooperation in virtual environment (Hardaker, Smith, 2002).

In virtual learning environments used for distance learning an entire educational process takes place: entire content of a course or module is presented, communication takes place in forums of discussions, conversations and by e-mail, acquired knowledge and abilities are checked by computer tests as well as are evaluated by automatic means, etc. (Jasutienė, Garkauskaitė, 2004).

Cooperation in virtual environment is not easy, as R. Joyner (2004) states: communication by itself will not produce effective communication, it is necessary to create environments of teaching/learning in cooperation in order to induce pupils for communication, as well as it is necessary to form communication abilities and skills. In order that processes of learning in cooperation would take place and learners would learn in cooperation, a teacher's role is very important. Referring to constructivist viewpoint to learning, a teacher must create environment so that a learner could get deeper into own previous knowledge and experience, actively process knowledge and relate new information to new authentic and meaningful context (Teresevičienė, Gedvilienė, 2003; Sahlberg, 2005; Tautkevičienė, 2004). Virtual learning environment requires greater inducement from an educator for pupils to communicate and cooperate by applying the tools of virtual learning environment, especially when education takes place in distance way and learners do not meet in traditional classes.

Figure. 1. Model of learning in cooperation in VLE (A.Židonytė, 2008)

In the model presenting learning in cooperation in virtual learning environment (see Fig. 1), learning in cooperation is important considering it in several perspectives: individual learning in VLE and learning in cooperation in VLE.

In order that learning in cooperation in virtual environment would take place, first of all individual learning and social interaction must take place. Learners also have to be able to use information technologies and develop their skills and abilities by sharing their experience and acquiring new knowledge.

Table 1

Possibilities for application of synchronous tools of cooperation in virtual learning environment for learning in cooperation

Features	Possibilities and limitations
Motivation	Conveyed emotions (in writing „faces", verbal or visual) enliven learning
	Perfectly fits for corporate activity (to discuss assignments, projects)
	Direct communication makes a class more united
Tele-participation, interactivity	When actively discussing, quarrelling, giving questions, pupils learn more effectively than when corresponding by e-mail
	It is possible to actively participate in reordering given material by inserting own comments
Feedback	Problems are more effectively solved because it is possible to faster come and explain an agreement
	It is much faster and easier to make corporate solutions
	It allows fast responsive reaction of a teacher on actual issues of learning
	It allows fast responsive reaction of friends
Pace	It is easy to follow a lesson and get involved into it
	When communicating directly, it harder to react fast
	Tools of direct communication induce keeping pace with other classmates
	Direct communication distracts, deflects from an assignment, hinders concentration

Usually virtual learning environments have two-type means of communication and cooperation: synchronous and asynchronous. Synchronous means – is communication of real time when a direct relation emerges among consumers, for example, conversation in the network, an electronic board.

In the research the following synchronous tools of teaching/learning in the WebCT virtual environment were

applied: videoconferences, conversations in real time, a white board.

Possibilities provided by synchronous tools of virtual learning environment are summarised in Table 1. As it was mentioned above, these tools induce motivation, interaction, they contribute to attaining good feedback and to individualise the pace of learning.

Possibilities provided by asynchronous tools of cooperation in VLE are summarised in Table 2. These tools distinguish in flexibility, possibilities for reflection and favourable conditions of application learning experience in activity.

Asynchronous communication and cooperation can take place not necessarily at the same time. In virtual environment a consumer can present own information at any time. Later it will be available for everyone who uses this system, for example, an electronic school daybook and alike.

Table 2

Possibilities for application of asynchronous tools of communication in VLE for learning in cooperation

Features	Possibilities and limitations
Flexibility	It is possible to control own learning process, communication by connecting to the system at convenient time for myself
	It is possible to coordinate learning to a situation of daily rhythm of own life
	Teachers (tutors) can consult not during a subject lesson as well
Possibility for reflection	There is more time to meditate, to think over own work, experience
	Indirect communication help to concentrate
Conditions to apply learning experience in the activity	When communicating indirectly, you can postpone works, assignments for some time
	At e-courses a pupil finds a lot of new things that could be applied in his/her daily activity

In this research the following asynchronous tools of teaching/learning applied in the WebCT virtual environment were applied: e-mail, forums of discussions (these are network fields, in which discussions take place in a written form) a calendar, a notice board that presents information about terms to perform tasks, planned meetings, synchronous communication and alike, a grade-book, means for argumentation when a person can present own thoughts as well as arguments by pictures, geometric figures by inserting comments, indicating links between comments and alike, personal pages, a vocabulary.

As it is evident, the process of learning in cooperation also needs the interaction between a teacher and pupils by applying chosen active methods of learning. All distinguished abilities and skills are significant for processes of learning in VLE. They are closely interrelated and complement each other.

Correlation relations of application of synchronous and asynchronous communication tools in virtual learning environment and abilities of learning in a group

The organisation of the research and the research sample. The empirical research was carried out in order to estimate possibilities for application of different tools of virtual learning environment in learning in cooperation (this publication is based on the empirical research carried by A. Židonytė (2008). In order to perform the

research, the method of survey-in-written was chosen. The research instrument consisted of two questionnaires meant for pupils and teachers. Both questionnaires consisted of presentation (introductory), diagnostic and demographic blocks. The presentation (introductory) part explains the aim of the research. Each question has the explanation how to fill it in, if it is necessary – further guidelines.

The research population consisted of the respondents from an X secondary school – the pupils who learn only in distance way.

The website of this school state that the school carries out the projects financed by the Republic of Lithuania and the European Union "The course of distance teaching/learning for the 8th-9th forms" and "The course of distance teaching/learning for the 10th–12th forms". A course of each form is divided into lessons and is adapted for specific requirements of ICT. Lessons are interactive; pupils' works are evaluated and reviewed in communicating by electronic mail and "Skype".

At electronic lessons there are a lot of audio and video material, self-control and control tests, additional website addresses. For teaching this school uses the virtual environment of WebCT, and qualified employees prepared the courses.

Having coordinated the research with the school principal and by cooperating with form tutors, two types questionnaires were sent out by e-mail to pupils and teachers of an X secondary school. Out of 185 questionnaires 127 were returned (feedback 68.6 percent). The research sample consisted of 102 pupils who studied the subjects presented in virtual learning environment by distance learning.

In analysing demographic data of the pupils obtained during the research at an X secondary school, it was identified that among 102 respondent-pupils were mostly of female gender (62.7 percent). Most answers were given by 11th-form pupils (44.1 percent), 10th-form pupils were active enough, and 8th-form pupils formed the least group of the respondents (13.7 percent).

Analysis of the research results. In order to find out the opinion of the respondents about advantages of **synchronous** tools of communication and cooperation when learning in distance, 13 statements were given. Most respondents (83.3 percent) agree that when using these tools *problems are more effectively solved* because it is possible to faster come to and to find an agreement. 66.7 percent of the respondents also agree with the statement *It is easier and faster to make corporate decisions*. More than a half of the respondents (66.7 percent) positively evaluated the statement that tools *enable fast a responsive reaction of a teacher on actual issues of learning*. More than a half of the respondents (58.9 percent) think that *tools enable fast responsive reaction of friends*. Thus it is good **feedback** of the system.

Even 81.4 percent of the respondents think that the **synchronous** tools of communication and cooperation *perfectly fit to discuss corporate activity (assignments, projects);* 78.5 percent of the respondents think that *direct communication make a class more united*. As D. Rutkauskienė (2007) states, synchronous system

stimulates **motivation** of group learning, it is the stimulus to keep pace with their colleagues and to consistently continue their studies. A bit more than a half of the respondents (59.8 percent) distinguishes the advantage of **tele-participation** because *it is possible to actively participate in rearranging the given material by inserting own comments*. Quite a big percent of the answers (38.2 percent) were neutral, this could be explained so that a part of the respondents seldom uses synchronous tools or they do not know how to use it purposefully. The statement *By active discussions, quarrels, asking questions we learn more effectively than by writing electronic letters* was positively evaluated by more than a half of the respondents (60.7 percent). More than a half of the respondents (59.8 percent) evaluated the features of tele-participation of synchronous tools by agreeing to the statement *It is easy to follow a lesson and get involved into it*. When using synchronous tools a half of the respondents (51 percent) do not want to lose the pace of their classmates. It is possible to assume that tele-participation is an important feature of synchronous tools, which stimulates learning and keeping pace; however some respondents seldom use these tools.

In analysing the opinion of the respondents about **advantages** of **asynchronous** tools of communication and cooperation when learning in distance, it was noticed that even 97.1 percent of the respondents think that when using asynchronous tools they *handle the process of their learning, communication by connected to the system at convenient time for them*. Most respondents (88.3 percent) agree that *they can tune their learning to their life situation*. Thus the system distinguishes in the feature of **flexibility**. The greater part of the respondents (95.1 percent) positively evaluate **favourable conditions** to apply learning experience in own activity – by communicating by means of indirect tools they can postpone assignments for later time. Most respondents (90.2 percent) positively evaluate the **possibility to reflect** – they have more time to think over and to reflect their work, experience. Though the opinions of the respondents differed (25 percent) in evaluating teachers' consultations not during a subject lesson, most respondents (79.5 percent) agreed with the statement. It is possible to think that more positive evaluation of asynchronous tools can be due to too seldom application of synchronous tools when learning.

In summarising the opinions of the respondents about advantages of synchronous and asynchronous tools of communication and cooperation when learning in distance, it is possible to state that the respondents most positively evaluated the feedback of synchronous tools. In most statements a rather distinctive observed divergence of the opinions shows that some pupils seldom use these tools or they do not use them at all. The respondents most positively evaluated the following features of asynchronous tools: flexibility, favourable conditions to adjust learning experience in own activity as well as a possibility to reflect.

In order to identify pupils' **abilities of group learning** in virtual learning environment, it was estimated in what size of **groups** pupils work (small – up to 6 people, middle or bigger than 12 people), how pupils understand **group goals**, what their **roles are when working in a**

group, their viewpoint to **ideas' generation, creativity, individual learning in a group**, the statement were presented, and the respondents expressed their approval and disapproval. The statements were evaluated by 47 respondents who pointed out that they participated in groups.

Great approval (91.5 percent) was given to the statement *Innovations give for me a possibility to develop, to advance*, as well as most respondents (95.8 percent) think that *when analysing and discussing the information is better memorised*. 83 percent of the respondents assume that *they can apply the acquired group experience in their practical activity*. Thus it is possible to point out that when learning in a group their creativity, individual experience and acquired experience is important for pupils. The opinions of the respondents split (V=27 percent) on the criterion of ideas' production; it was positively evaluated by 46.8 percent of the respondents. Also they are not sure (V=28 percent) whether when learning in a group they get new ideas, it is positively evaluated by 59.6 percent of the respondents, and neutrally – 29.8 percent. Perhaps it happens so because pupils do not solve creative assignments or are closed and do not share ideas with each other. When working in a group most respondents (76.6 percent) are active and listen to opinions of others. The respondents evaluate their roles in a group; differently understand the importance of common and individual goals (V=35–48 percent). It is possible to assume that pupils do not work closely in groups. This variety of the opinions can be explained so that only a part of teachers form virtual groups, and it is not clear whether they are formally and clearly defined for pupils. This would mean that pupils when answering the questions about their roles in a group consider the group of corporate learning created and imagined by them as datum-level. As group work takes place only in virtual environment and it is not formally defined, they face difficulties in identifying their roles in a group, taking common solutions and understanding the importance of a group goal.

Correlation analysis. Reliable and strong correlation relations were sought between **synchronous tools of virtual learning environment applied for learning and skills of learning in a group** (see Table 3).

A very strong and reliable correlation relation (0.5<r<=0.7; p≤0.001) allows assuming that the more frequently synchronous tools (conversations in real time and videoconferences) are applied for communication and cooperation the easier it is to produce new ideas. A relation is also observed in application of synchronous tools to lead in a group though the correlation relation is not very reliable but strong enough (r=0.4; p≤0.01).

Table 3

Correlation relations between synchronous tools of virtual learning environment applied for learning and abilities of learning in a group (N=47)

	Leading a group	Striving for group goals	Listening to opinions of others	Tension in communicating in a group	Vocation for competing	A passive observer	Domination	Production of new ideas	Receptivity of new ideas
Conver-sations in real time	0.4	0.0	0.3	−0.4	−0.2	−0.3	0.1	0.6	−0.1
	*			**		*		***	
Videoconferences	0.4	0.1	0.3	−0.4	−0.2	−0.3	0.2	0.6	0.1
	**		*	**		*		***	
White board	0.0	0.3	−0.2	−0.1	0.3	−0.2	0.2	0.0	0.0
		*			*				

Note: the table presents correlation coefficients, which are statistically significant in the following levels:
p ≤ 0.001*** 0.5 < r <= 0.7; p ≤ 0.01** 0.3 < r <= 0.5
p ≤ 0.05* 0.2 <= r <= 0.3

A moderate strength (0.3<r<=0.5) inverse relation (p≤0.01) between synchronous tools and tension when working in a group was diagnosed. It is possible to think that the more tools of direct communication are applied the less tension is when working in a group. A fairly strong inverse interrelation (0.3<r<=0.5; p≤0.001) between conversations in real time and application of acquired group experience in own practical activity was determined. The respondents do not think that *group experience can be applied in their activity or by directly working in a group;* they do not feel *having acquired group experience* by using this tool. This can mean that group work is anyhow individual enough.

A fairly weak and less reliable inverse interrelation (0.2<=r<=0.3; p≤0.05) between the frequency of application of videoconferences and *application of acquired group experience in own practical activity* was identified.

A weak inverse less reliable correlation relation (0.2<=r<=0.3; p≤0.05) between the frequency of application of synchronous tools (conversations in real time and videoconferences) and *passivity* was identified. It is possible to assume that the more frequently these tools are applied the more active pupils are when working in a group. An interesting weak correlation relation (0.2<=r<=0.3; p≤0.05) was identified between the usage of a white board and *inclination to compete*. As pupils seldom use a white board, so those who know how to use it can feel more superior to others and can show this. The emulation induces contention and competition when communicating and working in a group; this can make positive impact upon individual results of learning, however corporate activity suffers (Šiaučiukėnienė, Stankevičienė, 2002). Experimental researches have shown that structures of cooperation aim (the activity when people work together and strive for corporate aims) are more efficient than structures of emulation. Learners sincerely cooperate in sharing their experience; they do not compete and strive for an individual and common goal. Thus competition can cause some harm for a group as well. However it was observed that a white board though weakly (0.2<=r<=0.3; p≤0.05) but correlates with the ability to attain group goals. It is possible to think that pupils, who more frequently us a white board, understand the importance of group goals against individual goals. This feature is useful for a group.

Reliable and strong correlation relations were sought for between **asynchronous tools of virtual learning environment applied for learning and skills of group work** (see Table 4).

A very strong and reliable inverse correlation relation (0.5<r<=0.7; p≤0.001) between e-mail and the statement *I*

most frequently lead was identified. Thus it is possible to suppose that the more this tool is used the less tendency to lead when working in a group is. It could be explained by the logic because such communication is not direct. A strong and statistically reliable interrelation (r = 0.5, p≤0.001) between used tool of e-mail and the statement *I listen to others and I am a passive observer* as well as a statistically strong and reliable inverse correlation relation between the tool of e-mail and the statement *It is easier for me to produce new ideas* was obtained (r= 0.5, p≤0.001). Thus, in analysing the obtained data, it is possible to assume that the more frequently an asynchronous tool – e-mail – is used, the weaker generation of new ideas is as well as the more passive participation in group work is.

In analysing correlation relations of the forum tool, a strong and reliable inverse interrelation (r=–0.6; p≤0.001) between forums and the statement *I feel tension* was identified. Thus it is possible to assume that they do not feel tension when using forums because indirect communication gives more time, as well as to think over a situation longer and to evaluate it. It is possible to assume that the identified moderate interrelation (r=0.4, p≤0.01) between forums and *creation of new ideas* as well as inverse moderate relation (r=–0.4, p≤0.01) between frequency of forum use and *receptivity for new ideas* show that when applying forums it is easier to produce ideas than when communicating by e-mail. It is possible to suppose that discussions in a group are not deep and pupils are not involved very much because they do not produce ideas together and do not exchange ideas with one another. When working together, they only easier produce ideas. Here it is possible to envisage search for personal benefit while group learning is more oriented to personal interests. This is also proved by rather strong and reliable inverse interrelation (r=–0.5, p≤0.001) between forums and the statement *I can apply the acquired experience in my practical activity*. Here the problem of group learning emerges because pupils neither acquire group experience, nor they do not consider new experience to be important. It could be that group experience is not applied in further learning.

In analysing relations of a calendar and a grade-book to skills of learning in a group, it was noticed that perhaps application of these tools diminished tension, pupils are not inclined to lead because these tools are rather used individually. And the correlation of moderate strength (r=0.4; p≤0.01) shows the relation of these tools to *receptivity for new ideas*. The use of calendar can impart some information about the processes taking place within a group, as well as learning, terms for performance of assignments, a grade-book – grades. Thus the respondents could understand creation of new ideas as acceptance of new information from a group.

Table 4

Correlation relations between asynchronous tools of virtual learning environment used for learning and skills of learning in a group
(N=47)

	Leading a group	Striving for group goals	Listening to opinions of otherss	Tension in communicating within a group	Vocation for competing	A passive observer	Domination	Production of new ideas	Receptivity of new ideas	I treat innovations as a possibility to develop, to advance	When analysing, discussing, the information is better memorised	I can apply the acquired group experience in own practical activity
E–mail	–0.6 ***	0.1	–0.2	–0.1	–0.3	0.5 ***	–0.3 *	–0.5 ***	–0.1	–0.1	–0.1	0.0
Forums	0.1	0.2	–0.3	–0.6 ***	–0.1	0.1	0.1	0.4 **	–0.4 **	–0.2	0.0	–0.5 ***
Calendar	–0.4 **	–0.2	–0.1	0.7 ***	–0.2	0.2	0.1	0.0	0.4 **	–0.2	–0.3 *	0.3
Grade-book	–0.5 ***	0.1	–0.2	0.5 ***	–0.2	0.2	0.3 *	0.0	0.4 **	–0.2	–0.1	0.4 **
Assignments	0.1	0.0	0.1	0.1	–0.2	–0.3	0.1	0.3	–0.1	0.2	–0.4 **	–0.4 **
Tests	–0.1	–0.1	–0.1	0.2	–0.5 ***	–0.2	–0.2	0.0	0.1	–0.1	–0.4 *	–0.2
Questions for checking knowledge	–0.1	0.2	0.0	0.3 *	–0.1	–0.1	0.5 ***	0.3 *	0.4 **	0.2	–0.1	0.2
Vocabulary	–0.4 **	0.2	–0.1	–0.1	–0.4 *	0.3	–0.1	–0.2	0.0	0.0	–0.2	–0.1
Personal pages	0.2	0.0	0.2	–0.1	0.0	–0.1	0.2	0.4 **	0.3 *	–0.1	–0.1	0.0

Note: the table presents correlation coefficients that are statistically significant in the following levels:
p ≤ 0.001*** 0.5 < r <= 0.7; p ≤ 0.01** 0.3 < r <= 0.5; p ≤ 0.05* 0.2 <= r <= 0.3

The research reflection. Having performed the research, it is possible to summarise that virtual systematic learning where teaching/learning takes place only in distance form exists only in few Lithuanian secondary schools. The study of one case contributed to identifying that the respondents mostly used asynchronous tools, which were more meant to handle information, to evaluate knowledge, to observe the process of learning. The tool of forum as well as conversations in real time, video or audio conferences is not very often used. As group work takes place only in virtual environment and is not formally defined, pupils faced difficulties in identifying their roles in a group, to make common decisions and to understand the importance of a group goal. Main reasons why pupils do not participate in groups could be such that they like working individually, they are occupied enough, thus stronger motivation as well as teachers'

encouragement to work together is necessary. Teachers do not form groups because not all learners can equally get involved into group work; cooperation takes a lot of time. However pupils indicate that skills of learning in cooperation will be important for them in the future. Thus, when applying different tools of virtual learning environment, they should be more effectively and purposively exploited in order to induce deeper processes of learning.

Conclusions

- In learning by cooperation information and communication technologies can help as cognitive tools, which develop cognitive abilities, and as innovative communication tools, which induce higher level of socialisation. The process of learning in cooperation needs the interaction between a teacher and pupils by applying chosen active methods of learning. Computer environment of teaching/learning stimulates pupil's activity. Possibilities provided by synchronous tools of virtual learning environment are motivation, tele-participation, interaction, they contribute to attaining good feedback and to individualise the pace of learning. Asynchronous tools of cooperation in VLE distinguish in flexibility, possibilities for reflection and favourable conditions of application learning experience in activity.

- Having performed the empirical research on application of different virtual environment tools for learning in cooperation, some problems emerging when applying virtual tools for learning in cooperation were identified. The results of surveys show that pupils seldom use synchronous tools. Pupils are not subject to cooperate with each other, their individual benefit, their individual learning is more important for them. It could be explained so that teachers seldom form formal groups of virtual learning environment. When learning in a group, pupils care for their own creativity, individual learning, experience acquired by learning in a group.

- Most positively pupils evaluated feedback of synchronous tools; they agreed that the tools induced their motivation for learning. Tele-participation is an important feature of synchronous tools; it induces learning, keeping pace, but part of the respondents seldom use these tools.

- Most positively pupils evaluated flexibility of asynchronous tools, favourable conditions to apply learning experience in their activity, as well as possibilities to reflect. By means of forums pupils do not feel tension because indirect communication gives more time, it gives possibility to think longer and to evaluate a situation; they create ideas at forums easier than when communicating by e-mail.

References

1. Balbieris, G., Kriščiūnienė, N., Muraškienė, D., Urkis, M., Vaskela, G., Verseckas, A., Verseckas, V., Sederevičiūtė, E. Virtualioji mokymosi aplinka mokyklai. 2005.
2. Butkienė, G., Kepalaitė, A. Mokymasis ir asmenybės brendimas. Vilnius: Margi raštai. 1996.
3. Butrimienė, E., Stankevičienė, N. Edukacinės aplinkos turtinimas informacinėmis ir komunikacinėmis technologijomis. Kauno medicinos universiteto Farmacijos fakulteto situacija / Enrichment of the educational environment with information and communication technologies: state of art at the Faculty of Pharmacy of Kaunas University of Medicine. *Medicina*, 44 (2), 2008, p. 152–167.
4. Collazos, C. A., Guerrero, L. A., Pino, J. A., Renzi, S., Klobas, J., Ortega, M., Redondo, M. A., Bravo, C. Evaluating Collaborative Learning Processes using System–based Measurement. *Educational Technology & Society*. Vol. 10 (3), 2007, p. 257–274.
5. Dagienė V. ir kt. Tiriamojo darbo „Atviras kodas švietime" ataskaita. Vilnius. 2004. [Žiūrėta 2008–01–10]. Prieiga per internetą: http://www.ipc.lt/21z/duomenys/tyrimai/atviras proc.20kodas/ataskaita.pdf
6. Dagienė V. ir kt. Mokslinio tyrimo darbo „Mokomųjų kompiuterinių priemonių ir virtualių mokymosi aplinkų profesinio mokymo srityse diegimas". 2005.
7. Denisovas, V., Rauckienė, A.ir kt. Elektroninių paslaugų švietimui kitose šalyse analizė. Tyrimo ataskaita. Klaipėdos universitetas. 2007a.
8. Denisovas, V. Tijūnelienė O., Baziukaitė, D., Krūminienė, I., Jakutytė, D., Hage, R. Kitų šalių patirtis kuriant integruotą gamtos mokslų turinį IKT pagrindu analizė. Tyrimo ataskaita. Klaipėdos universitetas. 2007b.
9. Dillenbourg P. What do you mean by collaborative learning?. In P. Dillenbourg (Ed) Collaborative–learning: Cognitive and Computational Approaches. Oxford: Elsevier. 1999. p.1–19.
10. Dillenbourg, P. Over–scripting CSCL: The risks of blending collaborative learning with instructional design. 2002.
11. Gedvilienė, G. Socialinių gebėjimų dimensijos visa apimančiame mokymesi. Kaunas. VDU. Habilitacijos procedūrai teikiamų mokslo darbų apžvalga. 2008.
12. Hardaker, G., Smith, D. E–learning communities, virtual markets and knowledge creation. *European Business Review*. Vol. 14 (5), 2002. p. 342–350.
13. Hiltz, S. R. The Virtual Classroom: Learning Without Limits Via Computer Networks. Published in USA. 1994.
14. Joiner, R. Supporting Collaboration in Virtual Learning Environments. *Cyber Psychology & Behavior*. Vol. 7(2), 2004. p. 197–199.
15. Jucevičienė, P., Petkūnas, V. Edukacinės paradigmos kaita IKT diegimo įtakoje: mokytojo ir mokinio vaidmenų įvertinimo kriterijai. *Socialiniai mokslai*, Nr. 2 (52), 2006, p. 65–82.
16. Kollar, I., Fischer F. Collaboration scripts – a conceptual analysis. *Educational Psychology Review,* Vol. 18 (2), 2006. p. 159–185.
17. Kontautienė, R. Bendradarbiavimo sistema ir jos valdymas mokykloje. Klaipėdos universiteto leidykla. 2006.
18. Kompiuterinės leksikos aiškinamasis žodynas. (2005). [Žiūrėta 2009–04–28]. Prieiga per internetą: http://www.likit.lt/term/z2odynas.html.
19. Kubilinskienė, S., Kirilovas, E. Skaitmeninės mokymosi išteklių ir paslaugų bibliotekos diegimas Lietuvoje. Konferencija „Informacinių technologijų mokymas ir integravimo su kitais dalykais galimybės". 2007. Pedagogų profesinės raidos centras. [Žiūrėta 2008–01–10]. Prieiga per internetą: <http://discovery.ot.lt/linma/>
20. Kubo, M. M., Tori, R., Kirner, C. Interaction in Collaborative Educational Virtual Environments. *Cyber Psychology & Behavior*. Vol.5, No. 5, 2002. p. 399–407.
21. Kuhlen, R**.** Change of Paradigm in Knowledge Management – Framework for the Collaborative Production and Exchange of Knowledge. 2003. [Žiūrėta 2008–10–23]. Prieiga per internetą: http://www.ifla.org/IV/ifla69/papers/196e–Kuhlen.pdf.
22. Reis, Z. A., Karadag, Z. A proposal for developing online collaborative environment for learning mathematics. *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications*. 2008. p. 5123–5128.
23. Roschelle, J., Teasley, S. The construction of shared knowledge in collaborative problem solving. In O'Malley, C.E., (ed.), *Computer Supported Collaborative Learning*, 1995. p. 69–97. Springer-Verlag, Heidelberg.

24. Rutkauskienė, D. Nuotolinio mokymosi dėstytojo vadovas: mokomoji knyga. Kaunas: Technologija. 2007.
25. Sahlberg, P. Kaip suprantamas mokymasis. Konferencijos medžiaga. 2005. [Žiūrėta 2008–10–23]. Prieiga per internetą: http://www.mtp.smm.lt/dokumentai/InformacijaSvietimui/KonferencijuMedziaga/200505Sahlberg.doc.
26. Scardamalia, M., Bereiter, C., McLean, R. S, Swallow, J., Woodruff, E. Computer–supported intentional learning environments. *Educational Computing Research*, 5(1). 1989. p. 51–68.
27. Šiaučiukėnienė, L., Stankevičienė, N. Bendrosios didaktikos pagrindai. Kaunas: Technologija. 2002.
28. Tautkevičienė, G. Studentų mokymosi aplinkų susiformavimui iš universiteto bibliotekos įtaką darantys veiksniai: daktaro disertacija. Kauno technologijos universitetas. Kaunas. 2004.
29. Teresevičienė, M., Gentvilienė, G. *Mokymasis bendradarbiaujant*. Vilnius: Garnelis.1999.
30. Teresevičienė, M., Gedvilienė, G. *Mokymasis grupėse ir asmenybės kaita*. Monografija. Kaunas: Vytauto Didžiojo universiteto leidykla. 2003.
31. Tseng, S. Tsai, C. On–line peer assessment and the role of the peer feedback: A study of high school computer course. *Computers & Education*, 49, 2007, p. 1161–1174.
32. Židonytė, A. The Use of Different Virtual Learning Environment's tools on Collaborative Learning. Master's Work in Education science/ supervisor N. Stankevičienė, Kaunas University of Technology. - Kaunas, 2008. – 136 p.
33. Vygotsky, L. S. Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press. 1978.

Nida Stankevičienė, Aldona Augustinienė, Aušra Židonytė

Virtualios mokymosi aplinkos įrankių taikymas mokymuisi bendradarbiaujant

Santrauka

Straipsnyje analizuojama, ar pakankamai išnaudojamos virtualių mokymosi aplinkų bendradarbiavimo galimybės. Mokytis bendradarbiaujant informacinės ir komunikacinės technologijos gali padėti kaip kognityviniai įrankiai, kurie lavina pažintinius gebėjimus, ir kaip pažangūs komunikavimo įrankiai, kurie skatina aukštesnį socializacijos lygį. Informacinės komunikacinės technologijomis ir kompiuterių tinklais pagrįsta informacinė ugdymo sistema – tai virtuali mokymosi aplinka (toliau – VMA), kurioje vyksta mokymosi procesas ir besimokančiųjų bei ugdytojų sąveika, virtuali mokomoji bendradarbiavimo aplinka numato aktyvų bendradarbiavimą tarp besimokančiųjų ir ugdytojų, sąveikaujant ir tikintis žinių apsikeitimo ir gebėjimų kūrimo. Mokymasis tampa procesu, kuriame dalyviai padeda vieni kitiems, norėdami pasiekti tikslą, keičiasi patirtimi, dialogu, idėjų diskusijomis, grupės pasiekimais (laimėjimais) bei individualiu darbu, kuriuo taip pat pasidalijama su grupe. Taip sukuriamas žiniomis paremtas bendras domėjimasis. Šiame tyrime taikėme šiuos WebCT virtualioje aplinkoje naudojamus mokymo(-si) sinchroninius įrankius (vaizdo konferencijas, pokalbius realiame laike, baltąją lentą). Sinchroninių bendradarbiavimo VMA įrankiai žadina motyvaciją, sąveiką, padeda pasiekti gero grįžtamojo ryšio ir individualizuoti mokymosi tempą. Asinchroniniams bendradarbiavimo VMA įrankiams būdingas lankstumas, refleksijos galimybės ir palankios sąlygos mokymosi patirtį pritaikyti veikloje. Atlikus tyrimą galima apibendrinti, kad virtualaus sistemingo mokymosi, kur mokoma(si) tik nuotoliniu būdu, Lietuvos bendrojo lavinimo mokyklose yra labai mažai. Vieno atvejo studija padėjo nustatyti, jog respondentai daugiausiai naudojasi asinchroniniais įrankiais, kurie daugiau skirti informacijai valdyti, vertinti žinias, stebėti mokymosi procesą. Forumo įrankis nėra labai dažnai naudojamas, kaip ir pokalbiai realiu laiku, vaizdo ar garso konferencijos. Kadangi grupinis darbas vyksta tik virtualioje aplinkoje ir nėra formaliai apibrėžtas, mokiniams sunku identifikuoti savo vaidmenis grupėje, priimti bendrus sprendimus ir suprasti grupės tikslo svarbą. Pagrindinės priežastys, kodėl mokiniai nedalyvauja grupėse gali būti tai, kad jiems patinka dirbti individualiai, jie yra pakankamai užimti, taigi reikalingas stipresnis motyvavimas, mokytojų paskatinimas dirbti kartu. Mokytojai nekuria grupių, nes ne visi besimokantieji gali vienodai įsitraukti į grupės darbą, bendradarbiavimas užima daug laiko. Tačiau mokiniai nurodo, jog jiems mokymosi bendradarbiaujant gebėjimai ateityje bus svarbūs. Taigi, taikant skirtingus VMA įrankius mokymuisi bendradarbiaujant reiktų juos efektyviau ir sąmoningiau išnaudoti, skatinant gilesnius mokymosi procesus.

Raktažodžiai: virtuali mokymosi aplinka, mokymasis bendradarbiaujant, mokymosi aplinkos, nuotolinis mokymasis, sinchroniniai ir asinchroniniai virtualios mokymosi aplinkos įrankiai.

About the authors

Nida Stankevičienė, Ph.D. in Social sciences (Educational science), Associate Professor at Institute of Educational Studies, Faculty of Social Sciences, Kaunas University of Technology. Research interests: didactics, contemporary educational technologies, family education, systems of social security. E-mail: Nida.Stankeviciene@ktu.lt, tel. 8-(37) 300 135.

Aldona Augustinienė, Ph. D. in Social Sciences (Educational science), Head of the Centre for Gender Studies, lecturer at Institute of Educational Studies, Faculty of Social Sciences, Kaunas University of Technology. Research interests: didactics, educational psychology, career development; methodology of teaching the Lithuanian language and literature, gender studies. E-mail: minija@mail.lt, tel. 8-(37) 300 108.

Aušra Židonytė, Master of Social sciences (Educational science), Faculty of Social Sciences, Kaunas University of Technology. Research interests: educational technologies. Tel. 8-(37) 300 135.

IS THE DIVERSITY OF EMPLOYMENT FORMS AFFECTED BY BUSINESS CYCLES?

Gražina Startienė, Rita Remeikienė

Kaunas University of Technology, Lithuania

Abstract

The article dealt with the most common forms of employment - part-time work, temporary employment and self-employment - dynamics of the business cycle. The authors the spread of atypical/non-standard employment base on the demand, supply and institutional factors. Various studies have shown that the employment forms, unlike the overall level of employment, may vary in different ways, i.e. fall/rise while the economy is declining and growing. By Spearman's correlation coefficient, the relationship of forms of employment with the real GDP and the unemployment rate were calculated; the results showed that during the economic downturn the such standard forms of employment as full-time job, permanent job, employees and non-standard forms of employment such as employers and the self-employed prevailed in Lithuania, while during the economic growth, rose the activity of workers employed under temporary contracts.

Keywords
Atypical/non-standard employment, business cycles, employment forms.

Introduction

The relevance of the problem. One of the most important macroeconomic problems is increasing the employment, which is closely related to cyclical fluctuations, i.e. the employment rate directly depends on the current business cycle phase in the country (Šarkinienė, Kvainauskaitė, 2005).

On the present market conditions, scientists face difficulties in defining the concept of "active labour force" due to increasing number of labour forms in the labour market. If a few decades ago the main form of employment was a "full-time" work, now the term "atypical or non-standard work relationship" involving such employment forms as short-term rolling contracts, subcontracted work, casual work, temporary work, freelance work, self-employment, dependent self-employment, outsourcing, franchising, part-time work and etc., extends the concept of the active labour force market and at the same time makes scientists look for reasons of this diversity.

The research of interaction between employment and the business cycles was encouraged by the fact that in the scientific literature there are only few studies analysing the change of the forms of employment in the business cycle trends. General trends of employment level (unemployment, re-employment, self-employment) in different phases of business cycles were considered by both foreign (Lynch and Imbeni 2006; Rissman, 2006; Quadrini and Trigari, 2007) and Lithuanian (Šarkinienė, Kvainauskaitė, 2005; Navickas, Bagdonaitė, Jusčius, 2006; Adekola, Korsakienė and Tvaronaviciene, 2008) researchers who focused on the effects of the interaction of the analysed phenomenon in the certain sectors of the economy, in small and medium businesses, in groups of people of all ages, education, employment/unemployment experience, etc. The studies found that business cycles directly affect employment levels. When the business cycle is in the upturn the stage, the employment rate is the highest; and when the business cycle is in the depressive phase, the employment rate is the lowest. The question is raised how the forms of employment (full-time work or part-time work) vary in a particular business cycle phase, and which form is the dominant in the economic growth/depression?

The object of investigation – are the forms of employment and business cycles.

The aim of the article – is to identify the interaction between the business cycles and the employment forms, i.e. haw the forms of employment vary in different business cycle phases.

In order to achieve the aim, the following objectives were set:

1) To identify the factors that determined the diversity of employment forms;

2) On the grounds of the practice of different countries, to determine how employment forms change in individual business cycles.

3) To identify the interaction of the main economical factors and employment forms characterising the business cycle phases in Lithuania during 1998-2007.

Research methods: scientific literature and statistical data analysis, Spearman's correlation coefficient calculation.

Keywords: atypical / non-standard employment, business cycles, employment form.

Factors determining the diversity of employment forms

Standard employment (full-time work) ensuring full social protection and decent wages have reached the highest peak during the Second World War (Vosko, 2008), then followed the atypical/non-standard employment growth. According to the Eurostat (2008) data in European Union countries during 1998, part-time work accounted for 15.9 percent, 2007 reached 18.2 percent of total employment, temporary work in 1998 accounted for 11.5 percent, respectively, in 2007 - 14.5 percent of total employment.

Gunderson and Riddell (1999), Beneria (2001), Wenger and Kalleberg (2006) explains the changing nature of the work by supply side forces, demand side forces and institutional factors.

Despite the shortcomings of atypical employment (often smaller wage than of the standard employment, reduced social security, care for the bread and butter of the future,

non-income benefits, constant competition, employment discrimination), its the increase by many researchers (Yu, 2002; Paul and Townsend, 1998; Gunderson and Riddell, 1999; Vosko, 2008; Beneria, 2001; Remeikiene, Startiene, 2008) is associated with one of labour supply factor – the increase in women's participation in the labour market. This phenomenon has become one of the main reasons for non-standard employment, and especially for the spread of such employment forms as a part-time work, temporary employment or self-employment. The question is raised, why many women choose non-standard forms of employment? Such reasons as child rearing, domestic responsibility, managing child rearing and employment mostly determine the choice of non-standard work among women. Yu (2002) in their work argues that the patriarchal state (e.g., Japan), seeking to retain the model of "man-breadwinner", push women into non-standard employment. According to Alba-Ramirez (1998), Gottfired (2008) and Davis, Hernanz (2004) not only the factor of an increased female participation in the labour market, but also the employment of young, older and less educated persons determined the spread of non-standard employment.

Magnani (2003) the spread of a typical employment based on such demand factors as standardisation of the production process, increasing the efficiency of the business service industry at matching the client firm's needs and the labour market rigidities. Gottfried (2008) argues, globalization motivate the economic reasons why more firms have shed regular workers and hired non-standard employees to save personnel costs and supplementary benefits associated with regular employment. Such demand-side factors as global competition, trade liberalization, labour market deregulation, increasing flexibility of work process, technological change and innovation, industrial restructuring, greater capital mobility and prolonged recessions encouraged companies to seek new ways to support competitiveness. One of the alternatives is recruitment of contingent workers because it provides greater flexibility to compete in the changing market situations, the company reduces costs, since they are paid less, and the employer avoids training and promotion costs. Paul and Townsend (1998) distinguish the following reasons for the temporary employment of the employee: 1) at alleviate an overload of work) for example, major holidays, or at the time of harvest, 2) assistance with special project, which requires certain skills/experience or the massive efforts, 3) provide replacement help on a temporary basis, for example, in case of sickness, 4) seeking to verify a worker's suitability for full-time employment.

Scholars (Davis, Hernanz, 2004; Gottfried, 2008; Hillmert, 2002) examining the institutional factors that encourage non-standard employment growth, mainly focused on the individual country's employment policy. For example, after economic turmoil of 1970-1980 in Spain, government in order to reduce unemployment, especially among young people, introduced the temporary contracts. In Japan until 1980, country politicians did not even try to regulate the conditions of non-standard employment, but after the oil shock, when the economy began to rise, "Worker dispatching Law" governing the temporary employment in 1985 was adopted. In the UK in 1979, when Margaret Thatcher came to power, taxes were reduced, social security limited, the role of trade unions weakened, services market liberalised. This policy has influenced the emergence of flexible employment and led to part-time work growth.

It is important to note that the emergence of atypical employment and later the development of atypical were influenced by workers self-interest and motivation: job satisfaction (Ajay-Obe and Parker, 2005), supplement family income, flexible work hours, freedom of movement, change, a chance to meet new friends and limited responsibility (Paul and Townsend, 1998). For many of them non-standard work was the opportunity to retain their professional skills and not to lose the revenue source during economic downturn or a recession.

Having studied the various views, following key factors were excluded that lead to the development of atypical employment:

• increased number of women, youth, older and less educated persons in the labour market;

• Demand-side factors (globalization, trade liberalization, the production process of standardization, the introduction of new technologies, industrial restructuring, labour flexibility, capital mobility, etc.).

• The country's employment policy;

• The employee's personal interests and motivation.

The forms of non-standard employment and their change during the business cycle

Antonino (2007) argues there are three generally recognized non-standard employment forms: fixed-term contracts, temporary agency work and self-employment, but the most common are self-employment, part-time work and temporary employment (Vosko, 2008; Gottfried, 2008; Beneria, 2001).

Atypical employment concept is problematic, since each country uses different definitions of non-standard employment, and some non-standard forms of employment are consistent with each other. For example, temporary workers may be at the same time and part-time, night or shift work (Antonino, 2007). While the international "part-time work" definition is different (for example, in Finland, Canada and New Zealand, a person working 30 hours/weeks is considered to be a part-time worker; while in Australia, Austria, Iceland, Japan, Sweden and the United States such person is deemed to be the one employed 35 hours/weeks; accordingly, in Hungary and Turkey - 36 hours/weeks, in Norway - 37 hours/weeks, etc.). The statistical departments of various countries follow the concept of the ILO Convention no. 175: "the term" part-time worker "means an employed person whose normal hours of work are less than those of comparable full-time workers"; "*temporary employment*" comprises work under fixed-term contracts (OECD, 2007). Eurostat distinguishes three typical cases of temporary employment: a) persons with seasonal employment (mainly tourism and agriculture sectors), b) persons engaged by an agency or employment exchange and Hired to a third party to perform a specific task (unless there is a written work contract of unlimited duration), c) persons with specific training contracts.

Non-standard employment change in different business cycle phases in various countries were explored by scholars (Ajay-Obe and Parker 2005; Fenwick, 2008; Tremblay, 2008; Gottfried, 2008; Wenger and Kalleberg, 2006) who found that part-time work, temporary employment and self-employment rates may rise/decline in both economic phase growth and recession.

Ajay-Obe and Parker (2005) in their work claims that change in the non-standard employment forms can be partially determined by the business cycles: in 1991 British economy suffered a recession, during which the rate of temporary work, self-employment and multiple job has declined steadily until an economic upturn in 2000. During the economic slowdown in Spain (in the late eighties) atypical employment has increased due to temporary and fixed-term contracts validation and did not decline until economic recovery in 1998-2000 (Davia and Hernanz, 2004). Similar cases are explained by Gottfried (2008): even as the Japanese economy slipped into recession on the eve of the new decade, the temporary help industry grew except at the beginning of the Asian financial crisis. Quite the contrary results of the study in America showed that temporary employment is more sensitive to business cycles than the full-time employment, because temporary employees are much more likely to experience employment decline during a recession and increase during expansions (Wenger and Kalleberg, 2006).

Scientists (Remeikienė, Startienė, 2009; Rissman, 2006; Parker, 2004; Johansson, 2000; Muehlberger, 2007) examined the mutual relationship between entrepreneurship and unemployment, and found that regardless the business cycle phase in the country; self-employment can be a more useful alternative of gainful occupation. In the economic recession, the majority of workers choose self-employment due to the limited opportunities for employment or in order to avoid unemployment. On the other hand, people disappointed about their work conditions and wage, etc., choose self-employment during the economic recovery. Fenwick (2008) describes the recession in 1990, covering the Canadian economy, when people lose their jobs and went for self-employed contract work. Based on the National Longitudinal Survey of Youth in 1979 data, Rissman (2006) revealed that the U.S. discouraged wage workers are more likely to enter self-employment during economic downturns and are more likely to exit during economic expansions. In Finland in 1987-1989 (the boom years) the number of self-employed persons also increased (Ritsilä, Tervo, 2002). In related work, Paulson and Townsend (2005) find that in Thailand more new businesses were started around the time of the currency crisis in the late 1990s, suggesting that economic activity is an important factor in the decision to start a new business. Mandelman and Rojas (2007) in Argentina has carried out self-employment examination in different phases of the business cycle which revealed that during the economic recovery period (1996-1997) the number of persons who passed the from wage work to the "self-employment" significantly decreased and the reached the bottom during the economic upturn. The conclusion was made that the during economic prosperity, the self-employment is more viable for less educated, unable to find gainful employment; while during the recession, more educated people start their own business.

In summary, the majority of scientists agree on the fluctuations in overall level of employment in certain business cycles, however, they provide different study results of the connection between the different non-standard forms of employment and business cycle phase change. The diversity of results of the studies can be explained by the unique culture, different level of economic development and specific employment promotion policy in every country.

The interaction between business cycles and employment forms in Lithuania

Šarkinienė, Kvainauskaitė (2005) claim that the general business cycle development trends can be revealed by examining GDP and unemployment trends (see Figure 1), therefore, according to the article, during the analysed period (1998-2007) two phases can be distinguished: an economic downturn (1998-2001) and economic recovery / growth (2002-2007) phases[1]. In Lithuania during the analysed period, the dynamics of the prevailing standard (full-time work, permanent job, employees) and non-standard forms of employment (part-time work, temporary job, self-employed and employers) was uneven. During both phases of the business cycle, the highest percentage of employed was working full-time, had permanent jobs and were hired (see Figure 2). A comparison of GDP index and the employment curves of the full-time/ permanent/ employees, we see that they have the same trend, i.e. until 2001 it declined, and since 2002 it began to increase.
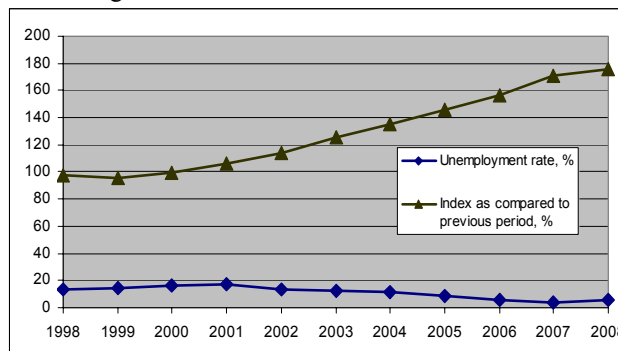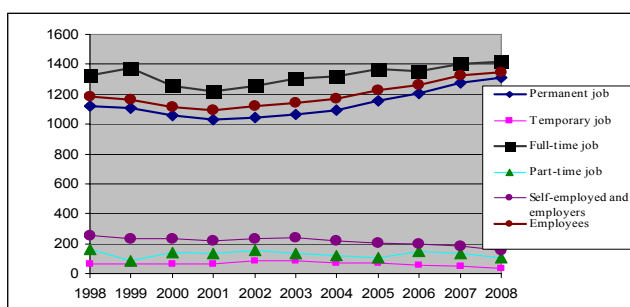

Source: Department of Statistics to the Government of the Republic of Lithuania

Figure 1. Dynamics of the GDP index and the unemployment rate in percent

Non-standard employment forms such as a part time work and temporary work changed unevenly (increased and decreased), while the number of employers and the self-employed persons during 2002-2003 was the highest (233.3 thousand and 242.8 thousand), and since 2004 continued to decline slowly

---

[1] the economic downturn began at the end of 2008, however, due to short time and the lack of data, it is not included into empirical calculations.

Source: Department of Statistics to the Government of the Republic of Lithuania

Figure 2. Change of standard and non-standard forms of employment in thousands

To establish how the standard and non-standard employment changes during different business cycle phases, the empirical the investigation will be carried out by using the data of Department of Statistics to the Government of the Republic of Lithuania describing the standard (full-time job; permanent job, employees) and non-standard (part-time job, temporary job, self-employment) forms of employment during the period of 1998-2007.

Business cycle indicators, classified into basic groups such as national income and product, cyclical indicators and other key indicators have been regularly published since the 1961 October by the U.S. Department of Commerce in the monthly magazine *Business Conditions Digest*.

Of the main business cycle indicators, the following economic indicators were selected for the survey: real GDP (from the group of national income and product) characterising the growth of economics (Lakstutiene, 2008) and the unemployment rate (from the group of the cyclical indicators).

For the maintenance of the general trend between the selected economic indicators and for the determination of employment forms Spearman's rank correlation coefficient is used[1] (Čekanavičius, Murauskas, 2004; Kruopis, 1993; Moore, 2000). The summary of the results are rendered in Table 1.

Table 1

The relation between employment forms and economic indicators (Spearman's coefficient during the phases of economic downturn and the recovery/growth)

	Downturn (1998-2001)		Recovery/growth (2002-2007)	
	Real GDP	Unemployment level	Real GDP	Unemployment level
Full-time employment	*-1,00000*	*-0,80000*	*0,94286*	*-0,94286*
Part-time employment	0,20000	-0,40000	-0,37143	0,37143
Permanent job	*-0,80000*	*-1,00000*	*1,00000*	*-1,00000*
Temporary job	0,00000	-0,40000	*-0,94286*	*0,94286*
Employees	*-0,80000*	*-1,00000*	*1,00000*	*-1,00000*
Employers and self-employed	*-0,80000*	*-1,00000*	*-0,94286*	*-0,94286*

[1] Spearman's correlation coefficient is used to investigate the relationships that may exist between the two variables in ascending or descending order. The closer value of the coefficient to +1 or -1, the higher mutual dependence (positive or negative), while 0 records absence of statistical relation

Analysing the forms of employment during the period of recession, the correlation shows the strongest links between the levels of unemployment and the standard forms of employment such as the full-time, permanent job, hired employment, and also the real GDP and the same forms of employment. Only one non-standard form of employment strongly correlated with the chosen economic indicators, i.e. employers and self-employed. During the recession, the rising unemployment rate in both standard and non-standard employment declined ($r_{Sfull-time}$ = -0,8; $r_{Spermanent}$ = -1; $r_{Semployees}$ = -1; $r_{Sself-employment}$= -1). The estimated negative correlation between real GDP and the standard and non-standard forms of employment, in the author's opinion, does not reflect the causality directly. It may be influenced by the factors not analysed in the study such as population, emigration, and etc. During the period of recovery/growth, strong correlations between the following variables were obtained:

- Real GDP and the full-time employment, i.e. during the increase in real GDP, full-time employment also increased ($r_{Sfull-time}$ = 0,9); unemployment level and full-time employment, i.e. when the level of unemployment decreased, the full-time employment increased ($r_{Sfull-time}$ = -0,9);
- Real GDP and the permanent employment, i.e. when real GDP increased, the permanent employment also continued to increase ($r_{Spermanent}$ = 1); unemployment level and permanent employment, i.e. when unemployment level decreased, the permanent employment continued to increase ($r_{Spermanent}$ = -1);
- Real GDP and temporary employment, i.e. when real GDP increased, temporary employment decreased ($r_{Stemporary}$ = -0,9). The trend could be determined by the fact that during the recovery / growth phase of the business cycle, many working-age people have more opportunities to find a steady work. That is also illustrated by the calculated relationship ($r_{Stemporary}$ = 0,9) between the levels of unemployment and temporary employment (when unemployment was falling, temporary employment decreased);
- Real GDP and the employees, i.e. when real GDP increase, level of employees also increased ($r_{Semployees}$= 1); unemployment and employees, i.e. when unemployment was falling, the level of employees was increasing ($r_{Semployees}$= -1);
- Real GDP and the level of employment of employers and the self-employed persons, i.e. when real GDP increased, the employment of employers and the self-employed persons declined ($r_{Semployers\ and\ self-employed}$= -0,9); the level of unemployment and the level of employment of employers and the self-employed persons, i.e. when the unemployment was falling, the level of employment of employers and the self-employed persons increased ($r_{Semployers\ and\ self-employed}$ = -0,9). These trends can be interpreted as follows: in recovery/growth phase, while GDP is increasing, the number of employers and the self-employed may reduce due to higher opportunities of

employment in hired work; the assessing from the unemployment side, the situation can be explained by "pull" assumption, which states that individuals will own the business, if a country's economic and business conditions will allow, thus reducing the unemployment rate. The assumption emphasizes that individuals tend to become self-employed when unemployment is low since a chance to return to wage labour are higher (Muehlberger, 2007).

Summarizing the results, it can be argued that, although during the recession the standard employment prevailed in Lithuania, the relation between the unemployment level and the employers and the self-employed persons has shown that during the period of the economic downturn, some persons decide to start own business because of the reduced employment opportunities in the labour market. During the recovery/growth phase the main standard forms of employment dominates, however, a strong correlation relationship between temporary employment and selected economic indicators was recorded, which allows the formation of the opinion that during the economic growth the demand for non-standard employment increases.

Conclusions

Having carried out the systematic literature analysis and empirical research, the following conclusions were made:

1. Development of non-standard employment throughout the world has been determined not only by external factors (demand, supply and institutional factors), but also by the non-standard work interest of the person himself. Although the standard employment ensures social security, constant and often higher salaries, non-standard employment provides opportunities for less demanded labour (women, youth and older people) find their place in the labour market, thereby reducing the existing gender and age differences.

2. Scientists of various countries carried out research of non-standard employment change during certain business cycle, however, failed to reveal the common trends of non-standard employment in different business cycle phases. The variety of study results show that the same non-standard forms of employment (for example, self-employment, and temporary work) may increase or decrease in business-cycle recovery/growth and the recession phase.

3. Empirical study found that during recession and recovery/growth phases in Lithuania, such standard and non-standard forms of employment as full-time employment, permanent job, employees, employers and the self employed prevailed. During the recovery/growth time, a strong correlation between employment and economic indicators was calculated which shows that during the economic prosperity labour market participants tend to engage themselves in non-standard work activities.

References

1. Adekola A, Korsakiene R, Tvaronaviciene M. APPROACH TO INNOVATIVE ACTIVITIES BY LITHUANIAN COMPANIES IN THE CURRENT CONDITIONS OF DEVELOPMENT. TECHNOLOGICAL AND ECONOMIC DEVELOPMENT OF ECONOMY, Volume: 14, Issue: 4, Pages: 595-611, Published: 2008.
2. Ajayi-Obe O., Parker S. C. The Changing Nature of Work among the Self-Employed in the 1990s: Evidence from Britain. Journal of Labor Research, Vol. XXVI, No. 3, 2005, p. 502-517.
3. Antonino E. Atypical Work and Health: Is there a relationship? Thesis, 2007, p. 74. Available at <http://www.tesionline.com/intl/thesis.jsp?idt=25311>
4. Alba-Ramirez A. How Temporary is Temporary Employment in Spain? Journal of Labor Research, 1998, Vol. XIX, No. 4, p. 695-710.
5. Beneria L. Shifting the Risk: New Employment Patterns, Informalization and Women's Work. International Journal of Politics, Culture and Society, 2001, Vol. 15, No. 1, p. 27-53.
6. Čekanavičius V., Murauskas G. Statistika ir jos taikymai, 2 dalis. Vilnius: TEV, 2004, p. 272.
7. Davis M. A., Hernanz V. Temporary employment and segmentation in the Spanish labor market: an empirical analysis through the study of wage differentials. Span. Econ. Rev, 2004, Vol. 6, p. 291-318.
8. European Commission Eurostat. Persons employed part-time - Total - (% of total employment). Available at <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00159&plugin=1>
9. European Commission Eurostat. Employees with a contract of limited duration (annual average) - (% of total number of employees). Available at <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00073&plugin=1>
10. Fenwick T. Women's Learning in Contract Work: Practicing Contradictions in Boundaryless Conditions. Vocations and Learning, 2008, Vol. 1, p. 11-26.
11. Fuller S., Vosko L. F. Temporary employment and Social Inequality in Canada: Exploring Intersections of Gender, Race and Immigration Status. Soc Indic Res, 2008, p. 31-50.
12. Gottfried H. Pathways to Economic Security: Gender and Nonstandard Employment in Contemporary Japan. Soc Indic Res, 2008, p. 179-196.
13. Gunderson M., Riddell W.C. The Changing Nature of Work: Implication for Public Policy. IRP-WORK2-907, 1999, p. 59. Available at <www.econ.ubc.ca/riddell/1chgnat.pdf>
14. Hillmert S. Deregulation of the Labor Market and Chances of employment in Great Britain. IAER, 2002, Vol. 8, no. 1, p. 1-9
15. International Labour Office. Report Form for the Part-time Work Convention 1994, No. 175. Available at <http://www.ilo.org/ilolex/english/reportforms/pdf/22e175.pdf>
16. Yu W. Jobs for Mothers: Married Women's Labor Force Reentry and Part-time, Temporary Employment in Japan. Sociological Forum, 2002, Vol. 17, No. 3, p. 493-523.
17. Kruopis J. Matematinė statistika. Vilnius: Mokslo enciklopedijų leidykla, 1993, p.416.
18. Lakstutiene, A. (2008). Correlation of the indicators of the financial system and gross domestic product in European Union countries. *Inzinerine Ekonomika-Engineering Economics*(3), 7-18.
19. Lynch L., Imbens G. Re-employment probabilities over the business cycle. IZA, Discussion Paper No. 2137, 2006, p. 45. Available at <ftp://repec.iza.org/RePEc/Discussionpaper/dp2167.pdf>
20. Magnani E. The Productivity Slowdown, Sectoral Reallocations and the Growth of Atypical Employment Arrangements. Journal of Productivity Analysis, 2003, Vol. 20, p. 121-142.
21. Mandelman F. S., Montes Rojas G. V. Microentrepreneurship and the Business Cycle: Is Self-Employment a Desired Outcome? Federal Reserve Bank of Atlanta, Working Paper, 2007. Available at <http://www.frbatlanta.org/filelegacydocs/wp0715.pdf>

22. Moore D. S. Statistics: Concepts and Controversies, Fifth Edition, New York: W.H. Freeman & Company, 2000.
23. Muehlberger U. Dependent Self-Employment. Palgrave Macmillan, 2007, p. 217.
24. Navickas V., Bagdonaite R., Juscius V. (2006). Business cycle and small business, ISSN 1392-2785, *Inzinerine Ekonomika-Engineering Economic(3)*, 36-42.
25. OECD Employment Outlook. Taking the Measure of Temporary Employment, 2002. Available at <http://www.oecd.org/dataoecd/36/8/17652675.pdf>
26. Paulson A. L., Townsend R. M. Financial constraints and entrepreneurship: Evidence from the Thai financial crisis. Economic Perspectives, Federal Reserve Bank of Chicago, Vol. 29, No. 3, 2005, Third Quarter, p. 34-48.
27. Parker S. C. The Effects of risk on Self-Employment. Small Business Economics, 1997, Vol. 9, p. 515-522.
28. Paul R. J., Townsend J. B. Managing the Contingent Workforce – Gaining the Advantages, Avoiding the Pitfalls. Employee Responsibilities Rights Journal, Vol. 11, No. 4, 1998, p. 239-252.
29. Quadrini V., Trigari A. Public employment and the business cycle. Scand. J. of Economics 109(4), 2007, 723-742.
30. Rissman E. R. The Self-employment duration of younger men over the business cycle. Economic Perspectives, Federal Reserve Bank of Chicago, Vol. 30, No. 3, 2006, Third Quarter, p. 14-27.
31. Ritsilä J., Tervo H. Effects of unemployment on New Firm Formation: Micro-Level Panel Data Evidence from Finland. Small Business Economics 19: 31-40, 2002.
32. Remeikiene R., Startiene G. Does the interaction between entrepreneurship and unemployment exist? Economics and management – 2009:14, ISSN 1822-6515, 903-911.
33. Remeikiene R, Startiene G. Gender Gap in Entrepreneurship. *Inzinerine Ekonomika-Engineering Economic(5)*, 95-103, 2008.
34. Šarkinienė E. Kvainauskaitė V. Verslo ciklų ir nedarbo lygio priklausomybė // Ekonomika ir vadyba-2005 = Economics and management-2005: tarptautinės konferencijos pranešimų medžiaga / Kauno technologijos universitetas. Ekonomikos ir vadybos fakultetas, Kaliningrado valstybinis technikos universitetas. Ekonomikos fakultetas. Kaunas: Technologija, 2005. ISBN 9955-09-893-7. p. 180-183.
35. Tremblay D. From Casual Work to Economic Security: The Paradoxical Case of Self-Employment. Soc Indic Res, 2008, Vol. 88, p. 115-130.
36. Vosko L. F. Temporary Work in Transitional Labor Regulation: SER-Centrism and the Risk of Exacerbating Gendered Precariousness. Soc Indic Res, 2008, Vol. 88, p. 131-145.
37. Wenger J. B., Kalleberg A. L. Employers' Flexibility and Employment Volatility. Ana analysis of the U.S. Personnel Supply Industry, 1972-2000. American Journal of economics and Sociology, Vol. 65, No. 2, 2006, p. 348-382.

Gražina Startienė, Rita Remeikienė

Ar užimtumo formų įvairovė yra veikiama verslo ciklų?

Santrauka

Straipsnyje nagrinėjamos labiausiai paplitusių užimtumo formų – darbo ne visą darbo dieną, laikino užimtumo ir savarankiško užimtumo – dinamika verslo ciklų metu. Autorės netipinio/nestandartinio užimtumo plitimą grindžia paklausos, pasiūlos ir instituciniais veiksniais. Įvairių šalių tyrimai parodė, kad užimtumo formos, skirtingai nuo bendro užimtumo lygio, gali kisti įvairiai, t.y. sumažėti/padidėti tiek ekonomikai krentant, tiek augant. Spirmeno koreliacijos koeficientu apskaičiuotas užimtumo formų ryšys su realiu BVP ir nedarbo lygiu parodė, jog ekonomikos nuosmukio metu Lietuvoje dominavo tokios standartinės užimtumo formos, kaip darbas visą darbo dieną, nuolatinis darbas, samdomieji bei nestandartinio užimtumo forma –darbdaviai ir savarankiškai dirbantys asmenys, ekonomikai kylant – išaugo darbuotojų, dirbančių pagal laikinas sutartis, aktyvumas.

About the authors

Gražina Startienė, Prof. Dr. of Social Sciences (Economics), Kaunas University of Technology, Economics and Management Faculty, Department of Economics and International Trade; e-mail grazina.startiene@ktu.lt, +370 37 300551, Financing of international trade, microeconomics.
Rita Remeikienė, PhD Student of Social Sciences (Economics), Kaunas University of Technology, Economics and Management Faculty, Department of economics and International Trade; e-mail rita.remeikiene@ktu.lt, +370 616 24114, employment and self-employment.

DEVELOPMENT OF A MANAGER COMPETENCY MODEL BASED ON McBer COMPETENCY DICTIONARY

Tadas Sudnickas

Mykolas Romeris University, Lithuania

Abstract

The article addresses the topic of the development of competency models, used in human resource management. Review of different competency models development approaches is presented together with a specific job competency model building method, based on McBer competency dictionary. The process starts with identification and prioritization of main job tasks and activities. Second step is competency/task mapping, using McBer Competency Dictionary as a guide. Focus groups of top performers consider competencies from a basket of 20 competencies and decide on acceptable competency and its appropriate level. The method is less time and effort consuming then the single-job competency model approach and at the same time it reflects special needs of any specific job.

Keywords

Competency, competency model, competency dictionary, leader, manager, human resource management

Introduction

Interest in what features and properties a supervisor or leader should possess lies from very old time. The initiator of a scientific investigation in this area could be considered Galton, who at the end of the nineteenth century studied correlation between leaders and geniuses in one generation. He claimed that an extraordinary intellect is the exclusive property of the leader, and this feature can not be developed, but only inherited. Galton proposed to carry out the selection of leaders coupling those individuals whose descendants should have the best properties.

Later empirical studies have been carried out to determine whether such properties as the eloquence, honesty and courage characterize a leader and distinguish it from other people. Unfortunately, these early studies did not confirm that certain characteristics of the leaders are a necessary precondition of effective leadership. Stogdill studied the results of 124 papers devoted to leadership topic from 1904 to 1948, and made a conclusion, which was subsequently often quoted, that „persons who are leaders in one situation may not necessarily be leaders in other situations." In 1974, enriched the study methodology, Stogdill reviewed the 163 leadership studies within 1949-1974 period, and this time have already stated that certain features would increase the likelihood of having the following characteristics a person can become an effective leader [Stogdill, 1975]. The importance of one or the other characteristic is determined by the specific situation in which the leader operates. Stogdill identified features and capabilities, which are usually associated with effective leadership [Zaccaro et al., 2004].

The most promising results of leader traits investigations have been obtained from the supervisors' selection studies. Until the mid-sixties of twentieth century attempts to predict the effectiveness of the supervisor in defining and measuring its personal traits or individual capacity was not very successful. Meanwhile, the studies mostly relied on paper and pen exercises, which had to identify and test a potential supervisor. However, the relationship between thus defined personal characteristics, traits and skills and the effectiveness of leader performance was very variable

and had a random character. Despite the pessimistic responses on the ongoing investigations, the leaders' selection and assessment methodology experienced a serious change and was significantly improved.

David C. Mclleland noted that only the traditional academic knowledge or high exam grades can not predict further success of human life, or career, or the efficiency of work [Mclleland, 1973].

The key scientific problem addressed by this article is to search the variables, called competencies, which would help to predict outstanding performance and structure them so as they could be used in various areas of human resource management.

The object of the research is job competency models, the goal is to develop a new method for creation of a competency model, which takes advantages of already created general competency dictionaries and single-job competency models. The analysis of the scientific literature and some case studies was carried out to develop this approach.

Competency, competence, competency models and competency dictionaries

Competency and competence are often referred and widely used words, but they are used to mean different things. Lyle M. Spencer and Signe M. Spencer define competency as „an underlying characteristic of an individual that causally related to criterion-referenced effective and/or superior performance in a job or situation" [Spencer, Spencer, 1993]. Lucia and Lepsinger give a similar description of a competency: „A cluster of related knowledge, skills, and attitudes that affects a major part of one's job (a role or responsibility), that correlates with performance on the job, that can be measured against well-accepted standards, and that can be improved via training and development". [Lucia, Lepsinger, 1999]. R. E. Boyatzis defines a competency „ as a capability or ability. It is a set of related but different sets of behaviour organized around an underlying

construct, which we call the „intent". [Boyatzis, 2008]. Competency can be seen as a broader concept than KSA (knowledge, skills and abilities), it includes motives, traits, self-concept, and is related to performance. Competence, differently fromthe competency, which is targeted to individual, indicates rather organizational level. Prahalad and Hamel use term "core competence" in their resource-based theory of strategic management [Prahalad, Hamel, 1990]. The analysis of core competencies is to be done at the organizational level and A. Clardy proposes framework of four questions for organizational core competence assessment:

"Does the organization have a competitive advantage? To what extent performance is attributable to those competitive capabilities? Where are those capabilities located? How specifically the core competences operate? Does a competitor have core competences, and what they are? [Clardy, 2008].

J. L. De Coi and others define a competence as a combination of competency, proficiency level and context. In their example "Fluent Business English" "English" is competency, "Fluent" is proficiency level and "Business" is context [De Coi et al.,2007]

Currently, the competencies, used to establish the performance of individuals are more popular in both practical work and academic research. Competencies are understood as long-term personal characteristics, which allow predicting its behaviour in the future. A set of competencies, which determines single job or group of related jobs, is called the competency model. A competency model is considered as a connector between human resource management and organizational strategies, linking "individual competencies with the desired organizational competencies, through competency modelling" [Naquin, Holton, 2006]. Competency models are becoming a ground for human resource management and gradually replacing existing traditional job descriptions [Dubois, Richmond, 2003]

Richard Boyatzis, analyzing the results of the evaluation of competencies of many managers and leaders, noticed that the excellent results in organizations are achieved by the leaders determined by the same set of competencies [Boyatzis, 1982]. It was a stimulus for creation of so-called competency dictionaries. These dictionaries are organized into 3 - 6 different groups, or clusters of competencies, which include from two to five different competencies. For example, R. Boyatzis presents three clusters of competencies differentiating outstanding from average performers: cognitive competencies (systems thinking or patterns recognition), emotional intelligence competencies (self-awareness, self-management) and social intelligence (empathy, teamwork, relationship management) [Boyatzis, 2008]. Each of the competencies is briefly described, and in addition, it includes three to six behavioural indicators, which describe the different behaviour patterns, in which the competence is being demonstrated. Commonly each behaviour indicator is illustrated by concrete examples, taken from interviews with the best performers in this area. Some competencies have several dimensions, for example, the achievement orientation competency has three scales [Spencer, Spencer, 1993]:

1. Intensity and completeness of achievement-motivated action.
2. Achievement impact (addressing the problems of scale, or impact on the achievements of the organization)
3. The degree of innovation.
Each competency scale is sorted according to the expression level of the competency. Numbering, as a rule, starts from 0 and reflects the mildest or neutral manifestation of the competence. The stronger expression of the competence, the higher number of level stands behind it. Numbering in some cases may be done using negative numbers, which shows destructive expression of these competencies. This may be useful in building employees' development plans - in a way one can specify what the employee's behaviour pattern should be avoided.

At a moment some large business companies, such as McBer and Company, Phillip Morris, Aon Consulting, etc. have developed their own competency dictionaries, which are widely used in their practise. Some public sector institutions use competency dictionaries developed for their needs – Saskatchewan Public Service Management Competency dictionary - Canada [Government of Saskatchewan], NASA Workforce Competency Dictionary – USA [NASA Competency Management Dictionary], Public Sector Middle Management Competency Framework – Republic of South Africa [Public Sector Middle Management Competency Framework].

Building a competency model

Competency models are widely used in all areas of human resource management, as well as they are important for developing the leaders of organizations. Competency models allow the modelling of an ideal leader/manager profile. According to this "template" the most suitable people can be selected and recruited, most needed competences can be targeted and developed, employees' performance can be objectively assessed, and they can be adequately promoted and paid.

R. S. Mansfield compares two most common ways of developing competency models: single-job competency and "one-size-fits-all" competency model [Mansfield R.S., 1996]. The first way assumes resource panel or focus group of job holders, including interviews with customers to collect needed data. Having analysed received information, competency model that typically consists of 10-20 traits or skills is built. This approach is widely used, as it provides a framework for more or less precise describing of key job requirements and it involves job holders' into the process increasing their commitment and giving feeling of ownership of the results. On the other hand this approach is much time and money consuming. Usually the process of developing a competency model in this way takes several months.

"One-size-fits-all" approach is much quicker and can be applied to a large number of employees. Instead of gathering data from job holders, all needed information is collected from available single-job competency models, from leadership and human resource development books and articles. Later the model is revised by senior managers to ensure alignment with organization's

mission and values. The main disadvantage of the approach is that such competency model does not reflect special needs of any specific job.

To eliminate shortages of both approaches R. Mansfield suggested a middle way – multiple-job approach that takes advantages of common conceptual framework and individual jobs.

Most researchers agree that a competence model must be related to organization's strategic set [Naquin S., Holton e fig. 1).

E. 2006], [Markus et al, 2005], [Mansfield, 1996] practically it can be ensured by starting the process of a competency model development with thorough job analysis.

The Job Competency Model (JCM) developed for some managerial positions reflects the collaborative efforts of Aon Consulting, GlaxoSmithKline Vilnius offices and Crisis Management Centre of Ministry of National Defence. (Se
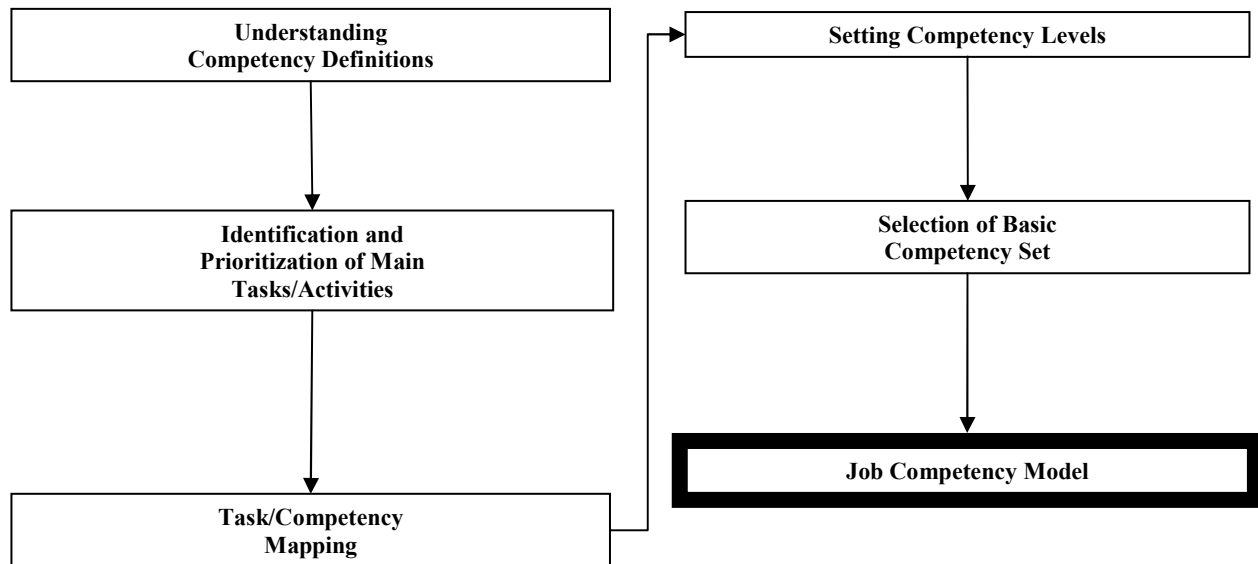

Figure 1. Flowchart of Job Competency Model Development

Three focus groups were formed; one to develop a JCM for the position of Medical Representative, second - to develop a JCM for Sales Group Manager of GlaxoSmithKline, and the third – to develop a JCM for the director of Crisis Management Centre. Each focus group consisted of 10 to 13 members.

The intent was to invite the best and most knowledgeable individuals in the organization to look at the current requirements for each position and develop a JCM comprised of "ideal but realistic" competencies. The assumption is that successful, experienced individuals within an organization can provide the best and most qualified advice regarding the requirements for each position.

Job Analysis: The focus groups started by analyzing the job tasks associated with each position. This process helped streamline and clarify each job task as well as eliminates duplications and redundancies. The focus was on defining "what" a job holder does and not "how" to do it. The goal was to build a solid, well-defined foundation of "job tasks" to facilitate the selection and matching of appropriate competencies. Job tasks were also prioritized by importance.

Development of Job Competency Profile: Using the McBer Competency Dictionary [Spencer, Spencer, 1993] as a guide, each focus group then selected and matched the appropriate competencies from a basket of 20 managerial competencies. A consensus process was used .

to decide which competencies to assign to each job task as well as the appropriate competency level. A final consensus was used to trim down the competency list to the most important ones for each position.

Input from Senior Management:
Following completion of both focus groups, a final review of both competency profiles was conducted with senior management. The first objective was to look at these "interim" JCMs and decide whether they accurately matched the "ideal but realistic" models initially intended and secondly, to look out several years to the future requirements for each position and determine whether additional adjustments were needed. A consensus was reached on 11 competencies for Medical Rep and 12 for Sales Group Manager and Director of Crisis Management Centre. In some areas, competency levels were also adjusted. The final results as well as components or stages of the process were provided in the attached reports.

The JCMs for all examined jobs reflect the current requirements for these positions as viewed in the context of GlaxoSmithKline's and Crisis Management Centre local business culture and include expected or preferred behaviours and attitudes. Over time and subject to changes to the marketplace (i.e., customers, products, available workforce, competition, etc.) the JCMs can be modified internally to accommodate changing needs
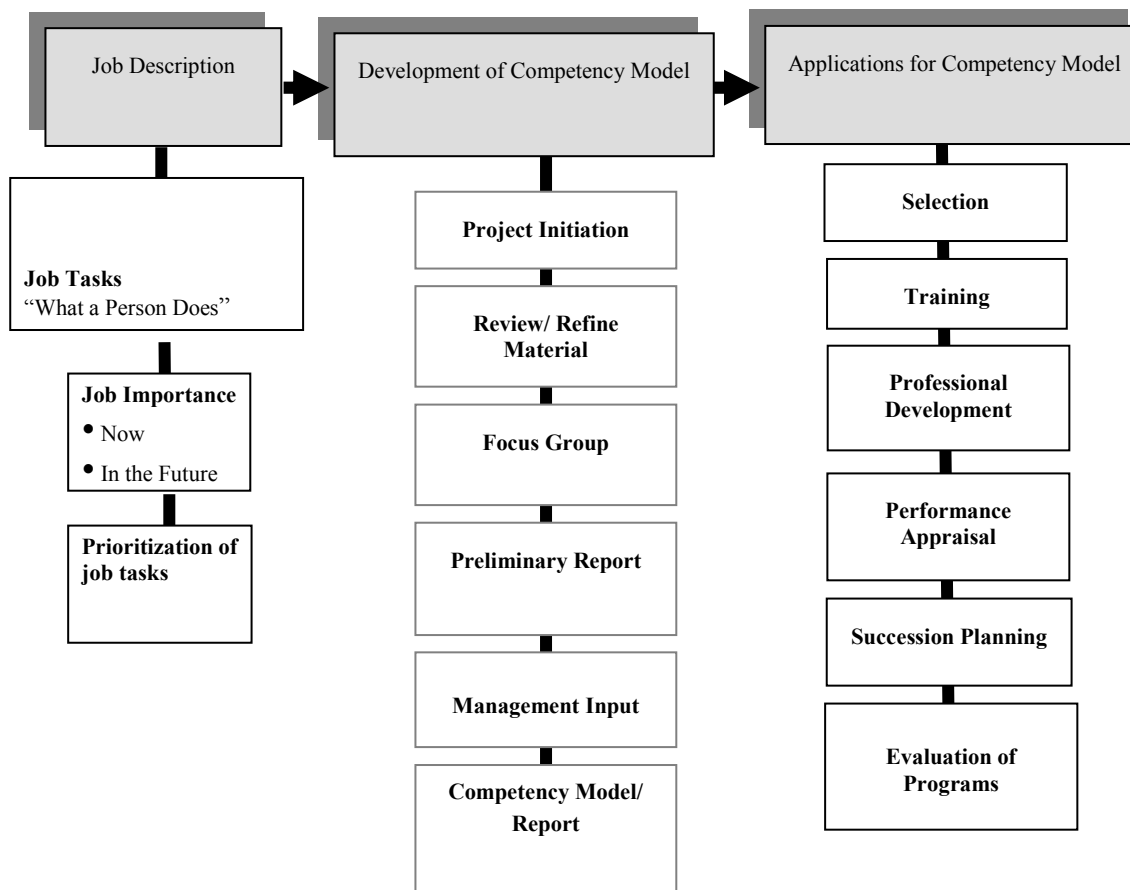
Figure 2. Development of Competency Model and Applications

This is a tool that has immediate applications, each with its own timeline and challenges (See fig. 2). The most obvious application is for recruitment and selection. The JCM now becomes the selection standard for these positions. The reality is that not all candidates will match these profiles and that some compromises may have to be made on a case-by-case basis to bring new talent into the organization.

In that regard, "lower" competency levels can be set for each position. These so-called "thresholds" are the minimum competency levels for new hires or current employees if the JCM is used as a performance management tool.

Conclusions

To summarize, this process has served to crystallize the job tasks and competencies required for very important positions within the organization; i.e., positions that are directly linked to organizations' ability to achieve revenue targets within this market, expand its client base and ultimately to the reach and maintain the position of "indisputable leader" in a very competitive environment. These new benchmarks now provide a strong platform for further uses (applications) which is where the real payoff will come. The proposed method enables us to take advantages of already created general competency dictionaries instead of creating a job competency model from scratch. The method is less time and effort consuming then the single-job competency model approach and at the same time it reflects special needs of any specific job.

References

1. Boyatzis R.E. (2008), Competencies in the 21st mentury. Journal of Management Development, Vol. 27, Issue 1, 2008
2. Boyatzis, R.E. (1982), The competent manager: A model for effective performance, New York:Wiley-Interscience
3. Clardy A. (2008), Human Resource Development and the Resource-Based Model of Core Competencies: Methods for Diagnosis and Assessment. Human Resource Development Review Vol. 7, No. 4 December 2008
4. De Coi J.L., Herder, E., Koesling A., Lofi, C., Olmedilla, D., Papapetrou, O., Siberski, W., A Model for Competence GAP Analysis, In WEBIST 2007, Proceedings of the Third International Conference on Web Information Systems and Technologies: Internet Technology /Web Interface and Applications, Barcelona, Spain, Mar 2007. INSTICC Press.
5. Dubois, D.D. & Richmond, L.J. (2003). Competency models: A roadmap to exemplary performance. *Career Planning and Adult Development Journal*, *18*, 19-28.
6. Government of Saskatchewan http://www.psc.gov.sk.ca/adx/aspx/adxGetMedia.aspx?DocID=778,4393,3621,3567,3105,1,Documents&MediaID=3215&Filename=Management+Competency+Dictionary.pdf

7. Mansfield, R. S. (1996). Building competency models: Approaches for HR professionals. Human Resource Management, 35, 7-18.
8. Markus L.H., Cooper-Thomas H.D., Allpress K.N. (2005) Confouded by competencies? An evaluation of the evolution and use of competency models. New Zealand Journal of Psychology Vol.34, No.2 July 2005
9. McClelland, D.C. (1973). Testing for competence rather than for intelligence. A m e r i c a n   P s y c h o l o g i s t , 28, 1-14.
10. Naquin S., Holton E. (2006) Leadership and managerial competency models: a simplified process and resulting model. Advances in developing Human resources Vol. 8 No. 2 May 2006 144-165
11. NASA Competency Management Dictionary http://www.nhpa.org/council/Legis-CMS-DOC01_Rev4.doc
12. Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, *68*, 79-91.
13. Public Sector Middle Management Competency Framework http://www.dpsa.gov.za/documents/ep/mmcfdictionaryconsolidated18july.pdf
14. Spencer L. M., Spencer S. M. Competence at work: models for superior performance. ISBN 0-471-54809-X, John Viley & Sons, Inc, 1993. – 372 p.
15. Stogdill**,** Ralph M. The evolution of leadership theory. Academy of Management Proceedings, 1975, p 4-6, 3p;
16. Zaccaro, S., Kemp, C. & Bader, P. (2004). Leader traits and attributes. In J. Antonakis, A. T. Cianciolo, & R. J. Sternberg (Eds.), The nature of leadership, 101–124. Thousand Oaks, CA: Sage

Tadas Sudnickas

Vadovo kompetencijos tobulinimo modelis McBer kompetencijų žodyno pagrindu

Santrauka

Straipsnyje nagrinėjama kompetencijų modelių, naudojamų žmoniškųjų išteklių vadyboje, kūrimo problematika. Pateikiama skirtingų požiūrių į kompetencijų modelių kūrimą apžvalga ir pristatoma metodika, kuri buvo panaudota sudarant konkrečių organizacijų pareigybių kompetencijų modelius. Pareigybių kompetencijos buvo sumodeliuotos McBer kompetencijų žodyno pagrindu, įjungiant į kūrimo procesą labiausiai patyrusius ir pasiekusius geriausių rezultatų šių organizacijų darbuotojus, kurie iš anksto buvo supažindinti su kompetencijų aprašymais ir galėjo apibrėžti savo veiklą visiems vienodais suprantamais ir unifikuotais terminais. Pirmajame modelio kūrimo etape buvo peržiūrėti ir patikslinti nagrinėjamų pareigybių aprašymai, pagal prioritetą sureitinguoti atliekami darbai. Sekančiame etape iš bendro kompetencijų žodyno buvo išskirtas kiekvieną pareigybę atitinkančių kompetencijų rinkinys, kuris drauge su nustatytu kiekvienos kompetencijos pasireiškimo lygiu ir sudarė tiriamos pareigybės kompetencijų modelio pagrindą. Pateikta metodika leido pasinaudoti individualaus, konkrečiai darbo vietai skirto ir unifikuoto kompetencijų modelio teikiamais privalumais, išlaikant modelio specifiškumą ir sutrumpinant jo kūrimo darbo ir laiko sąnaudas.

About the author

Tadas Sudnickas, assoc. Prof., dr., University of Mykolas Riomeris, Lithuania. E-mail: tsudnick@mruni.eu , tel. (+370 5)2740 635. Research interests: žmogiškųjų išteklių vadyba, kompetencijų valdymas, lyderystė, veiklos efektyvumo vertinimas.

EXPLORING THE DIVERSITY OF KNOWLEDGE MANAGEMENT CONCEPT

Svetlana Šajeva, Robertas Jucevičius
Kaunas University of Technology, Lithuania

Abstract

This paper analyzes the definitions of knowledge management presented in the *Journal of Knowledge Management* and in the other resources during the period between 1996 and 2008. Through a content analysis the evolution of the concept of knowledge management is overviewed. The paper shows not only the diversity of the meanings used to define the knowledge management, but also presents how knowledge management changed over the last decade.

Introduction

For more than a decade, knowledge management has been proposed by theorists and practicians as a viable mean to optimize and leverage knowledge in the face of the rapidly increasing complexity and competitiveness. However while the importance of managing knowledge is broadly acknowledged there is no agreement about the definition of knowledge management. According to Jennex (2007, p. 2) there are plenty of opinions on what exactly it is and how it should be used, if used at all.

The overview of the literature shows that there are several reasons why knowledge management terminology is not well-established yet and why there are difficulties in determining the term of knowledge management.

First, knowledge management is a field with multidisciplinary roots. It draws from a vast number of diverse fields such as organizational science, cognitive science, information technologies, education and training, etc. According to Maier (2007, p. 52), "on the one hand, this situation can be characterized as a positive development because the lack of clear boundaries allows the free influx of ideas, concepts and approaches. On the other hand, this leads to considerable confusion, especially among practitioners, regarding the question what is knowledge management and what exactly they would have to do in order to implement knowledge management".

Second, knowledge management is still a young and growing discipline. Although the knowledge management community believes that knowledge management is a discipline in its own right (Jennex, 2007, p. 11), it is assumed that the development of knowledge management is not finished yet. According to a number of management theorists knowledge management have passed some stages of evolution: from the identifying knowledge management as information management till contemporary perception which strengths organizational learning, social interaction and knowledge creation. The first and the second generations of knowledge management are regarded as the main stages of knowledge management development (McElroy, 2003). First generation of knowledge management focuses on knowledge sharing – on how to distribute existing organizational knowledge, usually through technology. In contrast, second generation knowledge management focuses on knowledge creation – how to satisfy organizational needs for new knowledge, usually through processes of learning and value creation. Some authors state that there are more than two stages of knowledge management development (Koenig, 2002; Snowden, 2002; Tuomi, 2002; Laszlo, Laszlo, 2002; Collison, 2006; Vorakulpipat, Rezgui, 2008, etc.).

Third, knowledge management is a broad concept that addresses the full range of processes, management tasks, technologies, and practices by which an organization deploys knowledge and seeks certain goals. There are many goals that companies can direct their knowledge management efforts to. Thus, it is not surprising that knowledge management is seen from different perspectives and there are a lot of definitions of knowledge management.

Analyzing the diversity of knowledge management could help us better understand this phenomenon. Also this could show us the evolution path of the concept.

Some meaningful and widely cited researches of the evolution of knowledge management were held over five years ago by Koenig (2002), Snowden (2002), McElroy (2003). These authors distinguished two or three generations of knowledge management. They noticed that a new, third generation of knowledge management, was only emerging those years. However five years is a sufficient period during which one more or several stages of knowledge management development could be passed. In order to understand how the phenomenon of knowledge management evolved during the second generation and the further period the definitions of knowledge management were explored.

The main objective of this paper is to explore the variety of the meanings of knowledge management and recognize the evolution stages of the concept.

The paper is structured as follows. First, the brief understanding of the evolution of knowledge management through several generations is presented. Literature analysis was selected as the main research method. Second, it is explored how the definitions of knowledge management changed, and what are the main aspects underlined. While it is not clear when the third generation of knowledge management exactly begins, the analysis of the concept of knowledge management is

starting from the second generation of knowledge management. For this reason the publications of the *Journal of Knowledge Management* during the period between 1997 and 2008 and some other resources were explored. The concept analysis was used for this reason.

The evolution of knowledge management: an overview

Knowledge management is following a similar evolution to many similar management disciplines before it (Skyrme, 2003, p. 13). However in contrast to many scientific disciplines, knowledge management had emerged from practice. According to Gupta, Sharma and Hsu (2008, p. 5), the field has evolved from many different disciplines and domains (for example, total quality management, business process re-engineering, information systems and human resource management), so, the history and evolution of knowledge management has not always been that clear or straightforward.

According to Larry Prusak, knowledge management is the combination of new ideas with ideas that "everyone has known all along" (Tran, 2009, p. 513). Knowledge management practitioners recognize that knowledge management has brought new elements into the enterprise. A number of them are not new *per sé*, but have taken on new roles. As Wiig states (1999, p. 10), there is little new in the concepts behind educating and training people to be able to deliver competent work. The same is true for many other knowledge management-related activities. However, perspectives, priorities, and purposes are new. For example, the new was the strategic dimension of knowledge, as resource of competitiveness and performance (Boughzala, Ermine, 2006, p. 35).

In accordance with Grant and Grant (2008, p. 578), the field of knowledge management has seen significant evolution over the very short period. Bartholomew (2008, p. 5) also states that knowledge management has had a "meteoric rise". Before about 1995 the term was almost unknown, while in a couple of years knowledge management has become a powerful tool for promoting innovation and realizing corporate objectives.

The research identifies several generations of knowledge management. The periods of different generations are not strictly determined (see Table 1).

Table 1

The periods of knowledge management development

Author (resource)	The 1st KM generation	The 2nd KM generation	The 3rd KM generation
Scarbrough, Carter , 2000 (Hislop, 2005, p. 44)	Before 1998	n.i.*	n.i.
Koenig, 2002	n.i.	From 1998	n.i.
Tuomi, 2002	1993-1996	From 1997	n.i.
Snowden, 2002	Late 80s to mid 90s	Mid 90s to early 21st century	Just beginning now [i.e. 2002]
IST program the "KM Made in Europe, 1999-2002) (Filos, 2008, p. 66)	1998	1999-2000	2001-2002
Waltz (2003, p. 333)	1985-1995	n.i.	n.i.
Metaxiotis, Ergazakis, Psarras (2005, p. 7)	1990-1995	From 1996	Is now emerging [i.e. 2005]
Мариничева (2008, p. 6)	Till 2000-2002	n.i.	n.i.
Jones (2008, p. 139)	1991-2000	n.i.	n.i.
Grant, Grant (2008, p. 574)	From 1996	n.i.	n.i.

* n.i. – not identified

Although there is a disagreement among the researches about the periods of knowledge management development, the characteristics of the main stages of evolution of knowledge management are determined almost in a similar fashion (see Table 2). The first knowledge management generation (*KM generation*) was mostly driven by information technology and focused on information sharing. During the second KM generation there was growing awareness of the importance of human and cultural dimensions of knowledge management. The third KM generation brought about an awareness of the importance of shared context (Dalkir, 2005, p. 19), the knowledge process is viewed as a complete life cycle within the organization, and the emphasis is turnig to revolutionizing the organization and reducing the knowledge cycle time to adapt to an ever-changing world environment (Waltz, 2003, p. 103). The overview of main characteristics of KM generations mostly determined till 2003 is presented below.

The first generation of knowledge management. According to Tuomi (2002), the first KM generation is regarded as the *object-centered* with a strong dependence on artificial intelligence and information technology. For Koenig (2002), the first stage of knowledge management was about applying technology to accomplish knowledge sharing and coordination across the enterprise. In accordance with Snowden (2002, p. 100) during this period the main focus was on the appropriate structuring and flow of information to decision makers. Knowledge management worked on the principle that knowledge that is needed by individuals to perform a certain task is already exists (McElroy, 2003), and can be managed in explicit form (Collison, 2006). So, the emphasis was placed on how to deploy the new technologies, i.e. lessons learned databases, best practice templates, enterprise intranet portals, document and content management systems, and search engines.

The second generation of knowledge management. The second stage was primarily based on recognition that knowledge management was not all about applying technology. According to Carrillo, the second KM generation was the *agent-centered* with a clear shift from collecting knowledge to connecting people (Garcia, 2006, p. 100). The learning organizations were seen as the vehicles (Laszlo, Laszlo, 2002, p. 408) and double loop learning as the basis (Switzer, 2008, p. 26) for facilitating second KM generation. So, second generation organizations choose to invest in networks, communities of practice and the technology which makes and supports connection and collaboration between people (Collison, 2006). Compared to the first KM generation, leaders did not seek to manage knowledge within their companies, but they seek to knowledgeably manage for competitive advantage. Leaders of KM's second decade seek to understand how to transform their organizations into knowledge-based organizations that use knowledge to achieve performance that cannot easily be duplicated by their competitors (Cavaleri, Seivert, Lee, 2005, p. 6).

The third generation of knowledge management. Some authors identified that there were three main generations of knowledge management. Snowden and some other scientists stated that we were reaching the end of the second generation of knowledge management in 2002. In accordance with Metaxiotis, Ergazakis, Psarras (2005, p. 7), it was the year of 2005.

Koenig (2002) noticed that the third KM stage "is the awareness of the importance of content - and, in particular, an awareness of the importance of the retrievability and therefore of the arrangement, description, and structure of that content". According to Carrillo, the third KM generation is the *value-based* (Garcia, 2006, p. 101). Wiig (2004, p. 218) stated that compared to earlier KM generations, new generation was more highly integrated with the enterprise's philosophy, strategy, goals, practices, systems, and procedures and how it becomes part of each employee's daily work-life and motivation. Collison (2006) also stated that sharing knowledge became a part of day-to-day business, embedded in processes and reinforced by leadership behaviors, ultimately a part of the culture.

Although several attempts were made to identify the stages of evolution of knowledge management, there is still no common opinion among scientists about the number of the stages, or about its duration, or about the further stages of knowledge management development. The essential works in this area were published till 2003 (Koenig, 2002; Snowden, 2002; McElroy, 2003) with the exception of some works (for example, Wiig (2004) who described the New KM generation in detail). The further scientists only cited these authors (for example, Grant, Grant, 2008) and made some predictions about what is the future of knowledge management (Vorakulpipat, Rezgui, 2008). So we could conclude that the evolution of knowledge management was not properly analyzed from 2003. Furthermore the identified KM generations were only presented in general, not determining how the definitions of knowledge management changed during the certain period. That is why it is the challenge to overview how the concept of knowledge management was developed during the last decade when it was acknowledged being distinct from the information management and information technology using.

Table 2

The brief description of main generations of knowledge management

Author (resource)	The 1st KM generation	The 2nd KM generation	The 3rd KM generation
Koenig, 2002	▪ "By the Internet out of intellectual capital".	▪ "It's no good if they don't use it".	▪ "It's no good if they try to use it but can't find it".
Tuomi, 2002	▪ Focused on information sharing, information repositories, and intellectual capital accounting.	▪ Involve the concepts of tacit knowledge, social learning, situated and embedded knowledge, and communities of practice.	▪ Some main characteristics: 1) knowledge will be seen as something that allows flexible and effective thinking and construction of knowledge-based artifacts; 2) the link between knowing and action; 3) organizational learning, knowledge creation, and innovation processes should be built into organizations` structure.
Snowden, 2002	▪ "Information for decision support".	▪ Tacit/explicit knowledge conversation.	▪ Some main characteristics: 1) knowledge is viewed paradoxically as a thing and a flow; 2) context, narrative and content management are central; 3) an understanding of organization as engaged in sense-making; 4) scientific management and mechanistic models.
Laszlo, Laszlo, 2002	▪ Focused on capturing collective intelligence through intellectual capital technologies, promoting best practices.	▪ Focused on processes of learning and innovation.	▪ It is not so much about knowledge and know-how any more but more about meaning and know-why.
McElroy, 2003	▪ "Supply-side KM" – knowledge sharing. ▪ "It is all about capturing, codifying, and sharing valuable knowledge, and getting the right information to the right people at the right time".	▪ "Demand-side KM" – knowledge creation.	n.i.*
Wiig, 2004	n.i.	▪ Some main characteristics of the New KM generation: 1) knowledge management practices become a natural part of people's daily work-life; 2) broad and proactive business philosophy and management beliefs; 3) knowledge-focused business strategies and practices; 4) systemic, self-sustaining, and self-renewing KM practices; 5) systems perspective of enterprise and environment.	
Carrillo, 2006 (Garcia, 2006, p. 101)	▪ The object-centered.	▪ The agent-centered.	▪ The value-based.
Collison, 2006	▪ Knowledge "already exists" and can be managed in explicit form.	▪ New knowledge must be generated through learning. ▪ Explicit knowledge has a "half-life" and must be linked to an individual or community to have lasting value	▪ Knowledge management is part of "how we do things around here".
Vorakulpipat, Rezgui, 2008	▪ Similar to McElroy	▪ Similar to McElroy	▪ Value creation through the combination of human networks, social capital, intellectual capital, technology assets and change processes.

* n.i. – not identified

The analysis of the definitions of knowledge management

In this paper we are tracing the evolution of knowledge management not by reviewing and combining the thoughts of a number of leading authors, but presenting how the definitions of knowledge management during the so-called "second KM generation" and "third KM generation" or "new KM generation" were developed.

Identifying the beginning of the second generation of knowledge management we refer to Snowden (2002, p. 101) who suggests tree main reasons why 1995 could be seen as the transition to the second age:

1) by 1995 process reengineering failures in respect of capturing knowledge were becoming more obvious;

2) by 1995 collaborative computing, increasing access to e-mail and the growth of intra and extranets were becoming commonplace;

3) early success stories from organizations such as Buckman, Dow, Scandia and others were making the practice of knowledge management more respectable.

So, we suppose the year of 1996 as the beginning of the second KM generation.

The first step in our analysis was the selection of a journal and the articles to be analyzed. In order to explore the diversity of the definitions of knowledge management, publications published between 1997 and 2008 in the *Journal of Knowledge Management* were reviewed (with the exception of a few articles written by editors as well as introductions to special issues). The *Journal of Knowledge Management* was selected according to the ranking of knowledge management and intellectual capital academic journals presented by Bontis and Serenko (2009). With reference to the authors this journal is on the top in the list based on the journal citation impact.

The purpose was to collect the various definitions of knowledge management. Reviewing the definitions all of them were registered indicating the year when the concept was defined, who and when cited these definitions. Then the list of knowledge management definitions was reviewed discarding definitions repeated several times, reserving only those which authors were clearly defined, and which were created during the period of 1996 and 2008.

While the overview of the selected journal did not present the critical mass of definitions of knowledge management, the list was added by reviewing publications in the journal of *Knowledge and Process Management* and some books that presented a broad analysis of the concept (Schwartz, 2006; Jennex, 2007; Maier, 2007; Wickramasinghe, von Lubitz, 2007; Jennex, 2008; Lytras et all, 2008).

A total of 196 definitions of knowledge management were identified and selected. The Table 3 shows the number of selected definitions created per year. The analysis of the articles in the *Journal of Knowledge Management* shows that the peak of creation of various definitions of knowledge management noticed during 1998 and 2000.

Table 3

The number of selected definitions of knowledge management

Year	Journal of Knowledge Management	Other resources	Total number
1996	5	3	8
1997	14	5	19
1998	23	1	24
1999	18	4	22
2000	19	3	22
2001	14	3	17
2002	13	3	16
2003	14	3	17
2004	7	2	9
2005	5	2	7
2006	4	9	13
2007	3	4	7
2008	4	11	15

The evolution of knowledge management concept over time. Reviewing the definitions of knowledge management we could see that authors usually identify *the object that is managed* (for example, knowledge, information, organizational asset, etc.), *the way how it is managed* (for example, optimizing processes of capturing, transferring, leveraging, using of knowledge, creating and realizing a strategy, developing a learning environment, etc.), and *the reasons why it is managing* (for example, to enhance organizational performance, improve efficiency and increase competitive edge, etc.). So, exploring the evolution of knowledge management concept we could analyze how the objects, the methods and the objectives were changed over time (see Table 4).

The object of management. Reviewing the definitions of knowledge management the object of management in the selected definitions was identified 183 times. While the essence of knowledge management is to manage knowledge, this was mentioned in about a half of cases (49 proc.). The other objects usually defined are those: intellectual or knowledge-based assets (13 proc.), information (13 proc.), corporate knowledge and expertise (12 proc.), experience (4 proc.). Intellectual capital, intellectual property, opinions and ideas, skills and competencies are named rarely. Exploring mentioned objects during the evolution path we could state, that the strength of information as the object of management is turning down with years (it was mentioned only some times from the year of 2004).

The objectives of knowledge management. The objectives of knowledge management in the selected definitions were identified 167 times. The results show that the main aim of knowledge management is to continuously improve an organization's performance through the enhancing the productivity and efficiency (24 proc.), and to achieve the company's objectives (19 proc.). The other usually identified goals are: to achieve and maintain competitive advantage (16 proc.), to enhance the productivity of individuals fostering the process of decision making (13 proc.), to achieve the organization learning goals (10 proc.). Improving the management of internal knowledge processes, especially the creation of new knowledge (9 proc.) and knowledge sharing (9 proc.) are also frequently encountered objectives. The examination of the evolution of knowledge management objectives did not give the significant results. However we could state that the improving of the organization's functioning is acknowledged as equally important in the definitions of different years. The facilitating of knowledge sharing and supporting knowledge creation process were more often defined as the main objectives of knowledge management until 2002. The importance of achieving the competitive advantage was more often mentioned from 2003. The goal to enhance the organizational learning was identified as more important during the period between 1999 and 2002. During the recent years more attention is paid to the facilitating continuous improvement, facing the environmental challenges and achieving long-term competitive advantage.

The way of managing knowledge. The authors underline different ways of managing knowledge – organizing and optimizing concrete processes or a set of processes,

creating and realizing a business strategy, enhancing learning processes, etc. Different processes in selected definitions of knowledge management were identified for 322 times. Knowledge capturing, creation, transferring, sharing, organizing, storing and using were determined more frequently. Exploring the definitions of knowledge management over the evolution path we could see that knowledge management becoming more comprehensive, involving a set of directed, holistic, organic, systematic business and social processes, a complex of management tasks and functions, a variety of organizational elements, for example, human resources practices, organizational structure, culture, infrastructure, etc.

The historical development of the concept of knowledge management from different perspectives is presented in the Table 4. The table shows the keywords dominated in the definitions of knowledge management during the concrete period.

The diversity of the meanings of knowledge management. Based on the analysis of the definitions of knowledge management we could introduce eight groups that cover the variety of different meanings of knowledge management.

1. Knowledge management as the optimization, planning, management of separate or the cycle of different processes. The majority of the examined definitions can be ranked to the group that views knowledge management as a set of processes. In this instance knowledge management described as "*as a systematic, organized, explicit and deliberate ongoing process of creating, disseminating, applying, renewing and updating the knowledge for achieving organizational objectives*" (Pillania, 2008, p. 204). Sometimes authors determine only the one process during which knowledge could be managed. According to Seeman, "*knowledge management is about improving organizational productivity by focusing and accelerating knowledge creation in companies*" (Palmer, 1198, p. 304).

2. Knowledge management as management of knowledge workers and the organization of their knowledge work. Although individuals certainly can personally perform each of the knowledge management processes, knowledge management is largely an organizational activity that focuses on what managers can do to enable knowledge management's goals to be achieved, how they can motivate individuals to participate in achieving them and how they can create social processes that will facilitate knowledge management success (King, 2009, p. 4). That is why the other major group involves the definitions that see knowledge management as a collective concept which embraces different management functions. For Darroch

and McNaughton "*knowledge management is a management function that creates or locates knowledge, manages the flow of knowledge and ensures that knowledge is used effectively and efficiently for the long-term benefit of the organization*" (du Plessis, 2007, p. 21).

3. Knowledge management as the management of the knowledge and information assets. These definitions view knowledge as assets and the focus of knowledge management is to identify these assets and develop effective mechanisms for managing them. According to this knowledge management is often defined "*as leveraging the intellectual assets of the company to meet defined business objectives*" (Sveiby, 1997; cited by del-Rey-Chamorro and et., 2003, p. 47)". Intellectual or knowledge-related assets include knowledge in the form of printed documents such as patents and manuals, knowledge stored in electronic repositories such as a "best-practices" database, employees' knowledge about the best way to do their jobs, knowledge that is held by teams who have been working on focused problems and knowledge that is embedded in the organization's products, processes and relationships (King, 2009, p. 4).

4. Knowledge management as organizational learning and leveraging of corporate knowledge and expertise. This group involves those definitions that knowledge management refer to identifying and leveraging the collective knowledge in an organization to help the organization to compete (for Frappaolo (2002, p. 8) "*knowledge management is the leveraging of collective wisdom to increase responsiveness and innovation*") or to the organizational learning (for Satyadas et al. "*knowledge management is designed to provide strategy, process, and technology to increase organizational learning*" (Freeze, Kulkarni, 2007, p. 94).

5. Knowledge management as the realization of the business strategy. These definitions focus on the strategic relevance of knowledge management initiative (Maier, 2007, p. 54), and determine knowledge management as a strategy: "*knowledge management is considered an organization wide strategy underpinned by various management practices and tools that combine to support and develop the knowledge assets of an organization*" (Gloet, Berrell, 2003, p. 80).

6. Knowledge management as the deployment and use of information technologies. According to some authors, knowledge management is the deployment of comprehensive systems, instruments and tools that enhance the growth of an organization's knowledge. For Stewart "*knowledge management promises to improve organizations' performance by using technology to capture and share knowledge*" (Koskinen, 2003, p. 67).

Table 4

The evolution of the concept of knowledge management from different perspectives

Year	The objects	The way of management	The goals
2008	▪ Knowledge	▪ A set of business processes ▪ A variety of management tasks and management functions ▪ A set of processes (capturing, dissemination, sharing, creating, storing, using, organizing)	▪ Achieving the company's objectives
2007	▪ Knowledge	▪ A set of processes (transferring, creating)	▪ Achieving long-term competitive advantage ▪ Facing the environmental challenges ▪ Improving organizational performance
2006	▪ Knowledge ▪ Knowledge assets	▪ A complex socio-technical system ▪ A set of processes (capturing, sharing,	▪ Improving organizational performance ▪ Maximizing innovation and competitive advantage

		transferring, creating, storing, reputedly using, retrieving)	
	▪ Corporate knowledge		
2005	▪ Knowledge ▪ Intangible assets	▪ A generic process that involves mainly people, technology, processes and culture	▪ Facilitating continuous improvement
2004	▪ Knowledge	▪ A systematic process ▪ A strategy ▪ A set of processes (acquiring, sharing, creating, storing, deploying, utilizing, combination)	▪ Improving organizational performance ▪ Achieving the company's objectives ▪ Achieving and maintaining competitive advantage ▪ Encouraging innovation
2003	▪ Knowledge ▪ Information ▪ Knowledge resources ▪ Organization's collective wisdom	▪ A deeply social process ▪ A business optimization strategy ▪ A set of processes (dissemination, sharing, creating, using, organizing)	▪ Achieving and maintain competitive advantage
2002	▪ Knowledge ▪ Information	▪ A cyclic learning process ▪ A strategic process ▪ A management function	▪ Enhancing the productivity of individuals ▪ Encouraging innovation ▪ Learning continuously and effectively ▪ Supporting the creation process ▪ Facilitating knowledge flows and sharing ▪ Improving the management of internal knowledge processes
2001	▪ Knowledge ▪ Information ▪ Intangible assets ▪ Expertise	▪ A discipline, designed to provide strategy, process, and technology ▪ A socio-technical perspective of people, processes, and technologies	▪ Achieving the organization learning goal ▪ Supporting the creation process ▪ Improving the management of internal knowledge processes
2000	▪ Knowledge ▪ Information ▪ Knowledge-related activities ▪ Intellectual capital ▪ Collective expertise and intelligence ▪ Tangible and intangible knowledge assets	▪ A set of processes (acquiring, capturing, distributing, sharing, creating, generating, storing, using)	▪ Achieving the company's objectives ▪ Enhancing the productivity of individuals ▪ Supporting the creation process ▪ Fostering innovation through continued organizational learning
1999	▪ Knowledge ▪ Information ▪ Professional expertise ▪ Intellectual or knowledge-based assets ▪ Experience	▪ A formal, directed, holistic, organic process ▪ A wide a wide variety of interdependent and interlocking functions ▪ A business model ▪ A combination of many organizational elements - technology, human resources practices, organizational structure, culture ▪ A set of processes (acquiring, capturing, distributing, sharing, transferring, creating, storing, using, application, codification, measuring)	▪ Improving organizational performance ▪ Enhancing organizational learning
1998	▪ Knowledge ▪ Collective expertise ▪ Intellectual assets	▪ A collection of formal organizational processes, technologies, tools, norms, principles ▪ A set of processes (capturing, distributing, creating, utilizing)	▪ Improving organizational performance ▪ Facilitating knowledge flows and sharing ▪ Achieving and maintaining competitive advantage ▪ Enhancing the productivity of individuals ▪ Maximizing returns from its knowledge assets
1997	▪ Knowledge ▪ Information ▪ Expertise ▪ Collective expertise	▪ A set of processes (creating, capturing, organizing, using) ▪ A learning processes	▪ Improving organizational efficiency ▪ Achieving the company's objectives ▪ Making information accessible to other employees within the organization ▪ Creating value-adding products and services ▪ Developing new opportunities
1996	▪ Knowledge ▪ Information assets	▪ Processes of identifying, capturing and dissemination	▪ Supporting the knowledge creation process ▪ Improving organizational productivity ▪ Ensuring that knowledge reaches the right people at the right time use the information

7. Knowledge management as the creation of the environment that supports knowledge work. Some authors underline that the challenges of knowledge management lie in creating environments that support knowledge processes: "*knowledge management is about creating an environment that encourages people to learn and share knowledge by aligning goals, integrating bits and pieces of information within and across organizational boundaries, and producing new knowledge that is usable and useful to the organization*" (Corso, Giacobbe, Martini, Pellegrini, 2006, p. 210).

8. Knowledge management as a holistic approach. The other authors agree that knowledge management is a more holistic approach that integrates a business strategy and processes, organizational learning and culture, infrastructure and technology. As Boughzala, Ermine (2006, p. 24) state, knowledge management involves strategy, because it is a new type of management responding to a new socio-economic environment and a new vision of the organization. It involves the structure of the organization because the knowledge is created through complex networks, connected to the environment that can challenge the classic structures. It concerns many

processes that have already been put in place in organizations, but that have to be reviewed from new perspectives, optimized or developed. It concerns the staff of the organization, the human resources, which are the heart of the issue, because knowledge is created, is shared and evolves only through people, who must mobilize themselves personally and collectively for this objective. It concerns information and communication technologies, which are powerful vectors for KM if they are used efficiently.

So, we could see that knowledge management involves a variety of meanings. Seeking different purposes organizations could understand knowledge management in different way. However during the recent years there is a strong recognition among scientists that knowledge management requires a systematic and holistic view.

Conclusions

1. The analysis of the definitions of knowledge management showed that the object of management, the way of management and the objectives of knowledge management have evolved over time. Exploring the definitions of knowledge management over the evolution path we could see that knowledge management is becoming more comprehensive, involving a set of directed, holistic, organic, systematic business and social processes, a complex of management tasks and functions, a variety of organizational elements, for example, human resources practices, organizational structure, culture, infrastructure, etc. The main object of management becomes corporate knowledge, whereas the importance of information or individual knowledge as the object of

management is turning down with years. Reviewing the goals of knowledge management we could see that more attention during the recent years is paid to the facilitating continuous improvement, facing the environmental challenges and achieving long-term competitive advantage.

2. The analysis of the definitions of knowledge management let us identify eight main groups that cover the variety of knowledge management meanings: 1) knowledge management as the optimization, planning, management of separate or the cycle of processes; 2) knowledge management as management of knowledge workers and the organization of their knowledge work; 3) knowledge management as the management of the knowledge and information assets; 4) knowledge management as organizational learning and leveraging of corporate knowledge and expertise; 5) knowledge management as the realization of the business strategy; 6) knowledge management as the deployment and use of information technologies; 7) knowledge management as the creation of the environment that supports knowledge work; 8) knowledge management as a holistic approach. The most popular definitions focus on a whole cycle of processes that let organization improve the acquisition, creation, sharing and transferring, organizing, and utilizing of knowledge. The least of cited definitions refer to the groups which determine knowledge management as the deployment and use of information technologies, and as a creation of the environment that supports knowledge work. During the recent years there is a strong recognition that knowledge management is a holistic approach.

References

1. Bartholomew, D. Building on Knowledge. Developing Expertise, Creativity and Intellectual Capital in the Construction Professions. Blackwell Publishing Ltd. 2008. ISBN: 978-1-4051-4709-5.
2. Bontis, N., Serenko, A. A follow-up ranking of academic journals. Journal of Knowledge Management. 2009. Volume 13. Number 1, pp. 16-26.
3. Boughzala, I., Ermine, J.-L. Trends in enterprise knowledge management. ISTE Ltd. 2006. ISBN-13: 978-1-905209-03-3.
4. Cavaleri, S., Seivert, S., Lee, L.W. Knowledge Leadership: The Art and Science of the Knowledge-Based Organization. Elsevier Inc. 2005. ISBN: 0-7506-7840-2.
5. Collison, C. Knowledge Management – the Next Generation? 2006. Retrieved June 20, 2009, from http://www.chriscollison.com/documents/generation.pdf.
6. Corso, M., Giacobbe, A., Martini, A., Pellegrini, L. What Knowledge Management for Mobile Workers? Knowledge and Process Management. 2006. Volume 13. Number 3. pp. 206–217.
7. Dalkir, K. Knowledge management in Theory and Practice. Elsevier Inc. 2005. ISBN: 0-7506-7864-X.
8. Del-Rey-Chamorro, F.M., Roy R., van Wegen B, Steele A. A framework to create key performance indicators for knowledge management solutions. Journal of Knowledge management. 2003. Volume 7. Number 2. pp. 46-62.
9. Du Plessis, M. The role of knowledge management in innovation. Journal of Knowledge management. 2007. Volume 11. Number 4. pp. 20-29.
10. Filos, E. Smart Organizations in the Digital Age. In Knowledge Management: Concepts, Methodologies, Tools, and Applications // Ed. Murray E. Jennex. IGI Global. 2008. ISBN-13: 978-1-59904-934-2.
11. Frappaolo, C. Knowledge Management. Capstone Publishing. 2002. ISBN 1-84112-351-X.
12. Freeze, R.D., Kulkarni, U. Knowledge management capability: defining knowledge assets. Journal of Knowledge management. 2007. Volume 11. Number 6. pp. 94-109.
13. Gloet, M, Berrell, M. The dual paradigm nature of knowledge management: implications for achieving quality outcomes in human resource management. Journal of Knowledge management. 2003. Volume 7. Number 1. pp. 78-89.
14. Grant, K.A., Grant, C.T. Developing a Model of Next Generation Knowledge management. The Journal of Issues in Informing Science and Information. 2008. Volume 5. pp. 571-590. Retrieved June 20, 2009, from http://proceedings.informingscience.org/InSITE2008/IISITv5p571-590Grant532.pdf
15. Gupta, J., Sharma, S.K., Hsu, J. An Overview of Knowledge Management. In Knowledge Management: Concepts, Methodologies, Tools, and Applications / Ed. Jennex M.E. IGI Global. 2008. ISBN-13: 978-1-59904-934-2.
16. Hislop, D. Knowledge management in organizations: a critical introduction. Oxford University press. 2005. ISBN 10: 0-19-926206-3.
17. Huysman1, M., Wit, D. Practices of Managing Knowledge Sharing: Towards a Second Wave of Knowledge Management. Knowledge and Process Management. 2004. Volume 11. Number 2. pp. 81–92.
18. Jennex, M.E. Knowledge management in Modern Organizations. IGI Global. 2007. ISBN: 978-1599042619.
19. Jennex, M.E. Knowledge Management: Concepts, Methodologies, Tools, and Applications. IGI Global. 2008. ISBN-13: 978-1-59904-934-2.

20. Jones, P.H. Socializing a Knowledge Strategy. In Knowledge management and business strategies: theoretical frameworks and empirical research / El-Sayed Abou-Zeid, editor. IGI Global. 2008. ISBN 978-1-59904-488-0.
21. King, W.R. Knowledge Management and Organizational Learning. In Knowledge Management and Organizational Learning // Ed. W.R. King. Springer Science, Business Media. 2009. ISBN 978-1-4419-0007-4.
22. Koenig, M. The third stage of KM emerges. March 2002, Volume 11. Issue 3. Retrieved June 20, 2009, from http://www.kmworld.com/Articles/Editorial/Feature/The-third-stage-of-KM-emerges-9327.aspx
23. Koskinen, K.U. Evaluation of tacit knowledge utilization in work units. Journal of Knowledge management. 2003. Volume 7. Number 5. pp. 67-81.
24. Lytras, M.D., Russ, M., Maier, R., Naeve, A. Knowledge Management Strategies: A Handbook of Applied Technologies. IGI Publishing. 2008. ISBN-13: 978-1-59904-605-1.
25. Maier, R. Knowledge Management System: Information and Communication Technologies for Knowledge Management. Third Edition. Springer. 2007. ISBN 978-3-540-71407-4.
26. McElroy, M.W. The New Knowledge Management: Complexity, Learning, and Sustainable Innovation. Butterworth Heinemann. 2003. ISBN: 0-7506-7608-6.
27. Metaxiotis, K., Ergazakis, K., Psarras, J. Exploring the world of knowledge management: agreements and disagreements in the academic/practitioner community. Journal of Knowledge Management. 2005. Volume 9. Number 2. pp. 6-18.
28. Palmer, J. The Human Organization. Journal of Knowledge Management. 1998. Volume 1. Number 4. pp. 294-307.
29. Pillania, R.K. Information Technology Strategy for Knowledge Management in Indian Automotive Components SMEs. Knowledge and Process Management. 2008. Volume 15. Number 3. pp. 203–210.
30. Schwartz , D. Encyclopedia of Knowledge Management. Idea Group. 2006. ISBN 1-59140-574-2.
31. Skyrme, D. Measuring Knowledge and Intellectual Capital. Models and methods to maximise the value of knowledge, intangibles and intellectual assets. Optima Publishing. 2003. ISBN 1-903920-17-5.
32. Snowden, D. Complex act of knowing: paradox and descriptive self-awareness. Journal of Knowledge management. 2002. Volume 6. Number 2. pp. 100-111.
33. Srinivasan, P. Integrated digital libraries: changing the essence of research, analysis and knowledge management. Journal of Knowledge Management. 1998. Volume 2. Number 2. pp. 47-52.
34. Switzer, C. Time for change: empowering organizations to succeed in the knowledge economy. Journal of Knowledge management. 2008. Volume 12. Number 2. pp. 18-28.
35. Tran, B. Knowledge Management: The Construction of Knowledge in Organizations. In *Handbook of research on knowledge-intensive organizations* / Dariusz Jemielniak and Jerzy Kociatkiewicz, editors. IGI Global. 2009. ISBN 978-1-60566-177-3.
36. Tuomi, I. The Future of Knowledge Management. Lifelong Learning in Europe. 2002. Volume VII. Issue 2. pp. 69-79.
37. Vorakulpipat C., Rezgui Y. An evolutionary and interpretive perspective to knowledge management. Journal of Knowledge management. 2008. Volume 12. Number 3. pp. 17-34.
38. Waltz, E. Knowledge Management in the Intelligence Enterprise. ARTECH HOUSE, INC. 2003. ISBN 1-58053-494-5.
39. Wickramasinghe, N., von Lubitz, D. Knowledge-Based Enterprise: Theories and Fundamentals. Idea Group Publishing. 2007. ISBN 1-59904-239-8.
40. Wiig, K. Knowledge Management: An Emerging Discipline Rooted in a Long History. 1999. Retrieved June 20, 2009, from http://www.krii.com/downloads/km_emerg_discipl.pdf
41. Wiig, K. People-Focused Knowledge Management: How Effective Decision Making Leads to Corporate Success. Elsevier Inc. 2004. ISBN 0-7506-7777-5.
42. Мариничева, М. Управление знаниями на 100%. Путеводитель для практика. Москва: Альпина Бизнес Букс. 2008. ISBN 978-5-9614-0710-5.

Svetlana Šajeva, Robertas Jucevičius

Žinių valdymo interpretacijų įvairovės analizė

Santrauka

Nors susidomėjimas žinių valdymu sparčiai auga ir jau nebeginčijamas žinių valdymo svarbos klausimas, o žinių valdymą pradeda pripažinti savarankiška mokslo disciplina, tačiau tarp žinių valdymo ekspertų pasigendama vienodo požiūrio į šį reiškinį. Tai lemia poreikį nagrinėti žinių valdymo interpretacijų įvairovę, kartu išryškinant šios koncepcijos formavimosi raidą. Siekiant šio tikslo straipsnyje apžvelgiami žinių valdymo raidos etapai, o taip pat nagrinėjama, kaip keitėsi žinių valdymo suvokimas pradedant nuo 1996 metų. Pagrindinėms žinių valdymo raidos etapams atskleisti panaudota mokslinės literatūros analizė. Nagrinėjant žinių valdymo sąvokos kompleksiškumą išstudijuoti specializuotame tarptautiniame moksliniame žurnale cituojami žinių valdymo apibrėžimai.

About the authors

Svetlana Šajeva, a junior researcher, Kaunas University of Technology, svetlana.sajeva@ktu.lt, 837300142. Research interest: knowledge management, management of knowledge workers, building a knowledge-driven organization.
Robertas Jucevičius, prof. dr. habil., Kaunas University of Technology, robertas.jucevicius@ktu.lt, 837300121. Research interest: strategic development of country and organizations, competitiveness, clusters and business systems, knowledge and innovation management

EDUCATIONAL ASSISTANCE IN THE PROCESS OF REFUGEES' SOCIAL INTEGRATION INTO COMMUNITY

Edita Štuopytė, Justė Milaševičiūtė
Kaunas University of Technology, Lithuania

Abstract

It is important for refugees as mostly attackable social group to adjust to new environment and to integrate into the community of a receiving country. Problems of refugees' integration are analysed in the works of different scientists; but in the context of multidisciplinarity of the integration process the meaning of education in this process; thus the scientific problem of this article is defined by the question: how does educational assistance for refugees influence the process of their social integration into the community? The first part of the article reveals theoretical aspects organisation of educational assistance for refugees in the integration process; the second part analyses the research results.
The research results show that in striving for successful social integration of refugees into the community, it is necessary to foresee ways of educational assistance as well as to create the conditions necessary for this assistance. Ways of educational assistance involve the areas of refugees' children and adults' education, training and vocational training in the country where integration takes place. Main problems of organisation process of educational assistance for refugees that emerged when analysing the research results are related to insufficient preparation of teachers to work with refugees' children, bad organisation of the activity of the state language teachers, insufficient education of community, insufficient cooperation among organisations, which decreases possibilities to implement different activities.

Keywords
Refugees, educational assistance, social integration of refugees, community.

Introduction

As the number of refugees grows round the world, every country that accepts them has to solve a lot of questions related to their integration into a new society. History and reasons of constrained migration, rights of refugees, ways of refugees' problem solution as well as peculiarities of the process of refugees' integration have been analysed by different scientists: Belesta, (2003), Boswell ()2002), Jastram ir Achiron (2001), Cholewinski (2004), Philip (2007), Salinas ir Muller (1999), Jacobsen (2001), Crisp (2004), Niessen ir Schibel (2004), Hudson, Weiler (2005), Wren (2007), Heyzer (2007), Koser (2007), Krieger (2004), Rodgers (2004), Suvanto (2001). Needs of refugees, possibilities for social and professional integration in Lithuania have been analysed by Štuopytė (2006, 2007, 2008) Kuzmickaitė, Civinskas, Davoliutė, Tamutienė, Aušrotas (2005).

Refugees are the most attackable social group of the society, which due to war conflicts taking place in their native countries cannot come back home. According to Jacobsen (2001), it is important for this group to adjust to new environment and get integrated into the community of the country that accepted them. The integration process starts with the conferment of a refugee's status in the country of sanctuary. This takes place through legal, economical, social and cultural processes of refugees' involvement into country's society, which can end in conferment of citizenship.

According to Hudson, Weiler (2005), it is necessary to treat the process of refugees' integration as dynamic process of two sides, which starts from the day when a refugee comes to another country. Referring to the data of European Council on Refugees and Exiles (ECRE) as well as thoughts expressed by different scientists (Salinas, Muller, 1999; Hudson, Weiler, 2005), it is possible state that successful integration of refugees in European countries is useful for everyone (refugees, the society of an accepting country, the government, economics, etc.); however, according to Hudson, Weiler (2005), vivid atmosphere of intolerance and racism in Europe makes negative influence upon the process of refugees' integration. The Annual Report on Immigration and Integration of the European Commission (cit. Niessen, Schibel, 2004, p. 8) indicates that "in all states members the access to the home market as well as knowledge of languages and sufficient level of education are the most important aims to guarantee successful integration".

Education becomes a non-dissociative part of the process of refugees' social integration into community, thus in this context the following *scientific problem* emerges: *how does educational assistance for refugees influence the process of their social integration into community?*

The aim of the research – to disclose educational assistance in the process of refugees' social integration into community.

The research object – educational assistance.

Methods of the research: analysis of scientific literature and documents, half-structured interview, qualitative content analysis.

Theoretical aspects of organisation of educational assistance for refugees in the process of integration

The question of refugees' integration becomes the research object of different social sciences (sociology, psychology, educational science). However, according to Beresnevičiūtė (2005), the very meaning of social integration lacks a clear definition. According to the author, the concept is widely used in different theoretical studies and researches of social sciences as well as different political documents when analysing rights and possibilities of citizens to use society's resources in the areas of education, labour market, health care, dwelling, etc.

Beresnevičiūtė (2005), Volkert (2002), Kasatkina, Leončikas (2003) in defining the concept of social integration relate it to integration into community, social entirety. As Stuopyte (2007) states, at individual level the integration manifests when an individual maintains his/her ethnical identity as well as possesses enough skills to be able to get involved into culture and society of the majority. In its turn the society – if it cares for integration of refugees – has to create conditions necessary for structural assimilation, i.e. equal participation in public life.

Having performed the analysis of the works of W. Benz (1993), Hudson, Weiler (2005), it is possible to state that the process of refugees' integration is common efforts of both sides – both refuges and local people of a country – to find peaceful and at best mutual form of common life. Integration of refugees unfolds as the process of change, which could be:

a) **Two-way**: integration requires from refugees to adjust in a new society, but it does not require abandoning own identity. It means to observe the laws of the country that imparted sanctuary, to respect human rights democratic values of a receiving country. Integration from the receiving country requires that public institutions would adjust according to changes in the population, as well as to recognise and accept refugees as part of national society and to undertake actions in order to facilitate the access for refugees to public resources and processes, to stimulate tolerance.

b) **Dynamic and long-term**: considering psychological perspective of an individual, integration often begins when a refugee arrives to the country of sanctuary and continues till a refugee becomes an active member of the society on legal, social, economic, educational and cultural basis. The process of integration often involves several generations.

c) **Multi-dimensional**: integration is related to economic, social, cultural, civic and political participation of the society of a receiving country and to the wish of the refugee to be recognised and to be a member of the society.

Social integration of an individual takes place in certain environment, which is influenced by two factors, according to Krijnen (1992) (cit. Spiers, 2003):

- *One factor* – is daily life, in which communicative activity, i.e. the way of people communication plays a crucial role.
- *Another factor* – social-economic-political system, in which strategic activity dominates and which is understood as ability to have the disposition of information sources, finance, and authority.

These factors determine integration of refugees into community as well.

Having performed the analysis of the works by different scientists in the field of integration of refugees, the local context of the research became evident; it manifests by integration process in particular countries: Great Britain, Canada, the USA, Australia, Sweden, Finland, Lithuania or any other country.

The question of organisation of educational assistance for refugees is closely related to social and education systems of every country. According to Cholewinski (2004), education as empowerment right is the most important means, due to which economically and socially excluded people can get out from poverty and to obtain means, which could help them to fully participate in society life. The principle that the state education has to be available for everyone despite nationality is clearly expressed in the Article 3(1)(e) of the UNESCO Convention „Against Discrimination in Education", but this does not yet guarantee equal possibilities for children of refugees and adults.

Formal equality on education availability for children of refugees and children of the country that imparted sanctuary is not sufficient. Any difficulties experienced by children of refugees have to be eliminated by special means in order to guarantee that children of refugees would not be socially disadvantaged in respect of their education and employment in the future.

Cholewinski (2004) distinguishes means, which would help children of refugees to learn:
- preparatory and adaptation forms;
- assistance in doing homeworks;
- intercultural education;
- teaching of native language and culture.

Rights of education for adult refugees are mostly related to professional training and teaching of languages. According to Cholewinski (2004, p. 13): *„politics of states should help refugees to acquire new education and skills in a receiving country. All refugees should be supported in this respect...Such politics, if it meets the needs both of refugees and society of a receiving country, will prevent exclusion and will facilitate reintegration of refugees when they return to their native country."*

Salinas, Muller (1999) distinguish basic areas and ways of educational assistance for refugees, by means of which it is possible to facilitate the process of refugees' social integration:

1. Education of children and young refugees. As it has been already mentioned, all children of refugees have their right to acquire general education in European countries. A common feature for all European countries is that most frequently basic schools are state but not private. It is important for children of refugees because schooling at them is not fee-paying (not as at private schools); thus all of them can get necessary education. In order to guarantee children of refugees appropriate choice of a learning level, and it facilitates integration both to schools and society, Salinas, Muller (1999) suggest the following ways:
- identification of a teaching level;
- multicultural education;
- courses for teachers;
- special education for refugee-teenagers;
- involvement of community of refugees into education.

2. Language courses for refugees (adults). According to Salinas and Muller (1999), a language is an important means of integration; if a refugee can speak and understand the language of the country that gave the sanctuary. Possibilities for integration increase greatly. Teaching of the national language is the most important priority and should be available from the very beginning of integration process. Ways guaranteeing and facilitating language teaching are as follows:

- *language courses financed by the state;*
- *acquaintance of teachers with needs of refugees;*
- *teaching of language and culture that takes place at the same time;*
- *teaching of language and professional training that take place at the same time;*
- *estimation of individual needs of refugees and a personal action plan;*
- *different projects for refugees at different stages of integration;*
- *increase motivation of refugees for learning;*
- *assistance in choosing career and giving possibilities for acquisition of further education.*

3. Recognition of the diplomas possessed by refugees. Recognition of the qualification possessed by refugees is an important step of the process of integration into society and settling. The recognition is necessary both for their further education and for finding a job.

Different institutions carry out the organisation of educational assistance for refugees in community. Each organisation or institution that is related to social integration of refugees faces a goal – to guarantee effective rendering of this educational assistance. This requires not only social knowledge (ability to listen, advise, consult, etc.), but also managerial knowledge (how to organise educational activity for it would give effective results and would be useful). In addition, social integration of refugees takes place in a community because work with community is one more goal, which has to be fulfilled by specialists organising refugees' integration.

When speaking about social integration of refugees into community, it would be best emphasise the positive of the term of community, for example sociality, sense of community, it does not matter what religion or culture representatives live in this community. According to Indrašienė (2004), one more inseparable condition in organising the work with community is its cognition because every community distinguishes in different features.

The main factor in organising educational assistance for refugees is appropriate selection and preparation of specialists as well as formation of multi-agency (multi-institution) network. According to Wren (2007), formation of multi-agency networks is one of the most effective factors contributing to integration of refugees into community. The research performed by Scottish scientists (Asylum seekers in Scotland, 2003) show the benefit of multi-agency work both for service providers and service receivers (refugees) because it induces better rendering of services as well as sharing of better experience among organisations.

When speaking about the creation of the conditions necessary for implementation of the activity, not only physical conditions, i.e. buildings used for this activity (technical, sanitary, health and alike), but also psychological conditions, i.e. work climate, community climate, etc. are considered. When striving for good relations in a community, the development of tolerance and multi-culturality is very important.

Multi-culturality, according to Jonušas (2006), forms a versatile educated personality, tolerant to surrounding

cultures. The basis of each culture is spiritual potential, which emerges in having embraced spiritual values: moral, aesthetic, national. All these values enrich a person as personality through the environment, in which he/she has formed. If a child is born and grows in a family, which recognises the merit of multi-culturality, this value will become his/her spiritual value and this will contribute to his/her more objective evaluation of real spiritual values.

The research performed by Scottish scientists (Asylum Seekers in Scotland, 2003) show the need of anti-racist trainings and sensitivity to other nations at organisations, the community and the country. According to them, it is necessary to involve the community into the preparation for refugees' arrival, to continuous communication and providing assistance for refugees' integration.

In summarising it is possible to state that organisation of educational assistance for refugees in the community encompasses the providence of the ways to provide educational assistance as well as creation of the conditions necessary to implement educational assistance (i.e. selection of employees and their education, multi-cultural education, start of multi-agency relations, work with a community, objective information for a community) in order to implement successful social integration.

Research methodology

In analysing the process of educational assistance for refugees' social integration into community, the qualitative research was carried out in 2008. The method of partly-structured interview was chosen for the research. The method of quantitative methodology – half-structured interview was chosen for the solution of the research problem. The reason for such methodological decision is complex and misfit topic for standardised measurements as well as striving to disclose the meaning of the phenomenon (educational assistance for refugees in the process of social integration into community) in respect of the research participants.

Referring to the performed analysis of scientific studies (Benz, 1993; Hudson, Weiler, 2005; Wren, 2007; Salinas and Muller, 1999; Cholewinski, 2004; Asylum Seekers in Scotland, 2003, etc.) and formulated theoretical concepts, necessary questions as well as several additional questions for the research participants were provided in advance.

The interview consisted of four main question-blocks involving introductory questions; education and training of refugees' children; professional trainings and language teaching of refugees; preparedness and courses of employees, cooperation with community, mass media and organisations.

The aim of the introductory questions was to find out about positions of the respondents, reasons for choosing this kind of a job and duration of the work, as well as to find out their opinion about the process of refugees' integration.

The research was performed by recording the interview (a dictaphone) as such way to fix the interview contributes to recording the "natural" speech of the research participants, and keeps objectivity. In addition, a

dictaphone fixes insertions and comments of a researcher, as well as the data can more than once be checked and analysed anew.

Mixed target selection was applied for the research: a "snowball" and convenient interview participants' selections were applied.

The research sample consisted of ten people related to both direct provision of educational assistance for refugees, and to the organisation of refugees' social integration process. The research tool place in two towns, the duration of the interview was from 20 to 80 minutes. Before the interview, all participant of the research got acquainted with the aim of the research as well as its content; the participants' agreement to participate at the interview was obtained. The interview place was chosen in a place comfortable and familiar for them by implementing principles of goodwill, anonymity and confidence.

The method of qualitative content analysis was chosen for the analysis of the obtained results of the research.

The research results

The goal of the introductory question (**"What is your opinion about the process of refugees' integration in Lithuania?"**) was to find out the opinion of the specialists working with refugees on the process of refugees' integration in Lithuania. When analysing the obtained data, three qualitative categories were distinguished: changes of refugees' integration process, its limitations and the factors influencing refugees' integration. *The first category* (*Changes of refugees' integration process*) reflects the opinion of the respondents that refugees' integration process and legal base have improved as well as they pointed out that in comparison to other European countries the process of refugees' integration is good in Lithuania. *The second category (the factors influencing refugees' integration)* revealed the factors influencing refugees' integration, which involve the influence of *a person, motivation, employees and organisations* upon integration. According to the respondents, a personal wish of refugees and their motivation for integration are especially important factors influencing integration process. *The third category (limitations of refugees' integration process)* reflects main limitations of the refugees' integration process distinguished by the informants. One of the limitations, which the respondents miss in the refugees' integration process, is *client's empowerment for activity and integration into society*. It should be pointed out that the informants emphasise the lack of refugees' autonomy, responsibility and motivation because *"[integration means] teach to be a passive user of the programme"*, i.e. refugees when getting assistance from the state and being passive users dependent on the state courtesy lack power and stimulus to change something.

The question *"According to you, what is teachers' readiness to work with children of refugees?"* was given in order to diagnose the level of teachers' preparation to work with children of refuges. In analysing the interview results, the lack of competence of teachers working with children of refugees (see Table 1).

The research results showed that teachers lacked information about cultural differences as well as peculiarities of behaviour with refuges-children, as well as the results revealed the need of special programmes for teachers working with refugees. The obtained data proved theoretical statements of Salinas and Muller (1999) that in order to find suitable forms of teaching and education, intercultural education of teachers, special trainings for teachers as well as rendering of knowledge on the reasons that had caused the escape out of the country is especially important. This would enable teachers to better understand the needs and behaviour of these children and to help them integrate.

When analysing the data on the question *"What is the situation with professional information and trainings of refugees?",* by means of qualitative *content* analysis three qualitative categories were distinguished: *conditions created for refugees to acquire vocational education, factors influencing the acquisition of a profession, dependence of realisation of an acquired profession on gender* (see Table 2).

The research results revealed that personal traits of refugees ("their determination"), culture and future perspectives influenced the acquisition of a profession. Not all refugees after having acquired a speciality work according to it. This choice directly depends on a gender. According to the respondents, men differently than women work according the acquired qualification after the professional courses. It could be related to refugees' culture because most women when living in their country did not work, they hardly have education, a man maintained a family; thus in Lithuania this tendency has been repeated: men work, and women bring up children. However the women, who come alone to the country, have to acquire a speciality and to find a job.

One of the questions *("What do you think about the selection of the employees working refugees")* sought to find out the criteria for the selection of the employees working with refugees. The following two categories were distinguished: *employees' professional experience and employees' personal traits*. The research revealed that the employees working with refugees are required to possess not only professional knowledge (experience, education, knowledge on refugees, language knowledge), but also personal traits such as tolerance, impartiality, the ability to help and respect for other culture. The surveyed employees were subject to point out the greater importance of person's individual traits than of professional knowledge in the work with refugees.

Table 1

Limitations in teachers' competence

Category	Subcategory	Confirmative statement
Limitations in professional competence	Non-understanding of intercultural differences	*"Not all [teachers] are able to understand those intercultural differences"*
	Lack of integration work	*"They do not understand that more integration work is necessary with foreigners"*

Limitations in personal competence (personal traits)	Following stereotypes	*„Follow stereotypes"*
	Discriminating behaviour	*„very vivid exclusion", „some [teachers] discriminate", „[they hardly understand] that everyone is equal, i.e. both they [children of refugees], and Lithuanians"*
	Prevailing negative viewpoint	*„A very negative viewpoint to refugees"*

Table 2

Situation of professional information and trainings of refugees

Category	Subcategory	Confirmative statement
Created conditions for refugees to acquire vocational education	Great choice of courses	*„I think that there are enough courses", „A lot of courses", „For qualification, a good situation, there is quite a lot of courses", „sufficiently"*
	Wide choice of programmes	*„There are different programmes", „On the whole, these programmes do exist"*
	Possibility to acquire a speciality already at the Refugees Reception Centre	*„They are taught these specialities at the Refugees Reception Centre", „Those who leave the Refugees Reception Centre almost everyone has a profession"*
	Assistance in choosing a career at the Refugees Reception Centre	*„In the Centre [the Refugees Reception Centre] they are very involved in this [professional information]",*
	Supply of the trainings organised by the Labour Exchange	*„The Labour Exchange is involved in this", „People get involved by the Labour Exchange", „They get vocational training at the labour exchanges"*
	Provision of grants	*„the grant is paid", „Grants are paid [when learning]"*
	Transport is paid	*„Paid coming [to a place of courses]"*
	Equal learning conditions are provided as for country's residents	*„the conditions created for everyone are equal: both to Lithuanians and refugees"*
Factors influencing acquisition of a profession	Personal traits	*„It is their determination"*
	Cultural	*„it depends on the culture"*
	Future perspective	*„refugees do not see their future in Lithuania"*
Dependence of the implementation of an acquired profession on gender	Women work less	*„ very few women work according to a speciality"*
	All men work	*„Men get more involved into trainings, they integrate and accept this", „after finishing courses men work", „after courses men work, it is good for them...*

Three qualitative categories in the content of the respondents' answers to the question*„What kind of cooperation takes place in local and international organisations?"*: *evaluation of cooperation among organisations, limitations of cooperation among organisations, and the factors influencing cooperation among organisations* (see Table 3).

Some participants of the research stated that cooperation is good, effective and close in comparison with other European countries. Other participants of the research distinguished more intense cooperation with non-government organisations by reasoning that non-government organisations have more freedom to act while state institutions face strict "squeezing into the framework " in respect of the cooperation. The research results disclosed limitations of cooperation: *the lack of cooperation with other organisations working not in the field of refugees as well as the alck of cooperation in writing projects*. This allows stating that in preparing projects organisations are interested to meet the aims of their activity and are not subject to cooperate for corporate activity with other organisations. This diminishes a possibility to attract larger investments to an organisation and the same time to improve the process of rendering educational assistance. It is possible to assume that though sort of cooperation takes place, however the lack multi-agency networks (its importance was emphasised by Wren (2007)) is observed.

According to the respondent-employees, despite performed information campaigns (*event are being held, articles are being written, social advertising, seminars are being held*), the lack of the community being informed is observed. The community misses information about refugees, the reasons why refugees leave their country, what assistance and help they need in Lithuania, etc. The lack of information induces people's negative viewpoint to refugees, fear, expression of xenophobia because people are subject to follow stereotypes. The most efficient ways to involve the community are as follows: through personal contacts or communities of the schools that refugees attend (see Table 4).

Table 3

Cooperation with government and non-government organisations

Category	Subcategory	Confirmative statement
Cooperation among organisations	Good cooperation	„I would say that the cooperation is good", „Cooperation takes place",
	Effective cooperation	„I would say cooperation in Lithuania is the most effective [in comparison to other countries]",
	Close cooperation	„Cooperation is close with all organisations"
	Cooperation among NGO	„Greatest cooperation [takes place] among NGO"
	Complicated cooperation among state institutions	„...where at a state institution cooperation is somehow less", „sometimes one can feel where state institutions and where NGO", „one has to adjust to state institutions because their work is regulated by laws".
Limitations in cooperation among organisations	Lack of cooperation in writing projects	„... those organisations write similar projects because of the lack of cooperation"
	Lack of cooperation with other organisations [working not in refugees' field]	„It is hard to communicate with other organisations and institutions [working with other social groups]"
Factors influencing cooperation among organisations	A small country	„Lithuania is such a small country"
	A small number of refugees	„The number of refugees is small", „... because there not many refugees"
	A small number of working organisations	„There not many organisations and municipalities, which work with refugees"

Table 4

Involvement of the community

Category	Subcategory	Confirmative statement
Factors influencing community involvement	Negative viewpoint	„People treat us very negatively",
	Following stereotypes	„Involvement is hard because they follow stereotypes"
	Lack of interest in refugees	„Society is not interested", „Either they are afraid or they are not interested"
Ways for community involvement	Community involvement through acquaintances, friends, colleagues	„It is easy [to involve society] when colleagues communicate with their neighbours, children with friends at school"
	Community involvement through schools	„It is easier to involve people through schools"

During the analysis of the research results, other peculiarities of the process of educational assistance for refugees became evident:

✓ The research results have disclosed the lack of the factor – *client's empowerment to integrate into society,* which is very relevant for successful social integration of refugees. Without empowerment different means applied in refugees' integration process lose their essence – to integrate refugees.

✓ The research results have shown that in organising educational assistance for refugee-children the same conditions to learn as for children of a receiving country are created. On the one hand, this is good – children of refugees are not being discriminated in respect of education. However, on the other hand, as children of refugees require greater attention in educational process, certain limitations in organising the educational assistance become evident due to experienced stress, interrupted education in a native country, not knowing the language, namely: *the lack of readiness to learn Lithuanian, the lack of possibilities for additional learning and integration into the culture as well as the lack of free higher education for refugees.*

✓ The research results have revealed that courses and training are organised for the specialists (except teachers) working with refugees; however *supervisions and seminars* that acquaint with *the experience of and practice of foreign specialists* are missing.

Conclusions

• The process of refugees' social integration is the object of multidisciplinary researches. Social integration of refugees is two-way, dynamic, long-term and multidimensional processes taking place in certain environment. The success of the process is determined communication and cooperation of refugees and members of the community, in which the integration takes place, in daily life of people as well as the conditions existing for social integration, which are determined by social, economical and political systems of the country.

- Educational assistance for refugees is provided by meeting their educational needs necessary for integration into society. Main educational needs and rights of refugees are as follows: education and development of children and young refugees, language courses for refugees (adults), recognition of diplomas possessed by refugees. It is possible to meet these needs by the following ways: creating standardised systems to evaluate a teaching level; multi-agency cooperation, support and relationship; teaching of refugee-children at the forms of basic subjects in the language of the country that gave sanctuary; conditions to learn own native language; preparation of necessary materials for refugees' teaching; multicultural education of specialists; special trainings for teachers working with refugees.
- The research results disclosed that favourable conditions for learning of refugees existed *(i.e. a possibility to choose courses and programmes, a possibility to acquire a specialisation already at the Refugees reception Centre, assistance in choosing a profession at the Refugees Reception Centre; professional trainings suggested by the labour exchange; equal conditions to acquire a profession as for Lithuania's residents)* as well as to acquire professional qualification. Main problems of the process of organising educational assistance for refugees that have been disclosed during the research are related to client's empowerment for his/her activity and integration into the society, the lack of professional competence and personal traits of specialists (tolerance, positive viewpoint to refugees). The lack of employees' competences can be one of limitations of rendering educational assistance for refugees. Cooperation among organisations is one of the ways of organisation of successful educational assistance for refugees. The research has revealed some limitations in cooperation with other organisations working not in the field of refugees as well as the lack of cooperation in writing projects. Having established multi-agency network, the cooperation would be more efficient.

References

1. Asylum seekers in Scotland. Edinburgh: Scottish Executive Social Research. 2003.
2. Benz, W. Integration ist machbar. Ausländer in Deutschland. München: Beck'sche Reihe. 1993.
3. Beresnevičiūtė, V. Etninių grupių socialinės integracijos dimensijos šiuolaikinėje Lietuvos visuomenėje. Daktaro disertacijos santrauka. Vilnius. 2005
4. Belesta, A. Forced migration and the contemporary world challenges to the international system. Białystok. Retrieved on March 10, 2008, from http://fmo.qeh.ox.ac.uk/Repository/getPdf.asp?Path=Oxford6/1604/10/11&PageNo=1
5. Boswell, C. Addressing the causes of migratory and refugee movements: the role of the European Union. New Issues in Refugee Research. Working Paper, 2002. No. 73. Retrieved on February 11, 2008, from http://www.unhcr.org/research/RESEARCH/3e19ac624.pdf
6. Cholewinski, R. Overview of Social and Economic Rights of Refugees and Asylum Seekers in Europe: International Obligations – Education and Employment. ECRE Conference on Social and Economic Rights of Refugees and Asylum Seekers - Education and Employment. Ukraine. 2004
7. Crisp, J. The local integration and local settlement of refugees: a conceptual and historical analysis. New Issues in Refugee Research. Working Paper, 2004. No. 102. Retrieved on February 15, 2008, from http://www.unhcr.org/research/RESEARCH/407d3b762.pdf
8. Heyzer, N. Frameworks for response. Forced Migration Review, issue 27. Oxford: Refugee Studies Centre. 2007. Retrieved on February 20, 2008, from http://fmo.qeh.ox.ac.uk/fmo/index.asp
9. Hudson, D., Weiler, R. Towards the Integration of Refugees in Europe. The Way Forward - Europe's Role in the Global Refugee Protection System. ECRE. 2005. Retrieved on February 20, 2008, from http://www.ecre.org/files/Integ.pdf
10. Jacobsen, K. The forgotten solution: local integration for refugees in developing countries. New Issues in Refugee Research. Working Paper, 2001. 45. Retrieved on February 24, 2008, from http://www.unhcr.org/research/RESEARCH/3b7d24059.pdf
11. Jastram, K., Achiron, M. (2001). Pabėgėlių apsauga: Tarptautinės pabėgėlių teisės vadovas. Jungtinių Tautų vyriausiojo pabėgėlių komisaro valdyba ir Tarpparlamentinė sąjunga. 2001. p.41-63.
12. Jonušas, J. Мультикультурное окружение – критерий развития личности. Edukacja dla przyszlosci. Bialystok: Wyzsza Szkola Finansow i Zarzadzania. 2006.
13. Indrašienė, V. Socialinio ugdymo technologijos. Vilnius: VPU. 2004.
14. Kasatkina, N., Leončikas, T. Lietuvos etninių grupių adaptacija: kontekstas ir eiga. Vilnius: Eugrimas. 2003.
15. Koser, K. International Migration: A very short introduction. New York: Oxford university press. 2007.
16. Krieger, H. Migration trends in enlarged Europe. European foundation for the Improvement of Living and Working Conditions. Office for the Official Publications of the European Communities. Luxembourg. 2004. Retrieved on March 16, 2008, from http://www.eurofound.europa.eu/pubdocs/2003/109/en/1/ef03109en.pdf
17. Kuzmickaitė, D. K., Civinskas, R., Davoliutė, V., Tamutienė, I., Aušrotas, R. Prieglobsčio prašytojų socialinės ir profesinės integracijos galimybių studijos ataskaita. Kaunas: Socialinės ekonomikos institutas. 2005.
18. Niessen, J., Schibel, Y. Integracijos vadovas politikos kūrėjams ir vykdytojams. Europos Bendrija. 2004.
19. Philip, M. Refugees and History: Why we must address the past. Refugee Survey Quarterly, Vol. 26, Issue 3. London. 2007.
20. Rodgers G. „Hanging out'" with Forced Migrants: Methodological and Ethical Challenges. Forced. Migration Review, September, 2004. p.48–49. Retrieved on February 25, 2008, from http://www.fmreview.org/FMRpdfs/FMR21/FMR2119.pdf
21. Salinas, C., Muller, G. Good Practice Guides on the Integration of Refugees in the European Union: Education. ECRE task force on Integration. 1999. Retrieved on February 25, 2008, from: http://fmo.qeh.ox.ac.uk/Repository/getPdf.asp?Path=Oxford/1612/04/06&PageNo=1
22. Spierts, M. Balansavimas ir aktyvinimas. Metodiškai organizuotas socioedukacinis darbas. Vilnius; VU Specialiosios psichologijos labotratorija. 2003.
23. Suvanto, M. L. Pabėgėliai. Vilnius. 2001.
24. Štuopytė, E. Psichologinio- socialinio darbo su prieglobsčio prašytojais metodika. Vilnius. 2006.
25. Štuopytė, E. Prieglobstį gavusių užsieniečių socialinės integracijos vadovas. Vilnius: Kriventa. 2007.
26. Štuopytė, E. (2008). Social Educational Assistance for Refugee Women in the Process of Integration into New Social Environment. Social sciences / Socialiniai mokslai, 2008. 3 (61), p. 43-51.
27. Volkert D. Migration und Integration in Deutschland – Ein Vergleich, 2002. p.4. Retrieved on November 5, 2008, from, http://www.grin.com/e-book/25105/migration-und-integration-in-deutschland-ein-vergleich

28.   Wren, K. Supporting Asylum Seekers and Refugees in Glasgow: The Role of Multi-agency Networks. Journal of Refugee Studies. 2007. Vol. 20, 3.

Edita Štuopytė, Justė Milaševičiūtė

Edukacinė pagalba pabėgėlių socialinės integracijos į bendruomenę procese

Santrauka

Pabėgėliams kaip labiausiai pažeidžiamai socialinei grupei, yra svarbu prisitaikyti prie naujos aplinkos ir integruotis į juos priėmusios šalies bendruomenę. Pabėgėlių integracijos problemos analizuojamos įvairių mokslininkų darbuose, tačiau integracijos proceso multidiscipliniškumo kontekste, nepakankamai atskleista edukacijos reikšmė šiame procese, todėl šio straipsnio mokslinė problema apibrėžiama klausimu: kaip edukacinė pagalba pabėgėliams įtakoja jų socialinės integracijos bendruomenėje procesą? Pirmoje šio straipsnio dalyje atskleidžiami teoriniai edukacinės pagalbos pabėgėliams organizavimo integracijos procese aspektai, antroje dalyje analizuojami tyrimo rezultatai.

Tyrimo rezultatai parodė, kad siekiant sėkmingos socialinės integracijos bendruomenėje reikalinga numatyti edukacinės pagalbos būdus bei sudaryti šiai pagalbai būtinas sąlygas. Edukacinės pagalbos būdai apima pabėgėlių vaikų ir suaugusiųjų švietimo, mokymo bei profesinio mokymo sritis šalyje, kurioje vyksta integracija. Pagrindinės edukacinės pagalbos pabėgėliams organizavimo proceso problemos, išryškėjusios analizuojant tyrimo rezultatus, susijusios su nepakankamu mokytojų pasirengimu dirbti su pabėgėlių vaikais, prastu valstybinės kalbos mokytojų veiklos organizavimu, nepakankamu bendruomenės švietimu, nepakankamu bendradarbiavimu tarp organizacijų, kuris sumažina įvairių veiklų įgyvendinimo galimybes.

About the authors

Edita Štuopytė. Doctor of Social Sciences (Educational Science), Assoc. Prof., Department of EducationalSystems, Faculty of Social Sciences, Kaunas University of Technology. E-mail: edita.stuopyte@ktu.lt,
Office phone +370 37 300135. Scientific interests: social education, education in multicultural environemnt; socio-educational work with refugees and migrants.
Justė Milaševičiūtė. The graduate from the study programme in social education, Kaunas University of Technology, Domiciliary care and support worker in London. E-mail: jusmilas@gmail.com. Scientific interests: problems of children socialisation, socio-educational work with refugees.

THE ROLE OF OPEN ACCESS IN THE SCHOLARLY COMMUNICATION PROCESS

Gintarė Tautkevičienė, Iryna Kuchma, Ieva Cesevičiūtė
Kaunas University of Technology, Lithuania

Abstract

The number of open access journals and institutional repositories is constantly growing. Free and unrestricted access to scientific information has a significant impact on research process. However, researchers do not always understand and appreciate open access resources in the scholarly communication process. The integration of open access resources in the scholarly communication system changes the way scientists communicate research results and varies across fields. This paper aims to present open access situation around the world and to discuss tendencies and problems concerning open access resources in Lithuania.

Keywords
Open access, repositories, open access journals, scholarly communication, scientific publications.

Introduction

The current system of scholarly communication which has existed for many decades is facing changes, as it is no longer able to satisfy the needs of scientific communities. The dissatisfaction with the processes of scholarly communication is related to different reasons: rapidly rising subscription prices, concerns about copyright, latency between results and their actual publication, and restrictions on what can be published and how it can be disseminated. The problems of scientific publishing are related to constantly growing prices of scientific journals and an Open Access initiative is trying to solve access to scientific publications focuses on different strategies (Van de Sompel et al, 2004):

- The *self-archiving* movement strives for a scholar's right to make traditional journal publications freely available in an open repository.
- The *journal-reform* movement promotes the emergence of new types of journals that are free for the users.

The conventional commercial model of scientific publishing currently is supplemented or, recently, even substituted by the system of open access. The article addresses the problems and issues related to the role of open access in the process of scholarly communication. It also analyses the situation of open access in Lithuania. The methods of research literature analysis and document analysis are employed in the article.

The process of scholarly communication

Scholarly communication is accumulation and dissemination of information on research results by the means of technical equipment, organizational structures, etc., also evaluation of research results by practical knowledge. The system of scholarly communication encompasses generation of new scientific knowledge, its storage, dissemination, management and sharing. Conventionally scholarly communication takes place among members of the scientific community, but it also involves those members of the society who are concerned with implementation of research results in practice. Thus scholarly communication is ensures dissemination of

research results, visibility for the global community and practical application.

Scholars communicate by writing books, monographs and journal articles for publication, presenting conference papers that later are published in proceedings and transactions, also by submitting reports, creating and maintaining websites for the academic community, and communicating with peers via e-mail, discussion forums or social networks. The process of scientific communication includes not only creation and dissemination of scholarly works but also evaluation of quality (peer review) and preservation for future use.

Scholarly communication claims ownership of the research results, social recognition for the author, claiming priority for a discovery, establishing an accredited community of authors and readers. Roosendaal and Geurts (1997), drawing on the analysis of formal scholarly communication since its emergence in the 18th century, distinguish the following functions that must be fulfilled by every system of scholarly communication regardless of its actual implementation:

- registration, which allows claims of precedence for a scholarly finding;
- certification, which establishes the validity of a registered scholarly claim;
- dissemination/awareness, which allows actors in the scholarly system to remain aware of new claims and findings;
- preservation/archiving, which preserves the scholarly record over time.
- rewarding, which rewards actors for their performance in the communication system based on metrics derived from that system.

Research results are shared and evaluated by the scientific community and students. Scientists communicate both formally and informally.

Scholarly communication is lead by formal publications traditionally in some form of printed material: articles, books, proceedings, reports, etc. The advantages of formal scientific publishing is that information is widely disseminated to readers; information is comprehensive: methodological description, tables, diagrams, results, etc.; the information in documents is reviewed and critically evaluated; documents may be accessed globally; published documents are among the major indicators of

academic work and show the significance of their writers' work. The major weakness is that the process of publishing is long, expensive and that publications are accessible only to subscribers.

Informally researchers share ideas through verbal communication channels: personal networks, lectures, seminars, conferences or meetings. The advantage of this form of communication is rapid exchange of information and flexibility. The weakness of informal communication is that information is accessible only to a very limited number of people and its quality is not evaluated by the scholarly community. Lack of information may lead to misunderstanding or misinterpretation of ideas.

To extend the information communication possibilities in the process of informal communication information, technologies like e-mail, electronic conferences, discussion groups or social networks are used very often. The advantages of these means are related to indefinite place, distance and time of communication; the documents may be easily downloaded, accessed, printed or stored as well as discussed.

The model of scholarly communication process provides a foundation for a detailed identification of the actors, activities, objects and functions involved in the entire scholarly communication process (Björk, 2007, 2009). The scholarly communication life-cycle model 'includes the activities of researchers who perform research and write publications, publishers who manage and carry out the actual publication process, academics who participate in the process as editors and reviewers, libraries who help in archiving and providing access to the publications, bibliographic services who facilitate the identification and retrieval of publications, readers who search for publications, retrieve and read them, and practitioners who implement the research results directly or indirectly' (Houghton, 2009).

At present, the three emerging models: subscription publishing, open access publishing and self-archiving for scholarly publishing are discussed. Subscription or toll publishing refers primarily to academic journal publishing and subscription. The other two models are related to:

- open access journal publishing and open access self-archiving where authors deposit their publication in online open access institutional or subject-based repositories. These two models are discussed in the rest of the paper.

Open access to scholarly information

The aim of open access is to ensure a free and unrestricted access to scholarly literature: articles, conference papers, doctoral dissertations and theses, other published and/or non-published materials. The development of open access provides an opportunity to disseminate research results by ensuring their visibility globally and providing members of the academe with a free access to global scientific resources. At the same time, open access weakens the monopoly of commercial publishers, destroys the faulty system of access to publications, increases the return of financial input for scientific creation, encourages the use and application of scientific information.

Open access advocates seek open access for peer-reviewed literature. The only exception is for preprints, which are put online prior to peer review but which are intended for peer-reviewed journals at a later stage in their evolution. Self-publishing to the internet, which bypasses peer review, is not the kind of open access that open access movement seeks or endorses.

In other words, open access implies the same requirements that are valid for the processes of scientific publishing. In principle, the difference between them lies only in who pays the publishing costs.

The principles of Open Access (OA) have been set down in three different Declarations: The Budapest Open Access Initiative (February 2002), the Bethesda Statement on Open Access Publishing (June 2003) and the Berlin Declaration (October 2003). By 'open access' to literature, we mean its permanent free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited (open access definition from the Budapest Open Access Initiative http://www.soros.org/openaccess/read.shtml).

For the users, Open Access means that the price barrier is eliminated because they gain free access to the publications (Suber, 2007). In addition, the copyright limitations are removed because the author gives advance permission for a wide use of the complete publication. For the authors, Open Access means an increase in the readability of their works and visibility for worldwide auditorium and greater impact of their own work.

To achieve open access to scientific publications two complementary strategies are used: open access journals and open access archives or repositories. Open access journal publishing is called a 'gold road'. And open access archives/repositories – a 'green road'.

OA journals are on-line journals in which articles are published in accordance with the principles of Open Access. The publications are therefore freely available and the author has given a non-exclusive licence for their broad use. The characteristics of Open Access journals are as follows: the journals include peer review and provide a free public access, at the same time allowing the author to retain copyright. The costs incurred by journals consist of costs organizing the review process, production costs and server costs. Publishing costs may be covered by educational or research institutions, professional or scientific communities. Some costs of OA journals are covered by the authors, their institutions or sponsors. This model of publishing is applied by the Public Library of Science (PLoS) and BiomedCentral. The SCOAP3 consortium in the field of physics uses a different model of covering publishing costs: they are covered by the members of the consortium (governments, research institutions), thus authors do not have to pay.

Open access journals available on Directory of Open Access Journals (http://www.doaj.org) covers free, full text, quality controlled scientific and scholarly journals. There are now 4361 journals in the directory.

Some journals use a hybrid and delayed ways of access:

- hybrid journals provide open access only to some articles, those for which payment is made on behalf of the author.
- delayed open access journals provide open access to particular articles only after a period of embargo.

Open access repositories are an important part of the Open Access movement. They hold and make available research output to worldwide community. Authors deposit copies of their publications: articles, book chapters, conference papers, etc. The publications in the repository supplement conventional publishing of research articles, conference proceedings, etc. Thus the toll publishing model co-exists with the open access system. Open access archives or repositories do not perform peer review of the publications but they ensure access to them and worldwide visibility. They may store non-peer reviewed pre-prints, peer reviewed post-prints or both of these types. Repositories may be developed on the institutional basis, i.e. belong to one institution or institutional network; alternatively, archives on a specific scientific topic may be created. The development of open access archives and repositories should follow the standards supporting the OAI-PMH protocol and ensuring the interoperability of repositories. To ensure the visibility of research and its accessibility to the global scientific community, an infrastructure for a unified search within all institutional repositories is being developed and continuously improved.

The OA repositories contain peer reviewed articles, conference presentations, books, course materials, audio and video recordings, research data and 'grey literature' (pre-prints, reports, thesis and dissertations, not published conference presentations, etc.).

The Register of Open Access Repositories ROAR (http://roar.eprints.org) currently lists 1470 repositories from countries all over the world. The search for institutional repositories may be carried out according to geographic country, used system software or content type.

The catalogue of open access repositories OpenDOAR (http://www.opendoar.org) registered 1490 open access repositories. The OpenDOAR service provides a quality-assured listing of open access repositories around the world. OpenDOAR staff harvest and assign metadata to allow categorisation and analysis to assist the wider use and exploitation of repositories. Users can search for institutional repositories or their contents. Additionally, the OpenDOAR service provides tools and support to both repository administrators and service providers in sharing best practice and improving the quality of the repository infrastructure.
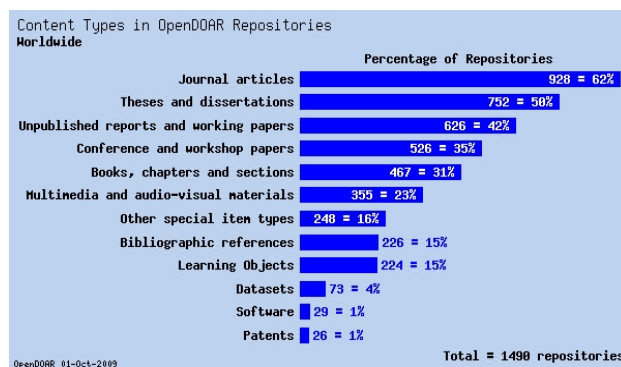

Figure 1. Content Types in OpenDOAR Repositories (most repositories hold several Content Types)

A union catalogue of digital resources OAIster currently provides access to 23,094,888 records from 1139 contributors (http://www.oaister.org). Data from repositories are harvested using OAI-PMH (the Open Archives Initiative Protocol for Metadata Harvesting). BASE is another multi-disciplinary search engine for academically relevant web resources which was created and developed by Bielefeld University Library (http://www.base-search.net). Through BASE one can search 21,172,966 documents from 1,362content sources. BASE is a registered OAI service provider and contributes to the European project "Digital Repository Infrastructure Vision for European Research" (DRIVER) since June 2006.

The DRIVER project (http://www.driver-repository.eu/) is networking European Scientific Repositories. The project funded by the European Commission is considered as the largest initiative enhancing repository development worldwide. The vision of the project is that all research institutions in Europe and worldwide make their research publications openly accessible through open access repository. The DRIVER infrastructure offers tools for harvesting and aggregating Open Access Institutional Repositories to form a uniform and openly accessible information space.

Issues in open access development

Two issues related to open access development may be distinguished: publishing costs and motivating scientists for depositing their publications in open-access journals and institutional repositories.

The first issue is related to ensuring funding allocation for publishing research results/ publishing and open access to them. Addressing this issue implies allocation of financial resources to publishing costs, at the same time making the publications available free of charge for end-users. When publications are available through on-line journals, no costs are required for subscription.

The second issue is related to evaluation of research results. By publishing their research results, scholars have different aims. First of all, they aim to become visible and recognized worldwide; secondly, their publications influence the recognition of their institutions in the global scientific community, as well as financing for research. Therefore, scholars seek to publish their research results in recognized publications that are read, cited and reviewed on prestigious databases, first of all, ISI Web of

Knowledge. Thus the Open Access movement has to consider these two issues and coordinate its performance for addressing them.

Encouraging the development of open access has to involve three directions:

- an open access policy should be developed on the institutional, national and international level, relevant documents encouraging and supporting open access should be adopted;

- dissemination of information about open access should be ensured on the international, national, institutional and scientific community levels;

- open access journals publishing and creation of national repositories should be encouraged and promoted to all the stakeholders.

A series of documents, regulations and recommendations to encourage open access on the international level and national level in different countries has been developed. According to the Berlin Declaration, institutions should develop political statements:

- to obligate scholars to submit publications on the results of their research funded by the state and other foundations in open-access repositories;

- to encourage scholars to publish their research articles in open-access journals by covering publication costs.

The institutions of the European Union have manifested a series of legal documents with statements about issues on open access, for instance European Research Advisory Board Final Report 'Scientific publication: Policy on Open Access'; European Research Council Scientific Council Guidelines for Open Access; Council of EU Conclusions on scientific information in the digital age: access, dissemination and preservation; Recommendations from the European University Association Working Group on Open Access.

The initiatives of open access have been supported in most universities and research institutes worldwide and in Europe; they have adopted the policy and regulatory documents on open access to research results. The attitude of different countries and institutions to the initiative of open access may be evaluated according to the adoption of legal documents regulating the issues of open access on the national and institutional levels. ROARMAP (the Registry of Open Access Repository Material Archiving Policies http://www.eprints.org/openaccess/policysignup) lists the organisations and policy documents on the issues of open access. Currently, the Registry involves 131 mandates.

Conferences, seminars and other events concerned with the trends and issues of open access are taking place worldwide. All kinds of stakeholders are involved in them: scholars, information specialists, librarians, publishers. Publishers who were rather critical towards open access initiative before, have now admitted its advantages.
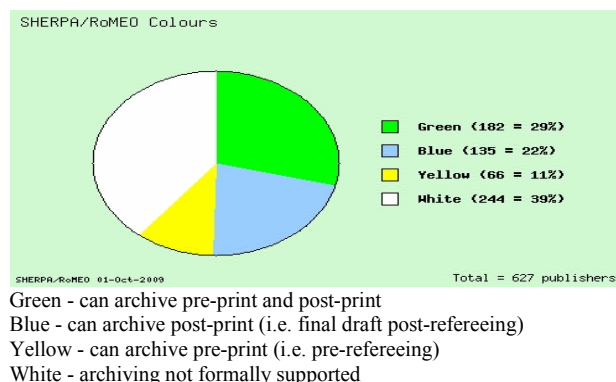

Green - can archive pre-print and post-print
Blue - can archive post-print (i.e. final draft post-refereeing)
Yellow - can archive pre-print (i.e. pre-refereeing)
White - archiving not formally supported

Figure 2. Publishers' archiving policy

Quite often scholars are sceptical towards open access for several reasons:

• in many countries the system of research assessment of individual scholars and institutions considers only the publications with a high index of citation reviewed in certain databases. The most acclaimed publications are those included into the ISI Web of Science and published in journals with a high impact factor. Therefore, scholars seek to publish their articles in these prestigious journals;

• archiving publications in institutional and subject repositories is impeded by the fact that authors transfer their copyright to publishers when they publish their articles. If this happens, they lose the right to disseminate their research results.

In most cases scholars are not familiar with the attitudes of publishers, scientific communities and different journals towards the issues of open access. The website of the SHERPA RoMEO project provides information about the publishers' copyright policy and publishers' copyright rules which allow to deposit articles in institutional repositories.

In the database of this project scholars may find a summary of each publishers' policies and clearly see what version of an article can be put to institutional or subject repository. 61% of publishers on this list formally allow some form of self-archiving. E.g., American Institute of Physics and Institute of Electrical and Electronics Engineers (IEEE) allow submitting their publications without any restrictions (); others allow delayed submission after the embargo period: 6 month embargo (e.g., American Heart Association, International Glaciological Society), –, or sometimes even 24 month embargo (e.g., Modern Humanities Research Association) (Kretavičienė, Tautkevičienė, 2008).

The website of another project SHERPA JULIET provides summaries of funding agencies' grant conditions on self-archiving of research publications and data. The researchers can clearly see what material, when and where should be self-archived.

With reference to the citation index and impact factor of open access journals in the system of scholarly communication, it may be noted that articles published in open access journals are easier accessible and, therefore, more often cited. Studies show that the influence of OA journals (OAJ) in the scholarly communication system is growing. A lot of publications provide an overview of studies on perception of OA journals. The study by McVeigh (2004) documents that the number of OAJs in the citation indexes provided by ISI ThomsonTM is

growing, both in terms of creating new titles and conversion of established titles. Sotudeh and Horri (2007, cit. Frandsen, 2008) analyse the performance of OAJs in terms of expected citation rates and conclude that OA is widely recognised by scientific communities.

Open access in Lithuania

The seminar on scholarly communication which took place in Vilnius in 2005 may be regarded as the beginning for open access movement in Lithuania. Representatives of the Ministry of Education and Science of the Republic of Lithuania, Lithuanian universities and research institutes took part in the seminar where presentations were given by internationally well known experts of open access: Melissa Hagemann, Raym Crow, Lilian van der Vaart and others. Different subsequent events were also held to promote the movement of open access among Lithuanian scholars.

On the 7th of May in 2008 the Ministry of Education and Science together with Lithuanian Research Libraries Consortium organised the meeting to discuss the idea of open access movement. SPARC Europe Director David Prosser, representatives of the Research Council of Lithuania and the Centre for Quality Assessment in Higher Education, administration of universities, scholars, libraries, publishers, the eLABa and other institutions participated in the meeting.

The 22nd of October was celebrated as the International Open Access Day in 2008. On this day different events addressing issues of open access were held in different countries. Open Access Day helped to broaden awareness and understanding of open access, including recent mandates and emerging policies, within the international higher education community and the general public. In Lithuania, the seminar 'Quality Assurance of Scientific Information in Open Access' was organised by the Research Council of Lithuania, Consortium of Lithuanian Academic Libraries and the Ministry of Education and Science. As different previous events, it showed that scholars and research administrators are too little acquainted with the potential of open access and its importance; their attitudes towards the development of open access in Lithuania are quite sceptical.

Almost all open access related events were organised with the initiative of academic libraries, and libraries are the most active advocates for of open access in Lithuania. The Lithuanian Research Libraries Consortium is a member of eIFL.net Open Access programme.

Major changes in the field of scientific publishing, especially in relation to open access, are anticipated because of the new 'Lithuanian Law on Science and Studies'. Its article 4.5 says that 'in order to guarantee the quality, transparency of the scientific research and to stimulate scientific advancement carried out utilising state budget funds, all the results of the scientific activity carried in the state science and study institutions must be made public (via internet and by other means) if this is in agreement with laws regulating intellectual property and protection of the commercial, state or work related secrets' (Law on Science and Studies, 2009). But implementation of this law on the institutional level is still being discussed. Institutions should also adopt policies obligating authors of publications to deposit them in institutional or national repositories.

Lithuanian electronic academic library (eLABa)

All academic and research institute libraries are members of the Lithuanian Academic Libraries Network (LABT). This organization currently involves 57 libraries, serving 120 000 readers, having 5,1 mln. items and 1,8 mln. bibliographical records (Tautkeviciene et al., 2009).

One of its aims is to create Lithuanian Virtual Library with unified access to digital resources as well as to other library resources and services.

The Lithuanian Electronic Academic Library (eLABa) has been created to provide access academic full text publications in the frame of the LABT project and projects supported by the EU Structural Funds. The main aim of the eLABa is to develop environment and tools that will be used to produce, deposit and archive as well as provide access for readers full text electronic documents concerned with Lithuanian science and studies (Štreimikis at al., 2007).

The main functions of the eLABa are the following (http://elaba.library.lt):
- submission of scientific and study publications by using automatic procedures of e-publishing;
- collection, cataloguing and archiving of e-documents for long-term preservation;
- search and retrieval of documents deposited in the eLABa;
- providing the possibility to search for repository documents via *Google* and other search engines.

The development of the eLABa is regulated by documents on the state, institutional and contractual level of regulation. On the state level, it is regulated by the Law on Copyright and Related Rights, Regulations of eLABa and Guidelines for the Description of Procedures for Preparation, Presentation and Submission of ETD to eLABa Repositories and its Usage. On the institutional level, the Description of Institutional Procedures for Preparation, Presentation and Submission of ETD to eLABa Repositories and Usage has been adopted. On the contractual level, it is regulated by Licence Agreements and Inter-institutional Agreements.
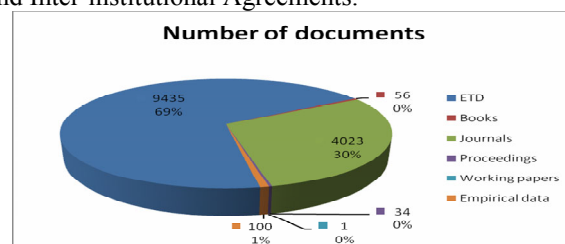

Figure 3. The eLABa statistics

The eLABa deposits and archives the documents in six collections:
- books (monographs, manuals, textbooks and other publications of science and studies);
- journals (peer-reviewed scientific articles or popular science publications);
- proceedings (papers presented at scientific or practical conferences, seminars and other events of science and studies);

- ETD (electronic theses and dissertations);
- working papers (research and project reports, other e-materials on scientific research and experimental development and studies);
- empirical data (empirical data of scientific research).

In the future, the repositories of the eLABa will also deposit and provide access for readers to other resources relevant for science and studies, e.g., learning objects.

At the moment the eLABa contains almost 14 thousands fulltext documents. The documents of all the collections, except ETD are open to on-line access. The access to ETD can be restricted by authors: the documents may have the status of open access, access only on the institutional intranet, temporarily unavailable for public.

Conclusions

The system of commercial publishing which has existed for many decades can no longer satisfy the needs of scientific communities and funding institutions.

Publishing the results of research funded by the government and different funding agencies in commercial journals when copyright is transferred to the publisher prevents access to research results worldwide, thus preventing a more effective development of science.

The open access initiative ensures free access to information and its free application, removes the barriers of scholarly communication and encourages a more effective development of research and studies.

Open access to research results is ensured through open access journals or institutional/ subject repositories. Institutions, funding agencies or authors themselves cover the costs of open access publishing but end-users may access the publication free of charge.

A series of documents, regulations and recommendations to encourage open access on the international level and national level in different countries has been developed.

In the case of Lithuania, one article of the newly adopted Law on Science and Studies provides premises for the development of open access in Lithuania but on the institutional level there still are no strategies and regulations on open access to scientific information. As the main problem for open access development in Lithuania is lack of awareness about goals, possibilities and advantages of open access movement. There is also a lack of scholars' interest and administration support.

There are changes in scientific publishing taking place in Lithuania: open access research journals are published, access to publication is ensured through the Lithuanian institutional repository eLABa. The Lithuanian electronic academic library (eLABa) is continually complemented with new fulltext documents, most often with master's theses, doctoral dissertations and their summaries. There is also a substantial collection of journal articles. Other collections are replenished less often.

References

1. Björk, B. C. (2007). A model of scientific communication as a global distributed information system. *Information Research, 12*(2). Retrieved 20 June, 2009 from http://InformationR.net/ir/12-2/paper307.html
2. Björk B. C., Roos, A., Lauri, M. (2009). Scientific journal publishing: yearly volume and open access availability. *Information Research, 14*(1). Retrieved 20 June, 2009 from http://informationr.net/ir/14-1/paper391.html
3. *Council of EU Conclusions on scientific information in the digital age: access, dissemination and preservation.* Retrieved 20 June, 2009 from http://ec.europa.eu/research/infrastructures/pdf/97236_en.pdf
4. *Dėl Studijų baigiamųjų darbų, daktaro disertacijų, jų santraukų bei habilitacijos procedūrai teikiamų mokslo darbų apžvalgų kaupimo Lietuvos mokslo ir studijų elektroninių dokumentų informacinėje sistemoje.* Retrieved 20 June, 2009 from (http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=316240&p_query=eLABa&p_tr2=2).
5. *DRIVER – Digital Repository Infrastructure Vision for European Research.* Retrieved 20 June, 2009 from http://www.driver-repository.eu/
6. *European Research Advisory Board Final Report 'Scientific publication: Policy on Open Access'.* Retrieved 20 June, 2009 from http://ec.europa.eu/research/eurab/pdf/eurab_scipub_report_recomm_dec06_en.pdf
7. *European Research Council Scientific Council Guidelines for Open Access.* Retrieved 20 June, 2009 from http://erc.europa.eu/pdf/ScC_Guidelines_Open_Access_revised_Dec07_FINAL.pdf
8. Frandsen, T.F. (2008). *The integration of open access journals in the scholarly communication system: three science fields.* Retrieved 20 June, 2009 from http://www.hprints.org/docs/00/32/62/85/PDF/oa-interaction.pdf
9. Houghton, J. Et al. (2009). *Economic Implications of Alternative Scholarly Publishing Models: Exploring the costs and benefits.* Retrieved 20 June, 2009 from http://www.jisc.ac.uk/media/documents/publications/rpteconomicoapublishing.pdf
10. *Lietuvos Respublikos mokslo ir studijų įstatymas (2009).* Retrieved 20 June, 2009 *http://www.smm.lt/ti/docs/istatymai/MSI.pdf*
11. eLABa duomenų saugos nuostatai http://www.smm.lt/teisine_baze/docs/isakymai/2006-07-14-ISAK-1506(3).doc
12. Kretavičienė, M., Tautkevičienė, G. Mokslinės informacijos atvira prieiga: situacija, tendencijos, problemos. Bibliotekos elektroninės informacijos infrastruktūros kūrimas ir e.paslaugos mokslui, studijoms, visuomenei ir verslui: seminaras, 2008-11-18. Retrieved from http://www.lnb.lt/stotisFiles/uploadedAttachments/meile200810213749.ppt
13. McVeigh, Marie E. *Open Access Journals in the ISI Citation Databases: Analysis of Impact Factors and Citation Patterns. A citation study.* 2004. Retrieved from Thomson Scientific. Retrieved 20 June, 2009 from http://science.thomsonreuters.com/m/pdfs/openaccesscitations2.pdf
14. *OpenDOAR – The Directory of Open Access Repositories.* Retrieved 20 June, 2009 from http://www.opendoar.org.
15. *Recommendations from the European University Association Working Group on Open Access.* Retrieved 20 June, 2009 from http://www.eua.be/fileadmin/user_upload/files/Policy_Positions/Recommendations_Open_Access_adopted_by_the_EUA_Council_on_26th_of_March_2008_final.pdf
16. Roosendaal, H., and Geurts, P. 1997. Forces and functions in scientific communication: an analysis of their interplay. *Cooperative Research Information Systems in Physics*, August 31—September 4 1997, Oldenburg, Germany. Retrieved 20 June, 2009 from <http://www.physik.uni-oldenburg.de/conferences/crisp97/roosendaal.html>
17. Štreimikis, A., Kučiukas, V., Žurauskas, S., Targamadzė, A., Žalys, A. (2007). Lietuvos akademinė e. biblioteka (eLABa) . I*nformacijos mokslai = Information Sciences: mokslo darbai,* 40. p. 9–24.
18. Tautkeviciene G., Streimikis, A., Kuciukas, V. (2009). Lithuanian Electronic Academic Library (eLABa). *CERN workshop on Innovations in Scholarly Communication (OAI6), 17-19 June. 2009.* Retrieved 20 June, 2009 from http://indico.cern.ch/internalPage.py?pageId=9&confId=48321
19. Van de Sompel, H. et al. (2004). Rethinking Scholarly Communication. Building the System that Scholars Deserve. *D-Lib Magazine10* (9). Retrieved 20 June, 2009. http://www.dlib.org/dlib/september04/vandesompel/09vandesompel.html.
20. *DOAJ – Directory of Open Access Journals.* Retrieved 20 June, 2009 from http://www.doaj.org /
21. *Budapest Open Access Initiative.* Retrieved 20 June, 2009 from http://www.soros.org/openaccess/read.shtml
22. *eLABa nuostatai.* Retrieved 20 June, 2009 from (http://www.smm.lt/teisine_baze/docs/isakymai/2006-07-14-ISAK-1506(3).doc);

23. *IVPK registras.* Retrieved 20 June, 2009 from (http://www.ivpk.lt/dokumentai/is/Registravimai.doc).
24. *Lietuvos mokslinių bibliotekų asociacija.* Retrieved 20 June, 2009 from (http://www.lmba.lt).
25. *OAIster - Union catalog of digital resources.* Retrieved 20 June, 2009 from http://www.oaister.org.
26. *Open Archives Initiative.* Retrieved 20 June, 2009 from http://www.openarchives.org/
27. *Publisher copyright policies & self-archiving.* Retrieved 20 June, 2009 from http://www.sherpa.ac.uk/romeo.php
28. Suber, P. (2007). *Open Access Overview.* Retrieved 20 June, 2009 from http://www.earham.edu/~peters/fos/overview.htm
29. ROAR - Registry of Open Access Repositories. Retrieved 20 June, 2009 from http://roar.eprints.org.

Gintarė Tautkevičienė, Iryna Kuchma, Ieva Cesevičiūtė

Atvirosios prieigos vaidmuo mokslinės komunikacijos procese

Santrauka

Pataruoju metu nuolat auga atvirosios prieigos žurnalų ir institucinių talpyklų skaičius. Laisva prieiga prie mokslinės informacijos veikia patį mokslinio tyrimo procesą. Tačiau mokslininkai ne visada supranta ir vertina atviros prieigos šaltinius mokslinės komunikacijos procese. Atviros prieigos šaltinių integracija mokslinės komunikacijos sistemoje keičia mokslinių tyrimų rezultatų sklaidos būdus bei pasižymi atskiroms mokslo sritims būdinga specifika. Straipsnyje pristatoma atviros prieigos situacija pasaulyje bei analizuojamos atviros prieigos plėtros tendencijos bei su ja susijusios problemos Lietuvoje.

Raktiniai žodžiai: atvira prieiga, institucinės talpyklos, atviros prieigos žurnalai, mokslinė komunikacija, mokslinės publikacijos.

About the authors

Gintarė Tautkevičienė, doctor in social sciences, Kaunas University of Technology, gintare.tautkeviciene@ktu.lt, +370-37-300652.   Research interests: knowledge and information management, learning environment, e-resources, open access, scholarly communication.

Iryna Kuchma, eIFL Open Access program manager, eIFL.net (Italy/Ukraine), iryna.kuchma@eifl.net. Research interests: scholarly communication, open access, access to knowledge.

Ieva Cesevičiūtė, doctor in social sciences, Kaunas University of Technology, ieva.ceseviciute@ktu.lt, +370-37-300132. Research interests: educational and learning environment, communicational competence, higher education.

DECENTRALIZATION REFORMS OF THE GENERAL EDUCATION SYSTEM MANAGEMENT IN LITHUANIA

Jolanta Urbanovič

Mykolas Romeris University, Lithuania

Abstract

The article analyses the general education management reforms of the recent decades in Lithuania in the context of management conceptions. The article focuses on the problem of implementing ideas of decentralization. Centralization and decentralization ratio is analyzed following the attitude that there has to be an adequate balance between centralization, which is necessary for implementation of general national educational objectives, and decentralization, which allows that the more teachers, schoolchildren, parents and the representatives of the local communities would participate in education management, in education management system.

Keywords

Education system management, centralization, decentralization, market of education services, management of human resources, management of financial resources.

Introduction

In the last decade of the previous century, first in the Anglo-Saxon countries and later in other Western countries, a new attitude of management began to develop, which integrated the best principles of business administration and economics into the system of public management. Modern concepts of public management also affected the changes of the education system management. But in the countries of continental Europe, espacially Central and Eastern Europe countries, where the normative tradition of public administration prevails, not always it is effective to disseminate management ideas that derive from the Anglo-Saxon countries and there is a big possibility to distort them. Application problems are especially relevant for education organizations because the relationship between the education and process of change is even more complicated as education is one of the most conservative social institutions. On the other hand, introduction of management principles is related with the decentralization reforms, whereas many countries in Central and Eastern Europe are cautious about decentralization because a centralized education system has long tradition in this region. In addition, as R. Želvys (2003) notices, phenomena of decentralization in this region sometimes may be called "decentralization of poverty", when the central government of poor post-socialistic countries tries to shake out the responsibility to maintain education institutions and wants to transfer them to local municipalities.

Full-scale researches on education centralization and decentralization ratio are lacking in Lithuania. It is aiming by this article, using the results of foreign researches on the problematic of education decentralization, to analyze the relationship between the centralization and the decentralization in the Lithuanian education system management.

A stage of general education management system has been chosen as the object of research. To serve the purpose, an analysis of legal acts, a survey of theoretical statements and practice as well as an analysis of statistical data have been chosen.

Management ideas when reforming Lithuanian education system

A new attitude of management while expanding to public sector organizations is changed attitude to education administration too. A concept of education management is used more and more often during the recent decades. In the educational policy, management ideas are manifest in two main forms (Želvys R., 2003, P.17):

- Education organizations more frequently offer their services, thus, the *market of education services* is being formed;
- There are attempts to reorganize education organizations so that *business management principles* could be applied in them.

When talking about formation of education services market, the conditions defined by T. Welsh and N. F. McGinn (1999) under which these markets exist may be mentioned:

- there is a variety of education quality and content;
- consumers are informed about the choice options;
- consumers can choose from the available options.

According to such definition, it can be stated that the market does not exist, if there is no variety of school types, there is no competition among the schools and the teachers, the conditions for the consumers to choose a school are not established and all the public and the private schools follow the same national education programs. There is no market as well, if the alternative schools are too expensive or too distant geographically.

From the perspective of the market *a consumer* – not only a schoolchild, his/her parents or custodians but also a community, the whole society, employees, etc.

The issue of decentralization is significant in the implementation of management ideas in educational organizations. Territorial authorities should have to have sufficient freedom of making decisions while schools should be rather autonomous in order to be able to apply the principles of business management. Thus, one of the most important issues influencing education systems in various countries during the recent decades are

centralization and decentralization ratio. The main questions arising to the reformers are the following: which solutions have to be decentralized? Who should pay for education? Who should allocate the finances intended for education? Who has to make decisions regarding the staff? etc.

The essence of the decentralization of education

Discussion of an issue of centralization or decentralization of an education system just cannot be avoided in any essential education reform. Administrative decentralization is separation of public organizations into independent agencies, decentralization of management functions, delegation of the responsibility, reduction of hierarchy (Staponkienė J., 2005, P. 86). Decentralization is started to be considered as the mean which will ensure possibilities of applying management principles and will establish conditions for taking into account all requests of all concerned groups in education. However, these two aspects partially contradict to each other because according to the model of the education services market, it is suggested to separate education production and consuming of education services and it is sought to depoliticize administrative processes. This changes the nature of communities' and concerned groups' participation in management. As it has already been mentioned, the mechanisms of the market are most effective, when consumers themselves collect the information about choice options and use their right to choose (according to Welsh T. and McGinn N. F., 1999, P. 46). This promotes competition between service providers. Nevertheless, the consumers by choosing the particular product influence only its continuity and not the producers' decisions regarding which product should be presented in the market. The producers create the demand for the products and offer novelties, in other words, do marketing. Thus, active participation of the community in decision making is avoided.

On the other hand, practice shows that active involvement of interest groups into the process of planning an organization and decision making increases successful actions possibilities.

Education decentralization processes in various countries were determined by various factors. T. Welsh and Noel F. McGinn (1999), when generalizing the experience of various countries, present several reasons for decentralization:

o education is decentralized in order to improve management;
o the result of political democratization: the society wants to be consulted with and to participate in decision making regarding the issues directly related with it;
o decentralization helps to determine the limits of responsibility;
o the objective is to reduce the power of Teachers' unions;
o governments refuse to manage those schools that they cannot finance any longer.

However, the fact that different regions have different situations of human and financial resources has to be taken into consideration, thus, if the state does not even

these differences, these resources can sharpen after decentralization of education management.

All these reasons more or less show up in the process of Lithuanian education system management change.

R. Želvys (2003) notes that centralization and decentralization reforms arise cyclically in education. Centralization waves are usually related with economical and social crises and later they are replaced by the period when education management functions are transferred to local authorities and teachers' organizations. This probably happens because during crisis situations, the model of centralized management is handier for implementation of the reforms. When crises pass and it is started to realize that the centralized management reforms are not effective any longer, ideas of decentralization are invoked.

Conditions for decentralization

Decentralization is performed pursuant to the subsidiary principle. Subsidiary – the fundamental EU management principle according to which decisions are made as close as possible to their implementation place, i.e. by the lowest competent management level. Pursuant to this principle the functions of management levels are redistributed. Participation of local communities and citizens in decision making is based on this principle.

Nevertheless, if there are no necessary management skills in the particular place, then decision making in the place of action is senseless. The subsidiary principle means not only that decisions have to be transferred to the place of action but also that the competence of those persons who make decisions locally would develop (Welsh T. and McGinn N. F. 1999, P. 66).

Thus, when discussing the issue of centralization to decentralization ratio, it has to be analyzed whether there are conditions suitable for decentralization.

For implementation of the decentralization reform as of any other reform the following two conditions are necessary: political support for proposed changes and the executors' of the reform ability to implement them. The majority of the decentralization reforms do not reach their goals because they do not satisfy one or both these conditions. Many reforms fail due to the fact that only a small circle of persons or interest groups enthusiastically want the changes. Some reforms are successfully stopped by the teachers who are not convinced that decentralization will be beneficial. Other reforms fail because the persons who are granted the right of decision making cannot exercise this right properly. According to T. Welsh and Noel F. McGinn the reforms in which, for example, communities participate can fail due to the fact that the members of the communities lack experience both in collective decision making and organization management.

Distribution of powers in Lithuanian general education management

There are four possible places of concentrating powers in Lithuanian education management: the level of central government; the ruling institutions of regional level; the ruling institutions of municipalities; the schools.

According to the Law on Education, education management subjects in Lithuania are the following (Law on Education of the Republic of Lithuania, art. 52): Seimas, the government, Ministry of Education and Science, other Ministries, State institutions, county governors; municipal institutions; a founder of the school; a head of the school. The law provides that the part of education management powers may be transferred to education self-administration institutions.

In accordance with the provisions of the *National Education Strategy 2003-2012*, functions, powers, obligations, responsibility and accountability of the state, municipalities and schools shall be redistributed and clearly defined, and the procedure of co-operation between the schools shall be described; management shall be decentralised and de-concentrated according to the principle of subsidiarity.

The review of the functions was started from the lowest – the school's – management level. *The program of improving schools' structure,* which aim is to increase independence, openness and management democracy of a school, is related with it. It is intended to procceed to administration of functions and powers of the higher management levels after implementation of this program. The principles of education content management are systemized in *General education content formation, implementation, evaluation and renewal strategy for 2006–2012.* This strategy provides that a municipality makes decisions about harmonization of education content of the state level with the needs of local community, the school – regarding its adjustment for schoolchildren's and school community's needs and experience of the teachers, a teacher – regarding adjustment for needs of a class and an individual schoolchild.

In order to identify distribution of decision-making power in Lithuania, we will analyze the functions of the main general education management subjects.

Competence of the Ministry of Education and Science

It is stipulated in the *National Education Strategy of Lithuania* that the Ministry of Education and Science shall establish the key requirements for general education, vocational education and training, and be responsible for ensuring the quality of education, accessibility to education and the social justice in education, quality assessment and provision of information about it to the society. It is stipulated in the *National Education Strategy*, that the Ministry of Education and Science, as the institution governing the national education system, should generate decisions (create strategies, plans, objectives, tasks, requirements) and carry out supervision (supervise through authorized institutions how the goals are achieved, programmes and legislation are implemented) (Janišius G., Klaus Ch., Bileišis M. and Masiulis K., 2008). Such statements correspond to theoretical statements of *New Public Management* (hereinafter referred to as NPM) according to which management of education production is separated from management of its consumption.

However, having analyzed *the Law on Education of the Republic of Lithuania*, it is manifest that the powers of the Ministry remain much broader. They are the formation and implementation of the State educational policy, strategic planning, submittal of proposals to the Government, etc. All the powers of the formation of the contents of education, setting standards, the organization of examinations, the requirements for textbooks and teaching aids, training and improvement of qualification of teachers, the accreditation of the provisions of school activities and curricula remain in the competence of the Ministry. Among new functions, the confirmation of the methodology and procedure of school audits should be mentioned. Thus, all in all, it is possible to contend that in *the Law on Education* the powers of the Ministry have not decreased – conversely, they have increased to some extent.

Thus purification of the Ministry's tasks remains aspirational as provided in the *National Education Strategy*. After the reform of the system the Ministry of Education, in cooperation with the Government and the institutions subordinate to it, has to set tasks regarding education while local government and schools have to look for ways of better implementation of those tasks. Such structure coincides with the views of the proponents of NPM who support the separation of the formation of the educational policy from its implementation. However, a question on the rationality of such separation should be raised at this point whether the policy formulated by politicians whose experience in the educational sphere frequently is rather superficial and ideologized would not be too remote from the reality of the educational process and real problems. In the formation of the educational policy the corporative model would be the most optimal where representatives of the government, education administrators and providers of educational services could all participate in the process of deliberation on decisions and making them on both the national and local level.

Competence of Local Government

The powers of local government are mostly related to the insurance of learning environment (the formation of the network of schools, the organization of examinations, school buses, etc.) and the establishment of assistance institutions (pedagogical psychological services, educational centres for teachers). Educational policy and strategic planning (drafted according to the centrally prepared methodology) are accentuated on the level of local government. Pursuant to the National Education Strategy, responsibility of local government for the accessibility and quality of education within their territories shall be strengthened. Local governments and counties shall be vested with a big share of responsibility not only for general education, but also for vocational education and training, for special education, continuing adult education. Every local government shall be responsible for a register of children residing in their territories, and co-ordination of the number and flow of pupils in the schools under their responsibility (The National Strategy of Education 2003-2012). However, the latter function seems inexpedient when introducing education services market mechanisms.

The municipalities are the majority of the schools' founders in Lithuania, thus, the municipalities perform the functions of the founder as well: ensure execution of state education policy, organization, supervision in the school and other functions related with management of the school's activity.

Competence of the School's Head
The list of the school head's powers according to the *Law on Education* is quite short and declarative in comparison with other education management subjects. The main functions of a school's head are the following: planning of the school's activity, approval of the school's education programs and supervision of their implementation; designation and deposition of the teachers and other employees in the school according to the established order, analysis of the school's activity and state of management resources, initiation of the school's internal audit, etc.

Self-governance institutions in education organizations

During the last decade, while carrying out education reforms, more attention is paid both to the implementation of methods of business management and in the activities of education institutions but to governance based on the participation of citizens' communities. Decentralization in particular can be considered as the essential condition not only for development of the local self-administration but of civil society as well (Fullan M. 1998, P. 16). This trend of reforms is influenced by a milder NPM variant which is frequently referred to as *New Public Service, "co-participation of citizens in public management"* and other names. Self-governance of schools performs has significant role in the process of decentralization as it strengthens society's influence on the system of education. In the sphere of education, political and administrative decisions
are made with the help of consultations and coordination with social education partners and other interest groups. Efficient mechanisms of accountability of education and its governance to society are implemented.
Grant of powers to self-administration of the schools influences attraction of new partners into decision making process. Instead of centralized decisions, school communities, local governments, social partners, etc become of greater significance. The councils of educational institutions are comprised not only of representatives of parents and social partners but also of supporters. Involvement of groups interested in the process and outcome of programs increases the understanding of those groups about the objectives and constraints, heightens the legitimacy of whatever are finally chosen, and contributes to mobilizing support for policy implementation.
There are some countries where school communities have particularly huge power. The largest degree of the community's involvement into the management processes is in those countries where the so-called political legitimacy (lawful politic powers) model prevails in education system management (according to Welsh T. ir

McGinn N. F., 1999, P. 30-31). According to this model even the functions to draw up the budget are transferred to communities and this closely relates with decisions regarding a number of employees, their work nature and with powers to employ and dismiss them. For instance, in Salvador parents associations have the right to employ the teachers from the list of qualified candidates prepared by the central government and they can refuse to prolong the contracts with them at the end of academic year.

Good results have been reached in the Czech Republic where the school council is comprised not only of teaching and non-teaching staff of the school or recipients of services (learners) but also of community representatives who comprise one-third of the school council. In Great Britain, everyone who is to some extent interested in the well-being of the school (from a learner to a local priest) can be involved (Eurydice. School Autonomy in Europe Policies and Measures, 2007). Thus, the community is understood in the broader meaning than in Lithuania.
From the perspective of a school's self-administration Lithuania also has innovative solutions, which are established in *the program of improving the schools' structure for 2006 – 2009*. Variety of self-administration institutions, their competences and organization principles are legalized by school's regulations (statute). Organizations of teachers, schoolchildren, parents (custodians, guardians) and other organizations can act in schools.
The highest institution of the school's self-administration is a *school's council* which represents schoolchildren, teachers, parents and the local community (Eurydice. School Autonomy in Europe Policies and Measures, 2007). The functions of the school's council are defined quite abstractly in *the Law on Education of the Republic of Lithuania* – self-governance institutions of the school collectively discuss issues of school activity and funding and, within the scope of their competency as defined in the by-laws (statute) of the school, adopt decisions and influence decisions of the Principal; also they perform public supervision of the school's management. In reality, it happens only in exceptional cases. The highest self-governance institution of the school -the school council - has no power to change the decisions of the principal of the school.
After analyzing the functions of Lithuanian education management subjects, it can be stated that while implementing the National Education Strategy, education is being slightly though gradually decentralized and deconcentrated on the basis of the subsidiarity principle.

Categories of education decisions

T. Welsh and N. F. McGinn suggest dividing the decisions, the approval right of which could be transferred, into five categories: mission, operations, personnel, clients and finances. The decisions are closely related with each other: one decision can influence the organization in more than one aspect (Welsh T. and McGinn N. F., 1999, P. 60).
In this paper we will review how the decision-making power distributes in the fields of staff and finances

management in Lithuanian general education organizations.

Decision regarding education organization's personnel

Decision Regarding Qualification of the Personnel

In Lithuania selection and employment of the educators are executed by the heads of education institutions taking into consideration the requirements for the educators' qualification.

It is worth to notice that centralization of decisions regarding qualification of employees is aspirational in countries where it is impossible to have equally qualified teachers in all regions due to considerable regional differences. It is also difficult to attract qualified teachers into small towns or rural areas in Lithuania.

Decisions Regarding Salaries

The decentralization reform, which grants the right to settle salary limits for local institutions, for instance, for municipalities, carried out in some countries serves for attracting qualified educators. By this it was tried to achieve that salaries would be different in different administrative units. However Teacher organizations object to this and this also violates professional solidarity. By controlling salaries locally, the teachers' labor market, which to organizations' of teachers belief declines the teachers' salaries over time, is created.

When talking about the teachers' salaries, it is worthwhile to mention the aspect of ensuring education quality. Pursuant to the concept of NPM, one of the conditions of the insurance of quality is the encouragement of competition. The greatest obstacle for competition among teachers is the centrally planned salary for teachers. At present it depends upon the programme of professional development, preparation for lessons, management of a group, the number of the hours of non-formal education and other additional tasks. Competition among teachers could be created having changed the system of accounting salary and having introduced the model applied in the business sector where the salary would depend on the agreement between a teacher and the principal of an institution. On the one hand, having introduced this system, the planner of the salary of a teacher would directly be the principal of a school who would allocate salaries in accordance with qualifications, the load of work, the satisfaction and complaints of students, the application of innovative methods in the teaching process, etc. On the other hand, there is the risk of the principal's biased assessment. Thus, at present, school principals lack authority to manage human resource while solving the issues of salaries and the allocation of work time.

Of course, it is more acceptable for organizations of the teachers when decisions regarding salaries are made automatically, for example, after working for the particular number of years, taking into consideration the number of family members, after obtaining the particular qualification degree.

Usually organizations of teachers are against the models of payment according to results, because they classify the teachers according to their level and weaken organizational solidarity. The teachers are particularly anxious about those decentralization proposals which would permit the local authority to settle salaries according to the results. It is argued that such payment models can promote corruption.

Personnel Assessment System

One of theoretical grounds of NPM - the theory of rational choice - is based on the assumption that all individuals are rational selfish persons. Each of us seeks selfish purposes; however, in proper surroundings these selfish purposes may bear fruit beneficial for society. It is also characteristic of the personnel of the education system. Thus, in the organization of education, the system of personnel management should function in such a way that the employees would strive to provide better education services knowing that those attempts would be properly evaluated.

Assessment of the heads of education organizations and educators is carried out through an attestation process in Lithuania. The assessment is carried out in accordance with a centralized list of indicators. Information about the quantity of formally completed indicators prevails in the attestation process, there is a lack of information about efficiency of the teachers' and the heads' activity. Such staff's assessment process reveals that the authorities are oriented not to the results but rather to the process. The community's satisfaction with the quality of provided services, internal culture of the institution's staff, the results of the head's work, etc. should become the main indicator.

Requirements for the Heads of the Schools

In Lithuania the principal of a school is appointed by open competition which is held by the local government The appointment of the principal of a school by open competition which is held by the local government is an optimal management decision as the principal becomes accountable to the local government and is well aware of the situation in the local government. In addition, the principal is not "a figure who tries to please everyone" in case of the election of the principal in a school. However, in Lithuania, the requirement for the candidate to the office of a school principal is to have three years of teaching experience. Such a requirement precludes professional managers (who have management experience but do not have pedagogical education) from becoming school principals.

A lack management experience particularly shows up when management functions are decentralized. As it has already been mentioned, one of the conditions for successful decentralization is the management competence of the persons who make decisions locally.

The competence, which is needed for that decentralization would be effective at maximum, cannot be equated to the ability to implement decisions made elsewhere. The persons making decisions locally have to be able to identify problems, to know when apply particular rules and when it is time to change them.

After analyzing centralization and decentralization ration in solving some issues regarding the staff of education organizations, the following assumption can be made: the

fact that the community is not involved into the decision-making process regarding the personnel and the fact that management competence is not required from the heads of education institutions do not guarantee conditions for successful decentralization, thus the heads of the schools execute staff management according to the centrally created instructions.

Decisions regarding management of financial resources

Sources for Financing Education
This category includes decision regarding who decides, who and how much should pay for education? Who allocate the funds for education? etc. When generalizing experience of various countries, T. Welsh and N. F. McGinn (Welsh T. and McGinn N. F., 1999, P. 55) assert that usually public education is financed from the taxes collected by the central government. There are countries which use the funds collected both by central and local governments.

Allocations from the state budget and municipal budgets make the largest part of sources for financing education in Lithuania. For financing education the means of EU structural funds and other sources are used. Private investments into education increases marginally.

When analyzing the tendencies of financing education in Lithuania, the assumption can be made that financing of education is decentralized because the portion of the state budget in the national education budget decline, while municipalities get larger and larger burden of financing general education. National Education Strategy provides that the support from municipalities to education will reach 75 % of the education budget in 2012 (see. Table 1)

Table 1
State's and municipals' portion in the national education budget.

	1994	1995	1996	2003	2004	2005	2006	2007	2012
State's portion in the national education budget	36%	34%	35%	35%	34%	30%	27%	25%	25%
Municipals' portion in the national education budget	64 %	66%	65%	65%	66%	70%	73%	75%	75%

Priciple of „pupils' basket"
Until 2001 year educational institutions used to receive funding in accordance with the number of sets of classes, regardless of the number of learners of the school. The reform of education funding implemented the principle of *money follows the client* or principle of *pupils' basket*. This reform creates conditions for competition among institutions providing educational services. It corresponds to the NPM principle - competition of public institutions.

The essence of *pupils' basket* is education fund allocation for one pupil. Its amount is established annually by the Government of the Republic of Lithuania upon the adoption of the *Law on the Approval of Financial Indicators of the State Budget and Municipal Budgets*.
Financial autonomy of schools
Fund allocation *money follows the client* creates competition which itself solves numerous management issues; however, the system of *pupils' basket* has not been fully implemented as schools lack autonomy to allocate funds themselves. All the money received by a school is divided into purposive parts. Thus, schools are precluded from autonomy (financial, personnel autonomy, etc) (Janišius G., Klaus Ch., Bileišis M. and Masiulis K., 2008). Thus, the problem of *pupils' basket* is that it is beaurocratically detailed how schools have to use the funds of *baskets* – which part should be allocated to salaries and which to learning materials. Although in the report of the Ministry of Education and Science is stated (Lithuania. Education in regions 2008), that the *pupil's basket* methodology does not prohibit school communities from setting specific priorities for the school's activity and from allocating larger means of the *pupil's basket* than intended by the state for financing these priorities, in reality schools communities do not any possibilities to exercise this right.

On the other hand, practice of reallocating the *pupil's basket* shows that the representatives of education administration department of the municipalities, if there are the schools in the municipality that cannot be supported only by the *pupil's basket*, find solid arguments to persuade the heads of the general education schools which have a large number of schoolchildren to "save" the part of means of the *pupil's basket* allocated for the school and to cover the debts of those schools that do not function so successfully.

Territorial division
Another aspect restricting competition among schools is territorial division. *The Law on Education of the Republic of Lithuania* stipulates that the priority enrolment in a State-run or municipal general education school is granted to persons living in the service territory assigned to that school: "Priority enrolment in a State-run or municipal general education school is granted to persons living in the service territory assigned to that school by its founder. At the request of parents (foster parents, guardians) and the child, a child may be enrolled in another general education school subject to the availability of free places" (Law on Education of the Republic of Lithuania, art. 29). It is peculiar consensus and guarantee that a pupil would not be enrolled in a school at all. However, this principle of centralization may cause certain restrictions of competition.

Network of non-state schools
The present education system of Lithuania partially discriminates private educational institutions. Private schools occur in a more difficult financial situation as they receive (approximately one-third) less funding than state schools. Private schools are also allocated funding according to the number of pupils but they do not receive maintenance funds which should be used for the maintenance, heating, etc. of school buildings.

As we can see in Table 2, a good *money after the client* method, which could have become the basis for finance management decentralization, for financing education institutions was chosen, however, traditions of centralized administration distort that idea.

Table 2

Implementing of principle money follows the client

management solutions	principle "money follows the client"		
centralization phenomenon	Territorial division	Different funding of state-run and non-state schools	Schools have no financial autonomy
result	Restricted competition	Restricted public choice	

The progressive idea of *pupils' basket,* having encountered such obstacles as territorial division, discriminative funding of non-state schools or centralized division into purposive parts, the partially loses its efficiency.

Conclusions

1. Decentralisation is a highly complex phenomenon. An education system may be decentralised in one area (for example, the curriculum) while remaining centralized in another (for example, financing). Sometimes, regional or local authorities became very powerful in education although they operated under the direction of central government offices. In fact, all systems are a mixture of centralization and decentralisation.

2. Regarding both its own history and the present social, economic and political situation, each country has to set adequate balance between centralization essential for the implementation of general national education objectives and decentralization which creates prerequisites for the participation of a larger number of teachers, students, parents and representatives of local community in governing education.

3. While implementing *the National Education Strategy*, education is being slightly though gradually decentralized and deconcentrated on the basis of the subsidiarity principle. Lithuania's education system remains to a large extent centralized; major decisions are made at the level of the central government or with its approval. On the ground of the arguments presented above, it is possible to contend that the aforementioned competences and responsibilities do exist but the decisions are not sufficiently close to the users of education and decentralization.

4. Distribution of decision-making power in education management and decentralization tendencies in Lithuania confirm the statement that despite the nature of carried our decentralization, success of the reform largely depends on the local heads' professional training in the management fields.

References

1. A boost to research and innovation. The Government and the Government Offices of Sweden, http://www.sweden.gov.se/ (accessed 14 March, 2009).
2. Bendrojo lavinimo mokyklų finansavimo reformos nuostatos. Nutarimas. Lietuvos Respublikos vyriausybė (Provisions of the Reform of Funding General Education Schools. Decision. The Government of the Republic of Lithuania). 2001 m. gruodžio 14 d. Nr. 1520. Vilnius. 1 skyrius.
3. Cerych L. 1997. Educational Reforms in Central and Eastern Europe: Processes and Outcomes. European Journal of Education. Vol. 32, No. 1, published by: Blackwell Publishing Secondary Education: State and Prospects (Mar., 1997).
4. Eurydice. School Autonomy in Europe Policies and Measures 2007.
5. Fullan M. Change Forces. Probing the Depths of Educational Reform. Taylor & Francis, 1993.
6. Janišius G., Klaus, Bileišis M. ir Masiulis K.. Švietimo organizavimo tobulinimo gairės. Bendrasis lavinimas (Guidelines for C. the Improvement of the Organization of Education. General Education), http://www.nvv.lt/index.php?option=com_content&task=view&id=226 (accessed 14 March, 2009)
7. Janyšius G., Klausas Ch., Pažangos siekiama atgyvenusiais metodais (Achieving Progress by Outdated Methods), www.dialogas.com. (accessed 25 September, 2008)
8. Lietuva. Švietimas regionuose 2008. Ugdymo aplinka. Švietimo aprūpinimo centras (Lithuania. Education in regions 2008). Švietimo ir mokslo ministerija: Vilnius, 2008
9. Lietuvos švietimo raida ir valstybinė švietimo strategija: rytdienos uždaviniai (The Development of Education in Lithuania and the National Education Strategy: Tasks of Tomorrow), www.smm.lt/naujienos/pranesimai
10. LR Švietimo ir mokslo ministro įsakymas Dėl valstybinių ir savivaldybių švietimo įstaigų vadovų priėmimo į pareigas tvarkos patvirtinimo 2001 m. rugpjūčio 3 d. Nr. 1192. (The 2001 August 3 Order of the Minister of Education and Science On the Confirmation of the Appointment of Heads of State and Municipal Education Institutions).
11. LR švietimo įstatymas (Law on Education of the Republic of Lithuania), 29 str., Nr. IX-1630, 2003-06-17, Žin., 2003, Nr. 63-2853 (2003-06-28)
12. Nacionalinis švietimo plėtotės raportas (Report of the National Development of Education), http://www.smm.lt/old/svietimas/RAPORTAS_(taisymai).doc>
13. Osborne J. and Gaebler D. 1992. Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector. Reading, MA: Addison-Wesley Publishing Company.
14. R.Želvys ir kt. Švietimo politika ir monitoringas (Policy and Monitoring of Education). Vilnius: Garnelis, 2003.
15. R.Želvys. Švietimo organizacijų vadyba (Management of Education Organizations). Vilnius: Garnelis, 2003.
16. Staponkienė J. Naujosios viešosios vadybos elementų identifikavimas // Viešoji politika ir administravimas. 2005, Nr. 13. P. 86.
17. Valstybinės švietimo strategijos 2003-2012 metų nuostatos (The National Strategy of Education 2003-2012).
18. Vries, M. S. de. The rise and fall of decentralization: A comparative analysis of arguments and practices in European countries. European Journal of Political Research 38: 193–224, 2000
19. Welsh T. ir McGinn N. F. Decentralization of Education: why, when, what and how? Paris: UNESCO: International Institute for Educational Planning, 1999.

20. Welsh T. ir McGinn N. F. Švietimo decentralizacija: kodėl, kaip, kas ir kada? (Decentralization of Education: why, when, what and how?). Vilnius: Versa, 2008.

Jolanta Urbanovič

Švietimo valdymo sistemos Lietuvoje decentralizavimo reformos

Santrauka

Lietuvoje pasigendama išsamesnių švietimo centralizacijos ir decentralizacijos santykio tyrimų, švietimo valdymo sričių centralizacijos ir decentralizacijos poreikio analizės. Šiame straipsnyje nagrinėjami veiksniai, lemiantys decentralizacijos procesus ir jų sėkmingumą švietimo sistemos valdyme, analizuojamas centralizacijos ir decentralizacijos santykis Lietuvos bendrojo lavinimo švietimo valdyme. Remiantis atlikta literatūros analize bei išnagrinėjus sprendimų galios pasiskirstymą tarp bendrojo lavinimo švietimo valdymo subjektų Lietuvoje, prieinama išvados, kad švietimo valdymo sistema Lietuvoje palaipsniui decentralizuojama ir dekoncentruojama remiantis subsidiarmo principu. Švietimo valdymo reformų analizė išryškina tendencijas palikti centralizuotą valdymą bendriems nacionaliniams švietimo tikslams įgyvendinti, tuo tarpu decentralizacija pasitelkiama siekiant sudaryti sąlygas vadybinių idėjų taikymui bei mokyklos bendruomenės atstovų dalyvavimui švietimo valdyme.

About the author

Jolanta Urbanovič, lecturer of Public Administration Department, Mykolas Romeris University, Vilnius, Lithuania; e-mail.: jolanta.urbanovic@gmail.com, tel. nr. (+370 5)2 740 634.

THE DEVELOPMENT OF OPEN INNOVATION MODEL IN BUSINESS: CONCEPT ANALYSIS AND LIMITATIONS IN A CASE OF SMALL CATCHING UP COUNTRY

Aistė Vaišnorė, Monika Petraitė – Kriaučionienė
Kaunas University of Technology, Lithuania

Abstract

Open Innovation is a phenomenon that has become increasingly important for both practice and theory over the last decade. The reasons are to be found in shorter innovation cycles, industrial research and development's escalating costs as well as in the dearth of resources. This paper analyses the advantages of open innovation creation model by analyzing the scientific literature on open innovation. Aiming to disclose the advantages of open innovation based business model, authors are highlighting the reasons of innovation model shifting from close to open; characteristics of the open innovation creation model; foregrounding the benefits of open innovation business model. Finally, some empirical evidence on the level of application of open innovation model in Lithuanian business is presented, and the recommendations are drawn for the case of catching up economy.

Introduction

Innovation based on science and new technologies in ICT, biotechnology, nanotechnology and etc. industries forced the growth of global economics and socioeconomic progress in last decades.

Knowledge residing in human capital and technologies is the biggest driver of evolving modern economics. The developing high-tech industry and the growing need for high-skilled labour show that economic activities are increasingly coherent to knowledge. The economic growth mostly is induced by investment in knowledge, R&D, and innovations.

So, the intention to have growing, successful, and competitive economics has to be based on effective science inventions and technological innovations based innovation system, which encourages the development of technologies, the business engagement with innovations, the lifelong learning by improving skills and core competences, continual investment in innovation by increasing the productivity and competitiveness of SME's, and to speed up the growth of science and technology based business.

The globalization and the development of the knowledge economy enable the active knowledge flows and wider knowledge spread. The prompt circulation of information and constant exchange of relevant knowledge discloses new customer needs and enhance new challenges for innovative organizations. The success of organization depends on its ability to detect, attract and anchor the right knowledge. The use of this specific knowledge can help to develop the competitive advantage of the organization.

It is mostly agreed, that competitive advantage of organization usually resides in their uniqueness. In order to stay competitive companies are forced to develop their core competencies and specialize in different sectors. This paper focuses on the following problem solution: modern organizations seeking to meet customer needs and to stay innovative develop universal and complex business solutions. The internal knowledge and

competencies of organization are not any more sufficient in the networked business world (Hughes A., 2003).

The wider viewpoint, and the different and various experiences are needed. The traditional innovation and business models based just on the exploitation of internal knowledge resources are not any more effective and raise new challenges for the competitiveness of organizations.

The recent literature on innovation exploits the idea of open innovation creation model, which suggests that innovations are created by cooperating and collaborating in business and science networks. The aim of this paper is to disclose the advantages of open innovation based business model. In particular, the paper seeks to highlight the reasons of innovation model shifting from close to open; to characterize the open innovation creation model; to foreground the benefits of open innovation business model.

The research methods applied: analysis of scientific literature and statistical data from CIS IV survey in Lithuania.

The paper is structured as follows. In the first part of the paper we aim to discuss the shift towards open innovation model. Lately, the open innovation models and their impact towards the development of business models are discussed. Finally, we provide the analysis of innovation openness in Lithuanian business and draw the conclusions.

From close to open innovation

The concept of innovation was used as a tool for the differentiation and competitiveness of business. The main impellent of productiveness and competitiveness in organization traditionally was the technological innovations, but this intellectual potential was usually created to meet the internal organization needs. Referring to this isolated model, the result of innovation was the

new product which endowed organization with differentiation, enabled product stability and time to market, and helped to reduce the inputs. For other organizations to join these activities or gain benefits of these processes were impossible, while the mechanisms of innovation creation were the commercial secrets and protected as an intellectual property (A. Gasiūnaitė, L. Stradomskytė, M. Kriaučionienė; 2008).

The traditional innovation model is based on thinking, that innovation is a new idea, method, mechanism or certain improvement, enhancement process by bringing something new to traditional practice. But this viewpoint is rather narrow. It does not appreciate the changes in the organization, which are necessary for continual improvement and to stay innovative. This proposition justifies the research of W. Vanhaverbeke, M. Cloodt and V. Van de Vrande (2007), which shows, that traditional innovation models were usually based on investment in internal R&D, which led to instantaneous outbreak inventions. These inventions were usually new products to market which gave a competitive advantage to organization by increasing the sales and profit through existing business models. The gained additional revenues cud had been reinvested to further R&D and cycle starts over.

According to the Whitepaper on open innovation (2006) technological innovation in traditional model has been within the domain of internal research and development (R&D) departments, where intellectual equity is created solely for internal use. In this insular corporate model, the fruits of 'innovation' are jealously guarded resources for corporate differentiation, used primarily to keep an organization's product pipeline filled, get to market faster or drive down operational costs.

Intellectual Property Rights generated through this type of 'closed' innovation remain an internal resource, often with limited possibilities for further commercializing these assets other than through technology licensing. This insular viewpoint dictates that the quantity of innovation an organization can deliver correlates directly with the amount of resource invested. So, it means, that the number of new ideas that can be developed and brought to market – is ultimately constrained by the size and wealth of a company's R&D department and investment in it (Whitepaper on open innovation, 2006). But in nowadays digital networking world this understanding of innovation activities is no longer effective. The contemporary organizations face the huge risk by investing the tremendous amounts of money in innovation development. The whiffed and unsettled customers can change their minds overnight with no reason and all innovation activities can fail causing big losses.

Either way the traditional innovation models were successful and infused great benefits for a long time. Traditional innovations were used to increase a product value or gain a competitive advantage. So, the question is what are the reasons, which cause the decline of traditional innovation model and the up growth of new open innovation business model? What reasons stimulates organizations to open their internal secrets and

share the precious knowledge with other companies; how does it work with their competitiveness?

Whitepaper in open innovation (2006) states, that traditional innovation paradigm evolved in 19-th century at the times of industrial revolution, when such communications as railway, telegraph emerged and companies were established seeking to create and utilize inventions. In the contemporary world this model is no longer effective. Globalization and internationalization processes determine the fading away borders between countries and even more between different organizations. The virtual space, where money, goods, ideas, people facing no obstacles move from one place to another, is growingly expanding. So, seeking to be leading companies, firms are forced to find new ways for knowledge share, experience interchange, and cooperation.

According to Vanhaverbeke et al (2007), despite the profitability of the traditional innovation model in certain productive business areas, closed innovation concept has many limitations. Basically it mostly caused by principles of closed model, which states that only the correct, good or the best ideas can be embodied, while other interesting ideas that does not fit to company business model, seems wrong in the initiation phase or there is no resources to develop and commercialize it has to be eliminated. The closed innovation model can be illustrated according to H. Chesbrough (2003) (see fig.1)
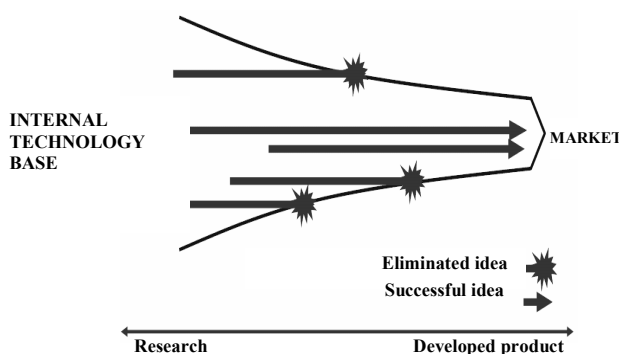

Figure 1. Closed innovation based business model (Neuvo, 2006)

As illustrated in Figure 1, closed innovation model is based on internal organization resources. The idea generation process is based on selection of the best ideas generated during internal research process bringing them to market, while other ideas are eliminated. This innovation creation model in the contemporary economics becomes to narrow by limiting the creativity and novelty of the companies.

According to Vanhaverbeke et al (2007), firms operating within a closed innovation model may not be able to recognize and value the significance of novelty, simply because more distant knowledge falls outside the scope of their absorption capability. Presence of valuable external sources of knowledge does not imply that the inflow of new ideas into the organization is an automatic or easy process. External knowledge can only be recognized; accessed and assimilated when firms develop new

routines and change their organizational structure and culture to facilitate knowledge absorption.

In this case any information, knowledge, competence, or R&D spread or interchange between organizations is minimal and induces the organization to act within their pale and protecting the valuable information. This model restrains the knowledge flows between organizations and blocks the new, more effective ideas generation.

Analyzing the innovation creation principles in last century (3rd, 4th decades) scientists paid a big attention to organization and its R&D impact to innovation process. The main competitive factor was R&D development. The basic need of organization was to stay at present level or to improve manufacturing activities. While these activities were usually unique to every firm, the investment in R&D was specific and separate to every company. However organizations moved from technology bases, developed by internal R&D, to use of accumulated knowledge by developing new products. Organizations faced the main difficulties when the knowledge spillover could not be commercialized internally. In some cases technologies were given out to other organizations by technology licensing means, but mostly it staid to lie on the shelf waiting for internal development or spin out and individual development. In this type of situation the Kuhan anomaly emphases, when the benefits were gain not of the companies that invested in R&D, while the ones that managed to utilize it (H. Chesbrough et al., 2006).

Eventually the external technologies were considered growing importance. Cohen & Levinthal (1990) (op. Cit. H. Chesbrough ir kt., 2006) distinguished two directions of R&D: internal and external. The scientists pointed out the organizational need to invest in internal research to effectively utilize the external technologies. The absorption capacity of organization gained the growing importance.

Nowadays, especially high-tech sectors are characterized by rapid scientific and technological developments where knowledge is so broadly distributed that no single firm possesses internally all relevant information for successful innovation. This shortcoming of the resource based view has led to an emphasis on inter-firm linkages that facilitate learning, innovation, and the creation of new knowledge within companies. The choice for a specific form of inter-firm linkages depends on the goal an innovating company wants to realize: it can develop relations with universities and research institutions, establish dyadic relationships with other firms, create networks or acquire technology-based start-ups (Vanhaverbeke et al., 2007, van de Vrande at all, 2006, Dahlstrand A. L. 2007).

From a resource point of view, there are three important reasons why firms set up inter-firm linkages. First, companies team up with other companies to monitor and stay in touch with the latest technological developments (Vanhaverbeke, 2006, van de Vrande at all, 2006). Second, collaboration enables the transfer and absorption of external knowledge and in that respect acts as an important supplement to the internal innovative activities of organizations. Finally, companies are no longer able to exploit and commercialize innovative products on their own. So, inter-firm linkages help firms to obtain access to

complementary resources that are needed to commercialize new products (Vanhaverbeke et al., 2007, Witt U., Zellner Ch., 2005).

Reference to Chesbrough (2003), Neuvo (2006), Vanhaverbeke et al. (2007) can be seen, that there are many factors in contemporary economics, that disturb the logics of l closed innovation model:

- **Availability of talents** - increasing availability and mobility of skilled workers:
  - Universities are producing talented professionals around the world
  - "Learning by hiring"
  - Cannot count on best talents to be around
- **Venture capital** – venture capital funded start-ups are a significant source of innovation:
  - Start-ups offer attractive risk/reward schemes for top talents
- **Ideas getting off the shelf -** talented professionals are finding venture capital funding to commercializing ideas on the shelf:
  - Faster product cycles and external options for commercialization are driving innovations to the market faster
  - Ideas put on the shelf are losing their value faster
- **Capability of external suppliers** External suppliers can increasingly offer solutions of equal or superior quality to in-house development
  - On one hand drives focusing of R&D investment
  - On the other hand, drives competition by leveling the playing field

According to Chesbrough (2003, 2004), these factors widens the organizational boundaries using internal and external innovation sources, consequently closed innovation model modifies overtime and the new, more complex, to external environment directed innovation model appears. The use of open innovation model sets prosperous circumstances to utilize the interorganizational knowledge flows by developing internal technologies and creating the new ones. These tendencies not just sense the importance of attracting the external knowledge for organizational development, but also force the organization to utilize new business models, what modifies the structure of organization itself. These new business models enables the organization to be flexible, agile, to keep up with the changes and innovations in the external environment, take part in the external research outside organizational boundaries (Gasiunaite et al., 2008).

Open innovation business model

The developer of open innovation concept H. Chesbrough (2003) defines open innovation as "... the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively."

With reference to H. Chesbrough, W. Vanhaverbeke, J. West (2006), open innovation based business model is grounded by principles, that valuable ideas be developed internally either can come from outside. In other words it is useful to share the information, knowledge and ideas with other companies and get a feedback, which helps to

enrich the organizational knowledge. Open innovation is a powerful tool in pursuance to induce the internal and external cooperation. The main principle of open innovation is the search of the best solutions in the whole world and to combine it with the purpose to offer new innovative solutions to the market.

The former resource based view emphasizes that a firm's competitive advantage results from difficult-to-imitate bundles of resources within the boundaries of the firm, Vanhaverbeke et al (2007) argues that from the perspective of open innovation these resources should not be closed off within one single firm. Rather scarce, valuable and reasonably durable resources of different (previously independent) companies should be brought together in order to offer value for the targeted customers. Consequently, a firm's critical resources should extend beyond its boundaries and enable resource flows (knowledge flows) with external firms.

Subsequently, whereas the resource-based view and the knowledge-based view stress such issues as independence and the crucial role of competition between autonomous companies based on the unique set of resources and capabilities they possess, open innovation emphasizes the interdependence of complementary resources of firms to introduce an innovative product in the market. This implies that an extension of the resource-based view is needed and the knowledge-based view with respect to the main theoretical premise underlying open innovation (Vanhaverbeke et al., 2007).

The concept of open innovation effectively means organizations can draw on external resources and best practices to complement the value of own internal innovation assets – and achieve greater real returns on their overall investment in innovation. Open innovation thus acknowledges the emergence of a global innovation marketplace – one where innovation itself is valued as a commodity that can be bought and sold, loaned, licensed, hedged and re-invested. Crucially, new products aren't the only tangible manifestation of open innovation. Service and process transformation are equally important facets of open innovation – whether it's to create an enhanced customer experience, to support internal business efficiencies or to support new products and services in their path to market (Whitepaper on open innovation, 2006).

Reference to Neuvo (2006), the principle of open innovation not just helps to create and offer a new product to the market, but also changes the entire business model of organization as illustrated in Figure 2.
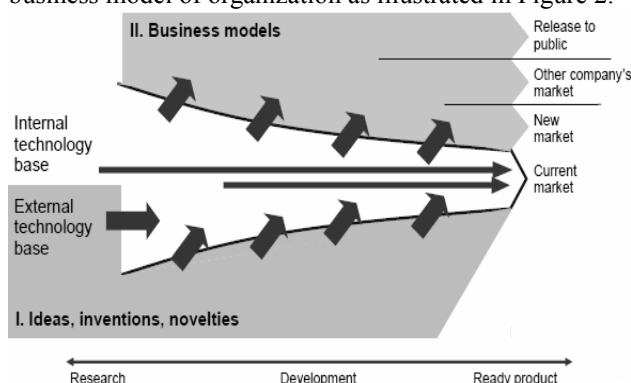

Figure 2. Open innovation based business model (Neuvo, 2006)

The processes of such business model encourage the creativity the generation and consideration of a various ideas, in pursuance to universal problem solution. Figure 2 illustrates that open innovation based company distinguishes by information a competence flows inward and outwards the organization, what creates the beneficial conditions to develop a high added value products. The open innovation model is oriented to principles to combine different knowledge, competencies and technological capabilities which belong to different highly specialized firms.

The benefits of specialization in certain field are that it leads to increased effectiveness and maximum use of resources, but it has some weaknesses too. Sometimes highly specialized competencies start missing a wider approach, various knowledge and competencies, so knowledge spread based on open innovation is an important factor for their competitiveness.

According to P. Cooke & J. Porter (2007) to utilize open innovation business model successfully it is crucial to have effective knowledge exchange. This creates a basis for the companies to reach and use the required information, to widen and deepen the knowledge, and to transfer it to innovative products also overspreading some new knowledge to other companies.

Chesbrough's (2003) open innovation model can be decomposed into 4 constituent dimensions; value creation and capturing via the business model, transactions / networks with innovation partners, capabilities or competencies, and coping with technological and market uncertainty which is embedded in the funnel concept (Vanhaverbeke et al., 2007).

Reference Chesborough et al. (2006) monopolistic innovation and business models restricts the flows of intellectual capital in and out of organization and this reduces the possibilities to commercialize these knowledge flows and to gain benefits from it.

The open innovation model is effectively functions at the interface of different sciences; different sectors (Vanhaverbeke et al., 2007). The possibilities to combine a different knowledge, different competencies from different business and industries and to utilize the methods of different sectors, and integrate technologies can be the biggest driver of radical innovation and competitive advantage. The institutional networks oriented to the different science fields are crucial for the long term success.

The assumption can be made, that development of interorganizational networking, science and business cooperation, clustering, are the substantial preconditions of successful open innovation based business model. In the opinion of the author of this article, the concept of open innovation impels the creativity, flexibility, agility, and pro-activeness of organization. The knowledge flows are crucial to successful implementation of this concept, this creates the advantageous environment for new ideas creation and innovative products, technologies, processes, methods and solutions development.

Though there are some reasons, impelling the organizations to resist open innovation business model. The author of this article by analyzing the principles of open innovation model, and its benefits raises the

question: if open innovation model is so advantages, why it is not mass phenomenon yet; if the biggest part of internally developed ideas isn't used by the firm, why the technology supply is not bigger in the market?

Reference to Chesbrough et al. (2006) the open innovation concept states, that the knowledge used for the value creation has as growingly bigger dispersion. Knowledge is increasingly diffused globally and located in a mass of different organizations and R&D institutions. One of the main obstacles for open innovation development is the phobia that everything, what is developed externally, what is different and unusual is not reliable. The negative impact is made also by company employees, which have unenthusiastic attitude to external novelties. Another obstacle is risk management in the R&D projects. The openness without trust and insufficient maturity sometimes brings out the danger for idea leakage, what can cause big losses. This is extremely important when the duration of R&D projects is short and there is a goal to be fast to market. The third weakness of omen model is the complexity of big R&D project management, when there are many partners involved, many different interests raised, many different competencies and knowledge brought (Chesbrough et al., 2006).

The effective coordination and combination of different competencies is a core element to successful open innovation. It is important to acknowledge, that companies have not to forget to use their internal knowledge and external sources use as a supplement of their activities. According to Vanhaverbeke et al. (2007), internal and external sources of knowledge are complements. They have to be combined to improve the innovative performance of companies. On the one hand, companies require internal R&D capabilities to recognize and monitor interesting technologies that are developed elsewhere. On the other hand, internal research capabilities are indispensable to effectively exploit external know-how. This is also echoed in the open innovation literature; internal R&D spurs a more effective monitoring and use of external knowledge resources and networks. It is found that innovating firms are performing better when they combining internal innovation activities with external technology sourcing. External acquisition and internal R&D are considered to be *complements*, not substitutes. This implies that managers have to integrate tightly the internal and external knowledge to capture the positive effects each type of innovation has on the marginal return of the other. Internal and external innovation activities are not only complementary, but the reliance of firms on external technology implies also that it has to change its internal innovation activities compared to a closed innovation.

Reference to Chesbrough et al. (2006) the efficient communication is needed to reach a common goal.

The benefits of open innovation model

Vanhaverbeke et al. (2007) External technology sourcing is becoming more important for a number of reasons: Shortening technology life cycles, emerging technologies with the potential to disrupt market leaders' positions, sharing costs and risks associated with science based technology such as nano-electronics, globalization of the R&D activities as a response of companies to the greater dissemination of knowledge throughout the world, increased rivalry between firms in their product markets, the growing importance of seed and venture capital to finance excellent business ideas, etc...

The recent era of open innovation started when practitioners realized that companies that wished to commercialize both their own ideas as well as other firms' innovation should seek new ways to bring their in-house ideas to the market. They need to deploy pathways outside their current businesses and should realize that the locus where knowledge is created does not necessarily always equal the locus of innovation - they need not both be found within the company (O. Gassmann, E. Enkel, 2004)

Experience has furthermore shown that neither the locus of innovation nor exploitation need lie within companies' own boundaries. However, emulation of the open innovation approach transforms a company's solid boundaries into a semi-permeable membrane that enables innovation to move more easily between the external environment and the company's internal innovation process (Gassmann, Enkel, 2004)

Open innovation means that the company needs to open up its solid boundaries to let valuable knowledge flow in from the outside in order to create opportunities for co-operative innovation processes with partners, customers and/or suppliers. It also includes the exploitation of ideas and IP in order to bring them to market faster than competitors can. Open innovation principles therefore describe how to deal best with strategic assets in order to meet market demands and company requirements. The open innovation approach is about gaining strategic flexibility in the strategic process and creating a critical momentum in innovation diffusion in order to generate customer acceptance and create industry standards. What differentiates the closed innovation paradigm from the open one is basically that companies that implement the latter interact with external entities in terms of their innovation process's efficiency and effectiveness (Gassmann, Enkel, 2004).

The results of research of Gassmann & Enkel, 2004 can be summarized by the three core open innovation processes: (1) The *outside-in process*: Enriching the company's own knowledge base through the integration of suppliers, customers and external knowledge sourcing can increase a company's innovativeness.

(2) The *inside-out process*: earning profits by bringing ideas to the market, selling IP and multiplying technology by transferring ideas to the outside environment.

(3) The *coupled process*: coupling the outside-in and inside-out processes by working in alliances with complementary partners in which give and take is crucial for success. All three the core processes represent an open innovation strategy, but not all are equally important for every company (see Figure 3).
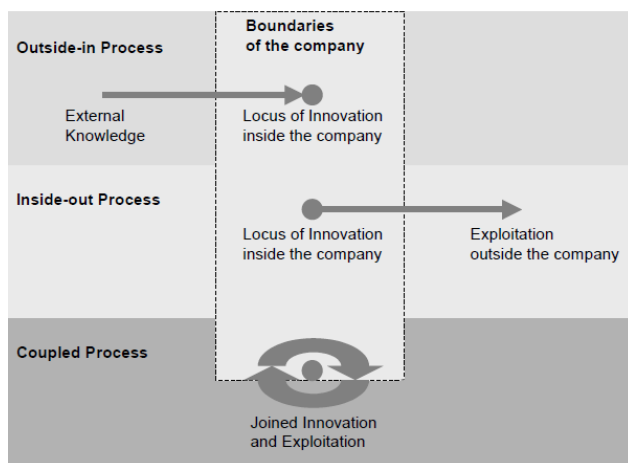
Figure 3. De-coupling the locus of innovation process
(Gassmann, Enkel, 2004).

Based on Gassmann, Enkel, 2004 revisited data in different areas of open innovation, they found that not all companies choose the same core open innovation process, or have integrated all three processes to the same degree. Each company chooses one primary process, but also integrates some elements of the others. These process archetypes are summarized in the following figure (Figure 4).
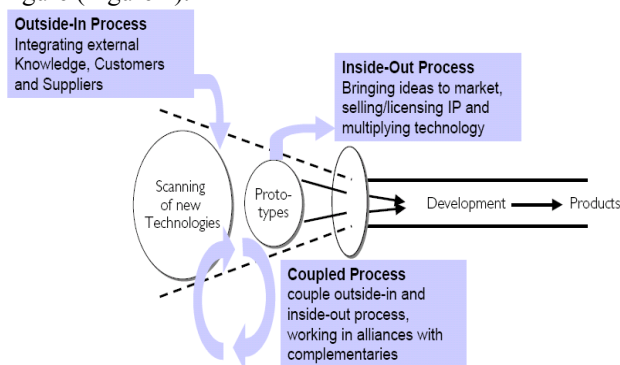

Figure 4. Three archetypes of open innovation processes.
(Gassmann, Enkel, 2004).

B) Outside-In Process
Deciding on the outside-in process as a company's core open innovation approach means that this company chooses to invest in co-operation with suppliers and customers and to integrate the external knowledge gained. This can be achieved by, e.g., customer and supplier integration, listening posts at innovation clusters, applying innovation across industries, buying intellectual property and investing in global knowledge creation. Opening up the internal innovation process by integrating suppliers and/or customers is not new. The literature on inter-firm collaboration in general and on supplier relationship management in particular repeatedly suggests that firms can significantly benefit if they are able to set up differentiated relationships with suppliers. If firms possess the necessary competence and supplier management capabilities, they could successfully integrate internal company resources with the critical resources of other supply chain members, such as customers or suppliers, by extending new product development activities across organizational boundaries (Gassmann, Enkel, 2004).

To summarize the results, the next table shows the most important characteristics of companies focusing on the outside-in process as the major process in their open innovation strategy as well as providing examples of such companies.

Table 1
Characteristics and company examples of outside-in process
(Gassmann, Enkel, 2004).

Characteristics:	Outside-in process:
- low tech industry for similar technology acquisition - act as knowledge brokers and/or knowledge creators - highly modular products - high knowledge intensity	- Earlier supplier integration - Customer co-development - External knowledge sourcing and integration - In-licensing and buying patents

C) Inside-out Process
Companies that choose the inside-out process as a key process focus on the externalizing of the company's knowledge and innovation in order to bring ideas to the market faster than they can through internal development. Deciding to change the locus of exploitation to outside the company's boundaries means generating profits by licensing IP and/or multiplying technology by transferring ideas to other companies. As already mentioned in the beginning, commercializing ideas in different industries (cross industry innovation) and therefore focusing on the inside-out process in open innovation can increase a company's revenue immensely (Gassmann, Enkel, 2004).
Besides commercializing ideas outside the own industry or market, outsourcing can be used to channel knowledge or ideas to the external environment. Outsourcing comprises the acquisition of knowledge on a market basis and the licensing of technologies.

The development of open innovation in Lithuanian context: emphirical edvidence

In our empirical analysis we rely on the Lithuanian CIS survey results and the results of case studies of R&D intensive companies. The analysis is organized in two steps: first, we look at the intensity and quality of networks and partnerships for innovation among innovating enterprises based on the CIS results, and second, the efficiency of networks in generating R&D based innovations.
The intensity and quality of networks define the processes of interactive search of opportunities of technological innovations within national innovation system. According to Community Innovation Survey (2006) (Statistics Lithuania, 2008) in Lithuania, 43 percent of innovative enterprises collaborate with each other in innovation activities (Table 2). Suppliers were the dominating partner in innovations for all sectors. More than ¼ of all innovations also were generated in collaboration with clients or customers. Higher education institutions were important innovation partners in wholesale and retail (33,7 percent), supply of electricity,

gas and water (27,8 percent), but also in construction (20.8 percent) and industry (19.8 percent). Public R&D institutes were important innovation partners in mining and quarrying, but no more important as suppliers and customers.

Despite relatively high cooperation rates in innovation activities with higher education and science institutions, it was not reported as being valuable or important type of innovation cooperation (Table 3). From the perspective of our analysis, the most striking fact is that only 1 percent of manufacturing enterprises reported the cooperation type with higher education institutions as a valuable one, although the intensity was rather high, as stated above. In other words, although enterprises are networking in the search of innovative opportunities, they do not result in a technological innovation.

As we know from the network and new technology based enterprise analysis (Laamanen and Autio, 1996; Karagozoglu and Lindell, 1998; Coulson-Thomas, 2001, 2004), the size of the enterprise is important in its ability and willingness for networking. On the one hand, small enterprises, and especially new technology based firms are forced to network. However, they often lack capacities and competencies for such activities. On the other hand, large size enterprises have more resources for networking, but less external triggers. In the Lithuanian case (Table 3), the most active in collaboration were large size enterprises (73,72 percent). Small and medium size enterprises were equally active in networking: 53,42 and 56,31 percent respectively. Still, suppliers remained the dominating innovation partners in all size categories. However, the abilities for partnership were reduced together with the size of enterprise, and customers were the partners of second importance respectively. Consultants, private research labs and R&D institutes were third important innovation partners in case of large and medium size enterprises (respectively 40,15 percent

and 27,61 percent of all innovations were generated jointly). The least important partner for innovation in all size categories was public R&D establishments. The differences between LSEs and SMEs were important - 19,71 percent of LSEs generated innovation in partnership with public R&D establishments, whereas only around 8,7 percent of SMEs were engaged in this type of cooperation. Universities were more active innovation partners in the case of LSEs: 29,2 percent developed innovation in cooperation with universities; in the case of SMEs, there were around 10,5 percent of partnerships with universities.

Despite the intensity of collaboration, its value was rather limited, especially in the case of cooperation with science and higher education sector. In fact, we can consider it as a total failure in the case of large size enterprises (Table 4), and only some success in the case of small enterprises. About 2.5 percent of small enterprises quoted cooperation with public R&D and higher education arrangement as successful, but it is relatively good evaluation in this size group, as it is close to the cooperation success with other enterprises or consultants. Private R&D establishment were more successful in innovation partnerships (around 10 percent of LSEs and 5 percent of SMEs mentioned it as a valuable type of cooperation), which shows the importance of private R&D establishments within NIS, as they perform the role of public knowledge transfer for the private sector via application of problem solving approach (Uus and Kriaučionienė, 2006).

In concluding the analysis of networking and partnerships for innovation, we can state that despite of intensive application of networking tools in innovation activities, the productivity of interaction within network is rather limited. We must admit that there is a lack of effective networking mechanisms, as well as the abilities to exchange knowledge, and especially generate technological innovations based on it.

Table 2

Co-operation arrangements on innovation activities, percent of enterprises with innovation activity, 2004-2006

Type of economic activity	Total	Cooperation with						
		Partners	Suppliers	Clients or Customers	Other enterprises	Consultants	Universities	Public R&D institutions
Total	**43,0**	**21,2**	**34,1**	**27,7**	**17,8**	**21,3**	**18,4**	**10,3**
Mining and quarrying	25,0	12,5	25,0	25,0	12,5	12,5	12,5	25,0
Manufacturing	40,8s	14,5	36,6	26,0	20,6	19,8	13,6	10,6
Electricity, gas and water supply	60,5	14,0	58,1	32,6	27,9	27,9	23,3	18,6
Construction	23,1	10,8	23,1	21,4	21,7	20,8	20,3	19,7
Wholesale and retail trade	69,8	66,0	36,8	34,4	0,7	34,7	33,7	0,3
Transport, storage and communications	47,2	7,1	40,6	32,1	21,2	14,6	11,8	9,4
Financial intermediation	80,6	58,1	58,1	32,3	22,6	29,0	3,2	-
Other business activities	37,3	16,7	25,4	30,3	16,7	15,4	22,4	7,0

Source: Statistics Lithuania (2008), own calculations

Most valuable Co-operation arrangements on innovation activities, percent of enterprises with innovation activity, by sector of activity, 2002-2004

Type of economic activity	Most valuable cooperation with:							
	Any type of co-operation	Partners	Suppliers	Clients or customers	Other enterprises	Consultants, Private R&D institutions	Higher education institutions	Public research institutions
Total	56.11	9.60	25.37	9.91	2.37	5.67	1.62	1.50
Mining and quarrying	68.75	6.25	31.25	18.75	0.00	12.50	0.00	0.00
Manufacturing	45.63	8.39	21.04	7.92	1.54	5.20	1.06	0.35
Electricity, gas and water supply	79.07	0.00	67.44	0.00	0.00	9.30	0.00	4.65
Construction	**35.74**	2.98	28.09	1.70	1.70	1.28	0.00	0.00
Wholesale and retail trade	**58.36**	8.19	23.52	16.38	0.00	4.36	2.96	2.96
Transport, storage and communications	**73.65**	2.99	37.13	20.36	10.78	2.40	0.00	0.00
Financial intermediation	**79.31**	44.83	24.14	6.90	3.45	0.00	0.00	0.00
Other business activities	**61.26**	3.66	16.23	9.42	13.09	7.33	10.47	1.05

Source: Eurostat (2008), own calculations

Co-operation arrangements on innovation activities, percent of enterprises with innovation activity, by size of enterprise, year 2002-2004

	Enterprise size class, by number of employees			
	Total	10-49	50-249	250+
Any type of cooperation	**56,11%**	**53,42%**	**56,31%**	**73,72%**
Partners	**16,71%**	12,05%	20,29%	34,31%
Suppliers	**45,45%**	40,50%	48,45%	67,15%
Clients or customers	**34,54%**	33,01%	34,00%	46,72%
Other enterprises	**25,44%**	24,00%	25,78%	32,85%
Consultants	**24,94%**	21,06%	27,61%	40,15%
Higher education institutions	**12,03%**	10,64%	10,05%	29,20%
Public research institutions	**9,60%**	8,58%	8,78%	19,71%

Source: Eurostat (2008), own calculations

Most valuable Co-operation arrangements on innovation activities, percent of enterprises with innovation activity, by size of enterprise, year 2002-2004

Most valuable cooperation with:	Enterprise size class, by number of employees			
	Total	10-49	50-249	250+
Any type of cooperation	**56.11**	**53.42**	**56.31**	**73.72**
Partners	**9.60**	8.47	9.87	16.06
Suppliers	**25.37**	20.30	30.71	37.96
Clients or customers	**9.91**	11.29	8.59	6.57
Other enterprises	**2.37**	3.04	1.46	1.46
Consultants	**5.67**	5.54	4.75	10.22
Higher education institutions	**1.62**	2.71	0.18	0.00
Public research institutions	**1.50**	2.06	0.73	0.73

Source: Eurostat (2008), own calculations

The following general conclusions could be drawn from the empirical research:

- The Lithuanian enterprises can only make use of the standard, explicit technological solutions (or standardised, encoded knowledge) in their innovative activities, while other types of knowledge that call for more sophisticated mechanisms of knowledge transfer and greater learning needs are not fully functioning (despite numerous efforts)
- Besides, the Lithuanian enterprises are more inclined to use the informal channels of knowledge transfer, i.e. to absorb the knowledge from their „social environment"– partners and suppliers with whom they have co competitive relations.
- The similarity of knowledge provider and receiver plays an important role in the knowledge transfer –

the industrial information received during the fairs, exhibitions and conferences is valued over other sources of information, such as research organizations. The main sources of information are the business partners..

- The more sophisticated mechanisms of knowledge transfer that call for a more active participation of the company, such as customer knowledge (or market knowledge) and consultant knowledge are not functioning effectively (true for companies of all sizes).
- Although the innovation theory claims that large enterprises are more successful in cooperating with the science sector due to their better absorptive capacities, it is not the case in Lithuania. Despite the fact that large enterprises had more cooperative links,

they were not deemed of importance to their innovative activities. On contrary, small enterprises achieved better results as far as cooperation with research institutions is concerned.

- The mechanisms of knowledge transfer do not depend on the sector. Business partners and clients are regarded as the most useful partners in innovative activities across all the analyzed sectors.

Such findings could be partially explained by the labour composition in the business sector that determines the low absorptive capacity of business sector and the historical divisions of science and industry. However, it is clear that the most sophisticated knowledge interaction, such as learning from the market and other system actors, are not being developed. The most basic forms of innovative activities prevail where the main power belongs to the suppliers of technologies. So there is a donor-recipient relationship prevailing in the system, where Lithuanian businesses are little involved in creating new technologies.

Conclusions

1. The rise of networked economy, increasing complexity and speed of innovation activities and development of new technologies forces the business enterprises to search for the new ways of innovation creation, which is generally defined as a concept of open innovation.
2. The concept of open innovation implies the new ways of business organization, whereas networking, partnership, collaboration are the underlying business processes. This also means that business organizations are becoming increasingly open and interrelated. The new challenges the business are facing with the implementation of open innovation model are basically related to the new requirements for business processes and distribution of results (benefits of jointly developed innovation, ownership of intellectual property rights, etc.).
3. Generally, the complexity of management of open innovation models increase with the volumes and complexity of knowledge shared and co-created. At the basic partnership level or innovation co-operation, there are no institutionally inclined limitations. The organizational factors play a curtail role for success. In case of more advanced innovation activities and co-creation of new knowledge important limitations rise because of the above listed reasons.
4. The analysis of the application of the concept of open innovation in Lithuanian businesses have shown, that the companies are basically limited to the simple models of open innovation, which does not impact the changes in business models. The traditional codified knowledge and related transfer processes (i.e. technology, and/ or business model transfer) are dominating over the more complex open innovation models, which feature knowledge co-creation and impose the development of new networked business models.
5. Thus, the key recommendation from the research could be based on the need to create open and networked business structures and search for new business models, which would allow the implementation of open innovation.

References

1. Chesbrough H. W. (2003). Open Innovation– The New Imperative for Creating and Profiting from Technology. Harvard Business School Press, 2003. 352 psl. ISBN 1578518377. Peržiūrėta adresu http://books.google.lt/books?id=4hTRWSt FhVgC&dq=chesbrough+2003+open+innovation&pg=PP1&ots=XpZFSNv2DJ&sig=7IlWCgx18ElyUiCBZPyv5woX5Es&hl=lt&prev=ht tp://www.google.lt/search?hl=lt&q=Chesbrough+2003+OPEN+INNOVATION&btnG=Google+Paie%C5%A1ka&sa=X&oi=print&ct=titl e&cad=one-book-with-thumbnail#PPA225,M1
2. Chesbrough H., Vanhaverbeke W., West J. (2006) *Open Innovation: Researching a New Paradigm.* Oxford: Oxford University Press. ISBN: 0-19-929072-5
3. Chesbrough, H. (2004) Managing open innovation. *Research-Technology Management,* 47 (1), 23-26 .
4. Chesbrough, H. (Ed.). (2006). *Open Innovation: Researching a New Paradigm.* Oxford: Oxford University Press.
5. Cooke P., Porter J. (2007) From seekers to squatters: the rise of knowledge entrepreneurship. CESifo Forum 2(2007) Peržiūrėta 2007, spalio 13, adresu http://www.dime-eu.org/files/active/0/knowentcesifo2007.pdf
6. Coulson-Thomas C. (2004). The knowledge entrepreneurship challenge. Moving on from knowledge sharing to knowledge creation and exploitation. The Learning Organization 1(11). Peržiūrėta 2007, spalio 13, adresu http://www.emeraldinsight.com/Insight/ViewContent Servlet/Filename=/published/emeraldfulltextarticle/pdf/1190110105
7. Coulson-Thomas, C. (2001). *Shaping Things to Come, strategies for creating alternative enterprises.* Dublin: Blackhall Publishing .
8. Dahlstrand A. L. (2007) Technology-based entrepreneutship and regional development: the case of Sweden. Peržiūrėta 2008, sausio 10, adresu http://www.emeraldinsight.com/Insight/view ContentItem.do?contentType=Article&contentId=1621645
9. Gassmann O., Enkel E. (2004) Towards a Theory of Open Innovation: Three Core Process Archetypes Peržiūrėta 2009 vasario 12 Scientiffccommons tinklapyje adresu http://de.scientificcommons.org/2287
10. Gasiūnaitė A., Stradomskytė L., Kriaučionienė M. (2008) „Atviros inovacijos koncepcija globalizacijos kontekste"/ Socialiniai mokslai 2008: iššūkiai globalizacijos procese: studentų mokslinės konferencijos medžiaga // Kauno technologijos universitetas. Socialinių mokslų fakultetas. Kaunas: Technologija, 2008
11. Gečas K., R. Jucevičius, A. Jakubavičius, A. Sutkus, M. Kriaučionienė, G. Jucevičius, J. Severinjs, R. Strazdas, E. Leichteris, R. Žitinskaitė (n.d). Taikomojo mokslinio tyrimo darbas – programinė studija. Inovacijų versle plėtra: strateginiai prioritetai ir veiksmai. Peržiūrėta 2007 Gruodžio 14 Lietuvos Respublikos Ūkio ministerijos tinklapyje adresu http://www.ukmin.lt/lt/ strategija/doc7/Programa_2007-LIC.doc
12. Hughes A. (2003). Knowledge transfer, entrepreneurship and economic growth: some reflections and implications for policy in the netherlands. CBR Research Programme 3 on Enterprise and SMEs. Peržiūrėta 2007 gegužės 13, adresu http://www.cbr.cam.ac.uk/pdf/wp273.pdf
13. Karagozoglu, N., & Lindell, M. (1998). Internationalisation of Small and Medium sized Technology –based firms: An exploratory study. *Journal of Business Management,* 36 (1), 44-58.
14. Laamanen, T., & Autio, E. (1996). Dominant dynamic complementarities and technology-motivated acquisitions of new, technology-based firms. *International Journal of Technology Management,* 12, 7/8, 769-786.

15. Lydesdorff L. (2005) The Triple Helix Model and The Study af Knowledge-Based Innovation Systems. International Journal of Contemporary Sociiology, 1(42). Peržiūrėta 2007 gegužės 8, adresu http://users.fmg.uva.nl/lleydesdorff/ijcs05/KnBasedIS.pdf
16. Lydesdorff L. Mayer M. (2006) Triple Helix Indicators of Knowledge-Based Innovation Systems. Introduction to The Special Issue. Peržiūrėta 2007 gegužės 2, adresu http://users.fmg.uva.nl/lleydesdorff/rp06th5/rp06th5.pdf
17. Neuvo Y. (2006) Open Innovation Driving Renewal. TEKES Innovation Foresight Seminar. Peržiūrėta 2007 Gruodžio 14, The University od Sydney tinklalapyje adresu http://www.eng.usyd.edu.au/currentstudents/InnoManage/ENGG4061/lectures/ENGG4061_Open_Innovation.pdf
18. Statistics Lithuania. (2008). *Development of innovation activities. Based Community Innovation Survey (CIS) 2002-2006*. Retrieved March 21, 2007, from http://www.stat.gov.lt/lt/catalog/viewfree/?id=1389.
19. Uus, I., & Kriaučionienė, M. (2006). *Efficient problem solving as a state-promoted ideology of facilitating the evolvement of company networks*. Innovation pressure: Rethinking Competitiveness, Policy and the Society in a Globalised Economy: international ProAct conference, 15-17th March, 2006, Tampere, Finland: proceedings. Tampere, 2006, 1-12.
20. Van de Vrande, V., Lemmens, C., Vanhaverbeke, W. (2006) Choosing governance modes for external technology sourcing. *R & D MANAGEMENT* , 36 (3), 347-363.
21. Vanhaverbeke W., Cloodt M., Van de Vrande V. (2007). Connecting absorptive capacity and open innovation. Peržiūrėta 2007 Lapkričio 11, Cas Oslo Centre for advanced study tinklalapyje adresu http://www.cas.uio.no/research/0708innovation/CASworkshop_VanhaverbekeEtAl.pdf
22. White paper on open innovation (2006) Embracing open innovation: a new approach to creating sustainable value. Peržiūrėta lapkričio 11, BT global networked IT services tinklapyje adresu http://www.btglobalservices.com/business/global/en/business/collaboration/images/InnovationWP_Final.pdf
23. Witt U., Zellner Ch. (2005). Knowledge-based entrepreneurship: the organizational side of technology commercialization. Paper to be presented at the DRUID Tenth Anniversary Summer Conference 2005 on Dynamics Of Industry And Innovation: Organizations, Networks And Systems. Copenhagen, Denmark, June 27-29, 2005. Peržiūrėta 2007 gegužės 10, adresu http://www.druid.dk/uploads/tx_picturedb/ds2005-1602.pdf.

Dr. Monika Petraitė – Kriaučionienė, dokt. Aistė Vaišnorė

Atvirųjų inovacijų modelio vystymas versle: koncepcijos analizė ir apribojimai mažos besivejančios šalies atveju

Santrauka

Atvirųjų inovacijų modelio plėtra ir taikymas versle susijęs su aibe besiplėtojančių globalių žinių ekonomikos procesų. Poreikis greitai ir kūrybiškai integruoti naujas žinias inovaciniuose procesuose, verslo tinklėjimo procesai, inovacinių procesų sparta versle skatina ieškoti naujų verslo modelių, įgalinančių efektyvų atvirosios inovacijos modelio diegimą konkurenciniams pranašumams kurti. Pagrindiniai atvirųjų inovacijų modelio pranašumai – įmonės resursų ir veiklos erdvių išplėtimas tinkle susijusių veikėjų pagalba, visų pirma žinių ir „know how" prasme. Tačiau šiems privalumams įgyti būtina ir adekvati verslo modelio ir organizacijos struktūra, leidžianti gan lengvai dalintis pastaraisiais resursais, neprarandant unikalaus konkurencinio pranašumo. Lietuvos atvejo analizė parodo, kad dominuojančios tradicinės verslo ir inovacinės veiklos struktūros leidžia diegti tik kai kuriuos atvirojo inovacijų modelio elementus, koncentruojantis į žinių ir technologijų perkėlimą, bet apribojant bendrų žinių ir inovacijų kūrimo veiklas.

About the authors

Aiste Vaišnorė. Doctoral candidate, Institute of Business Strategy, Kaunas University of Technology, Lithuania.
e-mail: aiste@technopolis.lt, tel. +370 611 49915
Aiste Gasiunaite is a doctoral candidate at the Research at the Institute of Business Strategy, Kaunas University of Technology, Lithuania. She is also the project manager at the Science and Technology Park TECHNOPOLIS in Kaunas.
Research interests: innovation management, science and technology based entrepreneurship, R&D in business, the role of Science and Technology Parks to innovation development in knowledge based sectors.
Monika Petraite-Kriaucioniene. Dr, Assoc. Professor, Institute of Business Strategy, Kaunas University of Technology, Lithuania.
e-mail: mkriauc@ktu.lt, tel. +370 37 300106
Monika Petraite-Kriaucioniene is Assoc. Professor and Deputy Director for Research at the Institute of Business Strategy, Kaunas University of Technology, Lithuania. She is the author of more than 40 research papers, is a national representative for Lithuania in European Trend Chart on Innovation, ERAWATCH networks, is the member of Lithuanian Knowledge economy forum, advising the Lithuanian Ministry of Economy in Innovation policy making. She has also co authored such scientific studies as The Implementation of Innovation policy statements in Lithuania and the recommendations, Study of the Complex growth factors for Lithuanian Economy, and a study in preparation of Lithuanian innovation in business programme 2007-2013.
Research interests: innovation management, Innovation Systems, R&D in business, S&T and Innovation policy

CONCEPTUALIZATION OF CRISIS PLANNING AND MANAGEMENT STRATEGY IN BUSINESS ENVIRONMENT

Asta Valackienė, Asta Krašenkienė, Alina Dėmenienė
Kaunas University of Technology, Lithuania

Abstract

In order to be able to strategically manage the crisis situations within business environment, it is essential to talk about the process of crisis planning, as well as strategy management within the organization. To achieve that an adequate training of staff is necessary, in addition to that the analysis of the situation and search for alternative solutions are required. To be able to properly get prepared for a crisis planning and strategy management process, both scholarly discussions and practical solutions are necessary. Action planning enables management to not only evaluate the dynamics within a business environment, but also evaluate similar changes related issues. In this way, action planning may be helpful in integration the constituent parts of a strategy process and developing the crisis management perspectives.

Introduction

Scientific problem: a conceptual paradigm of the phenomenon under discussion is applied: crisis planning and management strategy within the business environment are analyzed, at the same time emphasizing the synthesis of social sciences. The analysis of this social phenomenon requires a multidisciplinary approach. The object of the analysis is an axis for several social sciences.

The object of the article: - strategy of crisis planning and management.

The aim of the article – present the theoretical aspects of crisis planning and management strategies.

The objectives:
1. To analyse the theoretical aspects of crisis planning and management strategies in the context of different social science fields.
2. To evaluate the effectiveness guidelines of crisis plan in business organization.

The methods of data collection and analysis: the scientific literature analysis.

Conceptual analysis

Recently most attention in the research literature has been paid to analyze the corporate crisis issues. Research literature mainly deals with economical crisis aspects. To analyze corporate crises, the following scholars, such as Altman (1968;1971;1983), Ellliot (1995), Ansoff (1987), Alešina (1997), Fink (1986), Kash (1998), Darling (1998), Čumikov (1998), Roselieb (1999), Hauschildt (2000), Bartl (2000), Šarafanova (2001), Barvin (2002), Petuchov (2007) devoted their publications. In Lithuania the topic under discussion has been reflected by the publications by Janulevičiūtė (2003), Bielevičienė (2003), Dambrava (2003), Sakalas, Savanevičienė (2003), Garškaitė, Garškienė (2005), Beržinskienė (2006; 2007), Virbickaitė (2006; 2007), Stoškus (2007); Valackienė (2007, 2009), Krašenkienė (2007); Stundžienė (2006), Boguslauskas (2006), and others.

The authors structure the crisis situations, point out their economical expressions, and describe the crises diagnostics methodology and the ways of solving them.

However, the social aspect of this phenomenon has been researched to a lesser extent. If crises are treated as a social phenomenon, then the reasons for the crises can be more complicated to define and assess.

It is not an easy task to present a conceptual explanation of the employee's self-identification within an organization, and it is not easy to formulate the conceptual expressions for crises planning, in order to strategically manage the crises within business environment.

While doing research into the abovementioned social phenomena – an employee's self-identification and crises management, the following methodological difficulties are encountered: preparation of the research instrument and presentation of the analysis.

We dare to say that the management in each organization should know the weak points in their personnel management and should have a built-in advance employee identification strategy, which would accelerate the process of the employee's adaptation to the organizational goals and values and stipulate his/her efficiency and work satisfaction, in order to manage crisis situations. Complicated business environment encourages looking for new ways to evaluate the situation in which changes have taken place, as well as adapt and manage the continuity means for further activities.

In crisis planning process discussions and future perspectives are essential. The plan has to be formulated and tried out in order to see whether or not it will be efficient and useful to the organization.

While evaluating the plan it is firstly necessary to renew and evaluate all the most essential aspects of crises planning. For that adequate staff training is necessary, alongside with the analysis of the situation and search for alternative solutions. Consequently, both internal and external aspects of analysis are essential in the crises planning process.

It has been proved by *public communications researchers* P. Shrivastava, I. Mitroff, D. Miller, A. Miglani (1988), that mass media is a very important external agency acting as an intermediary after a crisis has taken place. After a crisis has taken place, the management of the organization should cooperate with the media in order to

maintain the reputation of the organization, to present truthful information which might be quite distorted if mass media is avoided. It also functions as a means of information to the clients, suppliers and all interested parties; therefore it is essential that the information presented is clear, accurate and informative. The management of the organization should have the public information prepared beforehand, as speaking on the spot presents a possibility to even worsen the crisis situation of the organization. Contacts with mass media have to be maintained not only in the face of a crisis situation, but also in the absence of a crisis, as an organization should have good relationship with mass media representatives, a factor essential in implementing the process of the organization's strategy.

P. Schoemaker (1997) notes that crisis management is like a multidisciplinary process, which cannot be left only to the public relations department. This social phenomenon is treated in the convergence of separate sciences: personnel management, psychology and management.

In the aspect of personnel, crisis management requires the involvement of managerial groups.

In the process of crisis management system people have to take active participation, otherwise it may lead to the collapse of the organization. However, there are managers who are not convinced that crisis management is worth the effort.

I. Mitroff (2004) states that if the managers' readiness is not appropriate, then crisis management and communication with external agencies becomes problematic. Failure to give a timely response, inappropriate or distorted information through poorly functioning communication channels, detailed external control cause serious consequences and high stress level to the managers.

A crisis management process may have various consequences to the organization. Some organizations plan and respond to each imaginary crisis that might make a descent on them. A wide overlook of possible issues is a welcome factor. Managers should try to discuss solutions which might help find a compromise regarding the position and reputation of the organization, although such ways might also cause a risk. Staff involvement into the crisis management process should not be emphasized. All this has to be considered in advance. This is closely related to crisis planning.

P. Shrivastava, I. Mitroff, D. Miller, A. Miglani (1988) emphasize that it is essential to learn from failures and draw conclusions, from which the organization learn a lesson. Crises overview and lessons learned are essential, if the efficient steps have been planned to help stop the development of the events. This kind of evaluation is essential to strengthen the short and long-term policies within the organization.

Research literature on psychology offers typical crisis management approaches. Z. Sheaffer and R. Mano-Negrin (2003) note that organizations may be characterized by two aspects: preparation for a crisis and recovery after one. Preparation is such a state within the team, when it is prepared to forecast both the internal and external circumstances of their competitors. A recovery after a crisis is a positive state, when all of the abovementioned components cease to exist. An existing crisis management plan is necessary, although it is not sufficient, as there is a danger that the organization will ignore the warning signs or will cause a threat for a crisis to take place due to a very high degrre of dependability to the existing plan. Plans may create wrong sences of preparedness, which in reality do not seem to exist.

Analysing crises management in the managerial aspect, it has been proved that it is still an unexplained field and it covers several methodological schools.

The main startegic thinking within an organization is to use technological analyses and decision making proceses. This strategic thinking was applied for various type enterprizes and in most industries, mainly as a result of growing and competitive functionality. J. Thompson, F. Martin (2005) divided the strategic process under three main features: formulating a strategy, implementing a strategy and evaluating it. Some authors object to this kind of division and states that this division of a strategy under three features seems more convenient rather than realistic, therefore he promotes a holistic view to the whole strategy process.

In the process of crisis management strategy formulation encompasses a precise setting of goals, objects and mission within an organization, analyses external environment, in terms how it can affect the enterprise alongside with its internal resources and possibilities for strategic alternatives.

The decision making strategy finds it very useful to analyze intermediaries and their impact to the organizational culture. The attractiveness of the potential strategy is its capability to support the factors which are welcome within an organization, as well as what it is possible to do with the resources and competences available.

Implementing a strategy is related to choosing an efficient strategy within an organization, which means implementing the strategy in practice. Strategy implementation always determines efficient management and may significantly influence implementation of success for the whole strategy. The evaluation of the strategy is probably a less reasearched part of the strategy, although it is a very important factor in successfully choosing a strategy. This is not only related with execution or means of execution, it also signals when it is time to make corrections to the strategy and quicly change the external environment.

The evaluation of strategic thinking and moving planning towards strategy management helps the strategic thinking remain heterogeneous. Various technologies have been invented to promote wider thinking regarding the stage of strategy formulation and one of such stages being action planning. Action planning helps the management see a wide view of the future, as this makes influence to their organization and evokes a deeper insight than the analysis of external environment.

Action planning, as an approach to strategy, acquires a high degree of unexpectedness in the business world. It has its roots in the military planning during WWII, although it was not until the 1970s when it was related to business. Action planning helps organizations analyze the external environment. P. Schoemaker (1997) describes action planning as "a disciplined method to imagine a

possible future". In this way it helps avoid the thinking, such as "what has happened" and "who is going to work now?" when alternative future is being considered. This demonstrates that actionj planning is related to unrest and confusion. Therefore, both action planning and strategic thinking are closely related to crises management and all the three elements are directly interrelated. The more organization management direct their strategic thinking to action planning, the easier crises management process is going to be with fewer negative consequences.

External business environment and organizational structures tend towards changes. Globalisation, demographic changes, changes in the social structures and events related to economy has gained a dramatical scale in the recent decade and this scale is going to remain in the future. Such an observation about increasing changes and difficulties influenced the increase in sceptical commentaries related to the rational attitude to the strategy. Action planning helps properly look to the future. Regardless of uncertainties typical of action planning, it yet has to acquire a clear recognition in the strategic environment. Action planning is the main integrated part in the strategy process. Although the initial attitude to action planning was hostile, although with time it was possible to persuade management that looking to the positions of future strategy action planning may be efficient.

Action planning implementation encompasses several important factors: building up a team and organizational culture. Leadership and management are also essential components in action planning.

In order to decrease the level of uncertainty in action planning it is important to set the action rules, which will act as guidelines executing the complivcated action planning. P. Schoemaker (1993) emphasizes that rational planning is important, although not sufficiently long tem in the business environment. Each action plan has a story behind it, in terms how various elements can interact under current conditions. Action planning most often encompasses the elements which cannot be easily modelled; therefore a story about them makes the action plan more easily understandable. P. Schoemaker (1993) offers integration into the strategy process, expanding its role into the internal and intermediary analysis, in other words, and concentrate to the importance of the strategy management process, which is less controlled by the management's interference.

Analysing strategy management, it is seldom when the crisis management aspects in the strategy process are substantiated. An occurrence of crisis may alter the enterprize's orientation in terms of limitations of operations or making the enterprise cut on costs. Crises may also make organizations go another direction. Crisis management and strategic management have similarities, such as evaluation of environmental conditions, including the evaluation of intermediaries and their importance to the management. Both evaluate the process influencing the strategy chosen and allows renew the routines and machinery.

J. Preble (1997) states that crisis management has to be an important part of the strategy management process and that the managers have to recognize the importance of strategy in the crisis management. Among other things he notes that various personal, psychological and behavioural processes affect this attitude. Most enterprises have detailed crisis management plans, however a very small part of those plans are realistic in the strategy process. If both processes – crisis management and strategy management are correctly evaluated, the organization can be looked at with a perspective.

People play an important role in the strategy planning and implementation. An individual's involvement into a project, its execution and the evaluation of the crisis management plan are truly essential in the organization. Human resources are an essential part in both processes – strategy and crisis management.

Strategy planning creates certainty and reduces ambiguity. This is the initial precondition, as well a process in any organization. Action planning enables the organization to move from the first stage to the second stage of crises process, if this is integrated into the strategy management actions as a dymanics and a tool for further learning.

All the abovementioned positive action planning features prove the necessity of action planning and its importance in the organization. Setting up astrategy, planning actions, these are the ways to more easily overcome the crises and how to manage them. This is an apparent help in a crisis situation. Having a strategy and action plan, both the staff and management find it clearer how to behave in a given situation, as this has already been talked about, discussed and planned.

D. Pollard, S. Hotho (2006) state that the more an organization is prepared for crisis situations, the better it can be managed, decision making in the crisis situation will be better thought over and efficient. Action planning means creating an alternative future action plan for the organization, to be provoked for the beforehand forecast actions of the environment changes, has to be seen as a significant intellectual action, which in its turn may move towards a useful integration of the organization's team members, at the same time increase its abilities while solving crisis challenged reputation and action related difficulties.

Both crisis management ans strategy management depend on the creative and intuitive thinking. Th efficiency of crisis management depends on the manager's ability to evaluate possible sources of the crisis and make corresponding decisions.

D. Pollard and S. Hotho (2006) note that action planning may become a catalyst in business environment. Action planning allows the managers to not only evaluate the dynamics within the business environment, but also evaluate similar change related issues. Therefore, the involvement of action planning may help integrate the constituent parts of the strategy process and develop the perspectives of crisis management. Actio planning does not mean a future forecaster, it is essential to note its high possibilities and building action plans while solving each individual case. For that reason flexibility remains essential.

While analysing research literature on crisis management process another important managerial element showed up: managers do not always pay dequate attention to a crisis and solve only when it ocurrs.

Stress and ambiguity often follow crises, which negatively effect decision making. The sooner the managers are able to find the main factors for risk, the more the crisis plan is efficient regarding decision making. Crisis management requires collaboration with systems, efficient internal and external communication, setting the persons and their roles expressed by special duties and responsibilities, effective collective decision making, control and collaboration responsibility.

S. Smits and N. Ally (2003) note that while solving the effect of strategy plans and potential crisis it is essential to estimate the intermediaries' involvement. Most managers will agree that good relationship with intermediaries is an indispensable part in the enterprise's strategy plan. After a crisis has occurred, with the help of media it is very important to maintain good communication with intermediaries. This should be the main detail in the strategy management process in order to solve the crisis.

Managing communication during the crisis period is not an easy task. Managers come across a wide choice in their relationship with intermediaries, while a t the same time it is necessary to find the reasons for the crisis mechanism and its influence.

D. Pollard, S. Hotho (2006) state that maintaining relationship wit the media has certain benefits. Media related communication may be included into crisis planning. Before crisis ocurrs, the organization can quickly and efficiently pass information to the press. In communication with the media, managers play an important role, especially when passing over and disseminating information regarding the crisis situation. They perceive the press with hostility and take a position in defence. This could be a reaction to the possibility that information has been lost or mistakenly presented. These fears may me related to the experience, which may also worsen the situation, especially due to poor preparation. Regardless of these fears, media resources must be used efficiently. Essential is a premeditated involvement of local media companies, while further working with an appropriate action plan. This attitude is important especially in organizations where. Important is the fact that they are familiarized with crisis planning and their roles are defined as well as possible. They can be more than usefully involved into crisis planning, as public information professionals may have specialist communication knowledge, they should be advised on crisis planning, setting responsibilities, and communication with intermediaries. Such close working relationship will be useful managing communication in a crisis situation, which will allow the organization strengthen their crisis management skills.

I. Mitroff (2004) emphasizes that human relationship and communication might be efficiently utilized in a crisis situation, therefore employees need information and specialist training. Efficient management of the strategy process may have impact on the organization in taking action to minimize the crisis. Prevention is the most efficient way in solving crises, as most reasons for crises are influenced by external management control. Relating crisis planning with the strategy proceses within an organization, a strong basis ocurrs, with the help of which future problems could be solved. The manager is a very important person in the organization, as he/she has to make decisions whena crisis ocurrs, as well as represent the company in contacting media representatives. The the organization has a strategy, botht the managers and company employees are preparing for action planning, and the crisis management in the organization is going to be efficient. The usefulness of action planning is emphasized, which allows evaluating the dymamics withing the business environment, helps prepare for various changes, and reduces obscurities and ambiguities. Also intermediaries are involved into the organization's crisis, as well as other institutions that care about the organization and the influence of the crisis for the further operation of the organization. Such intervention may positively or negatively influence the crisis situation in the organization. This depends on the relationship with those institutions not only in the course of the crisis, but also how the information will be publicised. All of these elements are essential for the crisis planning and its management.

Communication may have additional positive benefits in setting up the roles and responsible structures in a critical situation. In relationship with the intermediaries it is important to consult and revise potential intermediaries' roles in supporting the organization in crisis situations (Pollard, Hotho, 2006, 733 p.).

Although planning of computer related disasters may more influence formal and rational planning proceses, certain features of the process may be used as lessons for crisis nanagement system development. The main essential qualities are:

- The need to involve most people into the process;
- Event identification and their impact on the organization;
- Success factor indentification in overcomomng problems;
- Necessity to try out plans and practice application;
- The need to renovate.

All these qualities are really essential and useful for the organizations getting ready for crisis situations. This should be the basis for the company strategy in creating an action plan. Analysing these qualities is the main task in the company in sloving the issues that occurred and which could develop into crisis situations.

J. Preble (1997) states that planning crisis management may destroy efficient work of the organization, therefore a paranoid attitude is unwelcome. Crisis management should clarify the reasons for crises within the organization. Action planning is oriented towards the clarity of the potential issue, which may later help make potential decisions. Important is the fact that crisis management is treated as part of the overall organizational strategy.

While analysing crisis management and strategy management integration, the attitude that "one size fits all" is unsuitable. It is clearly realized that organizations have different cultures and management styles, which are based on the main priciples and which may help in planning crisis management, implementation and execution. Therefore crisis management plans and their actions will differ among organizations even withing the same industry.

Conclusions

1. A conceptual paradigm of the phenomenon under discussion is applied: crisis planning and management strategy within the business environment are analyzed, at the same time emphasizing the synthesis of social sciences. The analysis of this social phenomenon requires a multidisciplinary approach. The object of the analysis is an axis for several social sciences. In crisis planning process discussions and future perspectives are essential.

2. Having carried out an analysis of research literature of the social phenomenon under question it is possible to state that crises management is a rather new subject in Lithuanian bisiness environment. While analysing research literature on crisis management process another important managerial element showed up: managers do not always pay adequate attention to a crisis and solve only when it ocurrs. Company's managers realize the power of crises and their influence on the company's operations, although do not pay adequate attention to that. In order to successfully manage crises, companies have to set a strategy, with the help of which an action plan could be set up, employees should divide up responsibilities, the managers should always be responsible for decision making, especially in crisis situations. And when all the employees in the organization know the action plan, crisis management will become controllable, underatandable and efficient.

3. Another important element is the managers' ability to communicate with the media representatives in crisis sttuations. The managers have to be prepared what to say, how to present the information in order not to damage the company's reputation. They have to realise that media is a really powerful, which may both improve or destroy the current situation in the organization. Maintaining good relationship with public relations representatives is not only important when a crisis situation ocurrs, but also at all times. Analysing research literature it has been proved that the application of action planning in crisis situations is still not yet widely used in the business environment in Lithuania.

References

1. Alešina, I. (1997): Алешина И.В.. Паблик Рилейшнз для менеджеров и маркетеров. Москва, 402.
2. Altman, E. (1968). Finansial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy. Journal of Finance (23), 589-609.
3. Altman, E. (1971). Corporate Bankruptcy in America. Lexington, MA., Lexington Boooks.
4. Altman, E. (1983). Corporate Distress: A Complete Guide to Predicting, Avoiding and Dealind with Bankrupty. New York.
5. Ansoff, H.(1989). Implanting Strategy Management. Management Strategy (3). UK Prentice Hall.
6. Bartl, M. (1999). Die Früherkennung von Krisen: Eine unternehmensübergreifende Sichtweise. Kieln.
7. Barvin, R. (2002). Prediction Bankruptcy Resolution. Journal of Business Finance and Accounting (53), 497-521.
8. Beržinskienė, D., Virbickaitė, R. (2006). Dinaminės įmonių krizių vystymosi alternatyvos. Ekonomika ir vadyba: aktualijos ir perspektyvos (7), 21-24.
9. Darling, J., Kash T. (1998). Crisis Management: Prevention, Diagnosis and Intervention. Leadership and Organization Development Journal (19), 179-186.
10. Čumikov, A. N. (1998): Чумиков А. Н., Креативные технологии «паблик рилейшнз». Москва, 223.
11. Elliot, J. (1995). The Seguencing of Post-communist transition. International Journal Social Economic (22), 9-11.
12. Fink, S. (1996). Crisis management: Planning for Inevitable, New York, American Management Association.
13. Gaškaitė, K, Garškienė, A. (2005), Antikrizinio valdymo turinys: esmė, tikslia ir priemonės. Verslas: teorija ir praktika // Vilniaus Gedimino technikos universiteto mokslo žurnalas (6), 59-75.
14. Hauschildt, J. (2000). Krisenmanagement: Eine Herausforderung fur die Betriebswirtschaftslehre. Kieln, 311.
15. Janulevičiūtė, B., Bielevičienė, J., Dambrava, V., (2003). Krizinių situacijų valdymo aspektai ryšių su visuomene tarnybų požiūriu. Organizacijų vadyba: sisteminiai tyrimai (25), 107 – 108.
16. Kash, J. (1998). Crisis management: prevention, diagnosis and intervention // Leadership & Organisation Development Journal (15), 179 – 186.
17. Krašenkienė, Asta; Valackienė, Asta; Raycheva, Lilia. Issues of discrimination administration and public organizations // Changes in Social and Business Environment : proceedings of the 2nd international conference, November 8-9, 2007, Panevėžys, Lithuania : selected papers / Kaunas University of Technology Panevėžys Institute, Bulgarian Association of Management and Engineering, Koaceli University, Martin-Luther University ... [et al.]. ISSN 1822-7090. 2007. p. 128-131.
18. Mitroff, I. I. Crisis Leadership: Planing for the Unthinkable / John Wiley and Sons, New York, 2004.
19. Petuchov, D., B. (2007) : Петухов, Д. В. Антикризисное управление. Москва, 306
20. Pollard D. Crises, scenarios and the strategic management process/ D. Pollard, S. Hotho // Management Decision. 2006, vol. 44, no 6, p. 721.
21. Preble, J.F. Integrating The Crisis Management Perspective Into The Strategic Management Process // Journal of Management Studies, Vol.34, No.5, 1997. p. 769-91.
22. Roselieb, F. (1999). Frühwarnsysteme in der Unternehmenskommunikation, Manuskripte aus den Instituten für Betriebswirtschaftslehre der Universität Kiel. Kieln, 385.
23. Sakalas, A., Savanevičienė, A. (2003). Įmonės krizių vadyba, 201.
24. Sheaffer, Z., Mano-Negrin, R. Are women 'cooler' than men during crises? Exploring gender differences in perceiving organisational crisis preparedness-proneness. Women in Management Review. 19(2): 109-122, 2004.
25. Schoemaker P. Disciplined imagination // International Studies of Management and Organization 1997, vol. 27, no 2, p. 43.
26. Schoemaker P. Multiple scenario development: its conceptual and behavioral foundation // Strategic Management Journal. 1993, vol. 14. p. 193.
27. Shrivastava, I., Mitroff, I. I., Miller, R. M., Miglani, S. Understanding Why Corporate And Idustrial Crises Occur // The Antidote from CNBS, Issue 21, 1988.
28. Smits S. Thinking the unthinkable – Leadership's role in creating behavioral readiness for crisis management/ S. Smits, N. Ally // Competitiveness Review. 2003, vol. 13, no 1. p. 1.
29. Stoškus, S., Beržinskienė, D., Virbickaitė R. (2007). Theoretical and Practical Decisions of Bankruptcy as one of Dynamic Alternatives in Company's Performance. Inzinerine Ekonomika-Engineering Economics (2), 27-33.

30. Stundžienė, A. Boguslauskas, V. (2006). Valuation of Bankruptcy Risk For Lithuanian companies. Inzinerine Ekonomika-Engineering Economics (4) , 29-36.
31. Šarafanova, J. K. (2001): Шарафанова Е.К. Модели поведения менеджеров в кризисных ситуациях // Журнал Персонал Микс (8), 56-59. Санкт-Петербург.
32. Thompson J. Strategic Management, 5th ed/ J. Thompson, F. Martin. Thompson, London, 2005.
33. Valackienė, A. (2009). Krizių valdymas ir sprendimų priėmimas. Kaunas, 295.

Asta Valackienė, Asta Krašenkienė, Alina Dėmenienė

Krizių planavimo ir valdymo strategijos verslo aplinkoje konceptualizacija

Santrauka

Šiame straipsnyje analizuojama krizių planavimo ir valdymo strategija verslo aplinkoje, išryškinant socialinių mokslų sintezę. Šio socialinio reiškinio analizė reikalauja multidisciplininio požiūrio. Analizės objektas yra keleto socialinių mokslų ašis. Aptariama žiniasklaidos priemonių raiška formuojant krizių planavimo ir valdymo strategiją.

About the authors

Asta Valackienė, assoc.prof.doctor of social sciences, Kaunas University of Technology Panevėžys Institute Management and Administration Faculty. Economics Department. E-mail: asta.valackiene@ktu.lt; mob. phone: +370 68694121. Areas of scientific interests: sociology of labour, sociology of gender, crisis management.

Asta Krašenkienė, PhD student of Sociology Department of Kaunas University of Technology. Asistant of Kaunas University of Technology Panevėžys Institute Management and Administration Faculty Economics Department. E-mail: asta.krasenkiene@ktu.lt; mob. phone: +370 69948176. Areas of scientific interests: human rights, Non - governmental Sector, trade-union.

Alina Dėmenienė, Kaunas University of Technology Panevėžys Institute. Director of Information Technologies Center. E-mail: alina.demeniene@ktu.lt; mob. tel.: .+370 69841225. Areas of scientific interests: the systems of busssinies support, information technologies.

SOCIAL EXCLUSION AND ITS FACTORS

Gintarė Vaznonienė, Algis Krupavičius

Kaunas University of Technology, Lithuania

Abstract

In recent years the term "social exclusion" has become of some sort a catchword in social sciences. Lithuanian and European scholars put a special emphasis on the importance of social exclusion in many areas of social life. Though this concept is not fairly new, but still the diverse and miscellaneous usage of social exclusion is worth of an additional debate. Main points for this discussion are the following: what is social exclusion, is it a threat for society, what does influence the social exclusion, how to deal with the social exclusion in a real world. Main aim of this study is to specify contents of social exclusion and identify its factors. The object of this paper is to analyze and conceptualize factors of social exclusion.

Keywords
Social exclusion, social factors, social policy

Introduction

This section of the article deals with defining *what is social exclusion*. Definitional clarity of social exclusion is important not only for a theoretical and systemic understanding of this phenomenon but also for empirical purposes, i.e. identification of factors of social exclusion, development of its' measurements, ensuring congruence between instrumental policies and results in order to prevent social exclusion, etc. This descriptive analysis of social exclusion also enables to identify major and diverse factors, which cause this phenomenon.

The term *social exclusion* has many affinities with French Republican thought. This especially related with the concepts of solidarity and the social bond, where the "Anglo-Saxon" idea of "poverty" was thought to patronize or denigrate equal citizens (Silver, Miller, 2003). In France, when the term originated in the 1960s, a group of ''Social Catholics,'' especially the ATD-Fourth World movement headed by Father Joseph Wresinski, used the term to refer to the extremely poor of affluent and less developed countries living in the slums (Silver, 2006, p. 4411-4412). From the 1970s it was used to refer to the plight of those who fell through the net of social protection—disabled people, lone parents, and the uninsured unemployed. The publication of Les exclusion by René Lenoir in 1974 was a milestone in the emergence of social exclusion as a concept. But, as often happens, Lenoir was not aware at the time of the use that would subsequently be made of the term and he employed it merely to raise the alarm at the inability of an expanding economy to include certain physically, mentally or socially disabled groups. His main concern was his estimate that one in ten inhabitants of France was being left aside by the country's economic and social development (Estivill, 2003, p. 5). The concept of social exclusion became widely used in France after the economic crisis of the 1980s.

Social exclusion terminology was adopted at a European Union level in the late 1980s and early 1990s. Right-wing governments, including the Thatcher government in the UK, did not recognize the existence of poverty in their own countries, while commentators on the left were becoming increasingly concerned about the social polarization associated with rapidly growing income inequality. Social exclusion was sufficiently broad to accommodate both these perspectives, and allowed debates about social policy to continue at a European level. Leaders of EU passed resolutions to fight social exclusion as part of the European Social Model, one that weds economic growth with job creation and social cohesion (Silver, 2006; Social exclusion, 2009). The idea of social exclusion rose as central for Jacques Delors, president of the European Commission in the mid-1980s, who pressed for a "social dimension" to European integration. Afterwards the problem of social exclusion extended among different international, national institutions, countries with the look to its conceptualisation, measurement, monitoring, fighting and implementing various protecting programmes.

G.Jehoel-Gijsbers and C.Vrooman (2007) argued that social exclusion had become a prominent item on the European Union's policy agenda in the second half of the 1990s, attention began to focus on defining and specifying the concept more closely. Social exclusion as a concept commonly used in development, particularly following the World Social Summit in Copenhagen in 1995 (Arthurson, Jacobs, 2003; Frances, 2004; Beall, Piron, 2005). Thereafter a number of multilateral development agencies, notably the World Bank and the International Labour Organisation, adopted social exclusion as a multidimensional framework.

It is noticed that up until now scientists, policy-makers have not been provided with a generally agreed scientific conceptualization, though there are many conceptions which reveals understanding of social exclusion from different perspectives. The meaning of this concept is controversial so introduction with different its approaches leads to better perception what do we mean by social exclusion. The most general definition of social exclusion refers to ways in which individuals may become cut off from full involvement in the wider society. As G.Jehoel-Gijsbers (2004) points out social exclusion concept related with the theories of Durkheim (1897) on social cohesion and solidarity, the importance of collective values and norms, and especially the risk of social alienation (anomie). Though its sociological pedigree is clearly Durkheimian, however the concept is also adumbrated in Georg Simmel's *The Stranger*, Norbert Elias's *The Established and the Outsiders*, *Stigma*, and Howard Becker's *Outsiders* (Silver, 2006, p. 4411).

In the UK, the concept of social exclusion can be traced to Max Weber (Hills et al, 2002; Frances, 2004) who identified exclusion as a form of social closure on the part of groups (that is particular groups, communities or institutions that keep others out). As the concept evolved more recently in Europe, social exclusion came to be associated mostly with the social changes deriving from global economic change, notably the exclusion of large numbers of people from the benefits of welfare states and formal labour markets (Sen, 2000; Silver, Miller, 2003; Popay et al, 2006; etc.).

Some countries as Italy have a legal definition of social exclusion. In case of Italy "esclusione sociale" is defined as *poverty* combined to *social alienation*, by the *statute* n. 328 (11-8-2000), that instituted a state investigation commission named "Commissione di indagine sull'Esclusione Sociale" (CIES) to make annual report to the government on legally expected issues of *social exclusion* (Social exclusion, 2009).

The European Commission (2004) in "Joint Report on Social Inclusion 2004" social exclusion defines in such way – social exclusion is a process whereby certain individuals are pushed to the edge of society and prevented from participating fully by virtue of their poverty, or lack of basic competencies and lifelong learning opportunities, or as a result of discrimination. This distances them from job, income and education opportunities as well as social and community networks and activities. They have little access to power and decision-making bodies and thus often feeling powerless and unable to take control over the decisions that affect their day to day lives (The European…, 2004, p. 10). Accordingly social exclusion can be described like people, social groups who are prevented from participating fully in economic, social and civil life and/or when their access to income and other resources (personal, family, social and cultural). Following this they are excluded from enjoying a standard of living and quality of life that is regarded as acceptable by the society in which they live.

International Labour Organization (1996) defines social exclusion as a state in which an individual does not have access to living conditions which allow him both to satisfy his essential needs (food, education, health, etc.) and to participate in the development of the society in which he lives. From this point individuals can suffer from different forms of exclusion of an economic, political, cultural or other nature (Strategies…, 2003, p. 3).

Social exclusion is usually defined as a dynamic process of progressive multidimensional rupturing of the 'social bond' at the individual and collective levels. Social bonds mean the social relations, institutions, and imagined identities of belonging constituting social cohesion, integration, or solidarity. Social exclusion precludes full participation in the normatively prescribed activities of a given society and denies access to information, resources, sociability, recognition, and identity, eroding self-respect and reducing capabilities to achieve personal goals (Silver, 2005, p. 1).

J.Beall, L.H.Piron (2005) developed several methodological problems with the term social exclusion because it can be used in such ways:

- *colloquially*: it may become a cliché for every form of social disadvantage;
- *analytically*: it is used to analyse social disadvantage (beyond poverty);
- *operationally*: it informs actions by donor agencies and their partners (Beall, Piron, 2005, p. 36).

In conformity with A.Sen (2000), G.Jehoel-Gijsbers, C.Vrooman (2007) and many other researchers social exclusion as a concept denotes two main aspects:

1) *economic-structural* exclusion, which refers to a *distributional* dimension in line with the Anglo-American approach (they identify two distributional aspects: a material (income and goods) and a non-material (social rights) one);

2) *social-cultural* exclusion, which refers to the *relational* dimension emphasized in the French school (this dimension is also divided in two different aspects: social integration, which point to social relations and networks; and cultural integration, which regards values and norms) (Jehoel-Gijsbers, Vrooman, 2007, p. 16).

It can be noticed that all above mentioned leads to the assumption that dynamics of social exclusion operates through social relations, social cultural patterns and social, political and economic institutions based on power. These two paradigms thus focus on quite distinct understandings of disadvantage: one relating to lack of resources (*what you have*) and the other to identity-based discrimination (*who you are*).

H.Silver (2007) has developed some key arguments explaining multidimensionality of social exclusion concept. In greater detail they reveal such features of social exclusion:

- social exclusion is a *multidimensional process* of *progressive* social rupture, detaching groups and individuals from social relations and institutions and preventing them from full participation in the normal, normatively prescribed activities of the society in which they live;
- social exclusion is *context-specific*: This national-specificity implies that any comparison between exclusion across regions internationally will require a context dependent definition of social belonging;
- social exclusion is a *relational* - as a social relationship, *exclusion* has two parties- it is essential to examine the excluders as well as the excluded.
- socially excluded groups and individuals lack capacity or access to social opportunity;
- social exclusion definition reveals not only those excluded but also the excluding institutions and individuals that benefit from the process;
- it transcends the narrow conception of material poverty, whether conceived in terms of income or the fulfillment of basic needs; less concerned with the distribution of material or monetary resources than with other forms of social disadvantage or group memberships that are related to economic outcomes
- social exclusion is a relational rather than a redistributive idea;
- exclusion varies across contexts and therefore has a situated or spatial aspect (Sen, 2000; Silver, Miller, 2003; Silver, 2007, p.15-17).

It is notably seen that Lithuanian researchers and various reports (Vosyliūtė, 2002; Poviliūnas, 2003; Juška et al, 2003; Kanopienės, Mikulionienės, 2004; Taljūnaitė, 2004; Kocai, 2007; Leader…, 2007, Poverty…2008, etc.) highlight these aspects of social exclusion:

- deeper interests to similarities and distinctions of social exclusion and poverty;
- place emphasis to civil, legal aspects;
- draw attention to social cultural and/or social psychological expression of this phenomenon;
- make philosophic insights to social exclusion;
- reveal influence of innovations to social exclusion formation;
- analyse influence of social infrastructure on social exclusion formation.

Though most literature on social exclusion defines it as disadvantage, J.Beall, L.H.Piron (2005) underline that social exclusion conceptualisation can be assessed as valuable due to these matters:

- brings to the fore issues of power and powerlessness;
- suggests that 'things could change';
- provides a valuable tool of analysis;
- offers an operational framework;
- presents a concept that was/is useful for pragmatic reasons (Beall, Piron, 2005, p. 12).

Academics who engage with the concept tend to emphasis the conflicting social science paradigms that underlie social exclusion. Also focuses on its multidimensionality, which highlights a range of causes of social exclusion and the different dimensions of society where it arises. It leads to the possibility social exclusion analyse using different approaches.

Following ideas of K.Arthurson, K.Jacobs (2003) in any discussion of social exclusion is necessary to draw out its most relevant features. Table 1 summarises key interconnected features of the concept of social exclusion, as identified in literature.

Table 1

Key characteristics of the concept of social exclusion

KEY CHARACTERISTICS	ADVANTAGES	PROBLEMS AND ISSUES
Multidimensional nature of exclusion ➢ Many factors involved ➢ Covers various dimensions of social exclusion	• Includes the range of services people are excluded from • Implies complex policy prescriptions • Includes economic, moral, social, political dimensions	• So broad virtually anyone/anything can cause/become excluded • Difficult to put into practise, lacks clarity and political malleable • Not necessarily equated with economic exclusion
Dynamic concept ➢Focuses on the processes that causes inequality ➢Takes into account of agency/structure dynamic	• Integrative/dynamic perspective • Includes role of welfare state as a factor in ameliorating or sustaining inequality • Incorporates denial of social/citizenship rights • Political use progressive if draws attention to inequalities and processes causing them	• New label for well understood processes • Often used descriptively rather than analytically • Brings less precision to debates • Fits wide range of political perspectives • Sometimes policy pathologies disadvantaged groups • Doesn't sufficiently locate the processes of disadvantage in structural factors • Scepticism by academics about its value

Note: table is given in K.Arthurson, K.Jacobs (2003, p. 5) and adopted from Room, 1995; Sen, 2000; Burchardt, Le Grand, Piachaud, 2002; Arthurson, Jacobs, 2003.

Table 1 reveals that social exclusion characteristics enable researchers face to this problematical phenomenon from different perspectives. Advantages are perceived like positive, useful, valuable, perspective features of social exclusion concept. Problems and issues remark negative, uncertain, hardly solved matters related to conceptualisation of social exclusion.

Approaches of social exclusion analysis

Social exclusion as a unique phenomenon might be analysed using many different approaches. In the analysis of social exclusion a lot of attention is paid on its factors. Table 2 summarizes main theoretical and empirical approaches of social exclusion analysis.

Table 2

Theoretical and empirical approaches of social exclusion analysis

	APPROACHES
ANALYSIS OF SOCIAL EXCLUSION	• Multi-faceted/multidimensional character of phenomenon
	• Micro/macro/meso
	• Top($\downarrow$) / bottom($\uparrow$)
	• Institutional /Organisational
	• Condition or status/ dynamic process (passive/active)
	• Focus on social actors and agents

- *Multi-faceted/multidimensional character of social exclusion*

Most of scientific literature acknowledges social exclusion as *multi-faceted/multidimensional phenomenon* (Room, 1995; Sen, 2000; Silver, Miller, 2003; Poviliūnas, 2003; European Commission, 2004; Reimer, 2004; Breaking…, 2007; Poverty…, 2008). Although social exclusion has become a key issue on the European policy agenda and the whole world in recent years, but the social exclusion term is not unambiguous yet. Above mentioned authors touch upon the fact that social exclusion refers to the social relations and organisational barriers that block the attainment of livelihoods, human development and equal citizenship. It can create or sustain poverty and inequality, and can restrict social participation. Exclusion is multidimensional because it refers to economic-structural and socio-cultural aspects of life, one can be excluded from different institutions, social groups, specific benefits, or even particular events. Theoretically it consists of material deprivation, insufficient access to social rights, deficient social participation and a lack of cultural/normative integration etc. This approach deals with most below expressed approaches.

- *Micro, macro, meso levels of social exclusion*

Explaining micro, macro, meso levels (locally, nationally and globally) it is clear that social exclusion is a broad conception which includes international level, may have a national, regional, group or individual character. G.Rodgers et al (1995) acknowledge social exclusion and macro-economic development strategy. Following this approach a central aspect of the analysis of exclusion is the idea that it is embedded in the way societies function. As International Labour Organization (1996) notes that there is no measurement of social exclusion at global level.

Indeed, except for where it originated, the concept of social exclusion is still relatively little used at international level. Given that social exclusion is a broader concept than poverty (as usually defined), the excluded proportion of the population must be regarded as larger than that of the poor population. B.Reimer (2004) states that social exclusion is multileveled since inclusion within a small group cam imply exclusion from the perspective of a large group. Social exclusion refers to individuals (e.g. through exclusion from labour markets) or categories and/or groups (e.g. caste or minority groups) (Beall, Piron, 2005). J.Popay et al (2006) argues that social exclusion operates at the macro, meso and micro levels and interactions within and between processes and factors at these levels. These include problems with the comparability of data across nations, the lack of longitudinal data and major gaps in the coverage of data by population groups and dimensions of social exclusion.

It can be noted that when the central issue is socially excluded persons/social groups, then social exclusion appears in the micro level (with rejection, isolation, and humiliation are some of the mechanisms that exclude people from full participation in society). Meanwhile at the macro level social excluding manifests as exile, expulsion, and deportation, ethnic cleansing, apartheid, denial of human rights, and imprisonment - these are among the extreme processes of exclusion backed up by force (Robila, 2006, p. 87; Silver, 2007, p.15-17).

- *Top and bottom approach of social exclusion*

This also can be said about *top* (↓) / *bottom* (↑) approach. In greater detail *top* approach usually refers to macro and meso levels, meanwhile bottom approach is related with micro (Poviliūnas, 2003). Concluding it can be accepted that social exclusion mostly operates at the micro-level of the individual, at the meso-level of formal and informal organisations and social settings, and at the macro-level of government and society at large.

- *Institutional /Organisational social exclusion*

J.Beall, L.H.Piron (2005) presented social exclusion as the denial of rights and the exclusion of individuals or groups from full participation in society, through multidimensional and dynamic processes but with a strong emphasis on *institutions/organisations*. It includes an institutional dimension involving organisations and processes that exclude. The significance of social exclusion according to *institutional/organizational* approach is demonstrated by the range of international European institutions also national programmes which seek to impact social exclusion.

In addition to the European Commission mostly these include The World Bank, The International Labour Organisation and The United Nations Development Agency (European Commission, 2004). The European Commission has a social exclusion policy for member states. In order to make a decisive impact on the eradication of poverty and social exclusion by 2010, National Action Plans and shared reporting have been developed. Key policy areas are employment and social protection. This focus translates to development cooperation through a focus on social cohesion (Beal, Piron, 2005). The International Labour Organisation (International Labour Organization, 1996) adopted social exclusion as an analytical concept in the mid-1990s. Its strategies and tools against social exclusion is now a global programme for combating poverty and social exclusion and extending social protection.

The United Nations agencies also recognise the importance of social exclusion in relation to racism and discrimination, women and children and linked to poverty. The case of Lithuania shows strong discrepancies between national/local institutions work and socially excluded expectations.

- *Condition or status/ dynamic process (passive/active) of social exclusion*

Some scholars interpret social exclusion as *condition* (*status*) and others describes as *dynamic process*. On the one hand social exclusion as *condition* (*status*) can be assessed as *passive* thing – if socially excluded don't show their initiative, etc. On the other hand *active* approach highlights strong communities, social groups etc. who are responsible for their life. Distinction can be made between *traits* which describe the actual state of social exclusion (status characteristics) and *risk factors* that increase the chance of social exclusion (process) (Gijsbers, Vrooman, 2007). G.Rodgers et al (1995) reports that dynamic features of the concept of social exclusion are identified as one of its most important characteristics in that this aspect focuses attention on the active nature of the processes causing poverty. This

suggests that it is possible to move in and out of exclusion/poverty rather than seeing it as a static state or permanent condition of some individuals. For individual in particular groups, social exclusion represents a progressive process of marginalization leading to economic deprivation and various forms of social and cultural disadvantage. Also G.Rodgers notes that social exclusion may describe a *state*, but its particular advantage, in comparison with most work on poverty, for instance, is that it focuses attention on process (Rodgers et al, 1995, p. 13-15).

H.Silver, S.M. Miller (2003) lay stress on dynamic or process (active point of view), along a trajectory between full integration and multiple exclusions. B. Reimer (2004) reveals individual patterns of social exclusion because it fluctuates over time and call for flexibility policy programmes to accommodation of it. J.Beall, L.H. Piron (2005) point that social exclusion as a condition or outcome is a state in which excluded individuals or groups are unable to participate fully in their society. This may result from their social identity (for example race, gender, ethnicity, caste or religion), or social location (for example in areas that are remote, stigmatised or suffering from war or conflict). J.Popay et al (2006, p. 12) develop active and passive exclusion features: a) social exclusion is active where exclusion is the direct and intended result of policy or discriminatory action, b) when deprivation comes about through social processes in which there is no deliberate attempt to exclude for example when a downturn in the economy leads to higher than average levels of unemployment amongst young unskilled workers or older workers. Summarizing it is obviously that social exclusion is more dynamic process, but it operates within well-established political, social and economic structures. It is dynamic because it is a process that is highly conditional on time, places and circumstances. As a dynamic process, social exclusion usually governed by social and political relations, and access to organisations and institutional sites of power.

- **Focus on social actors and agents of social exclusion**

Sociologist A.Giddens (2006) refers that generally "exclusion" implies that someone or something is being shut out by another. J.Beall, C.H.Piron (2005) put emphasis on a social relations approach, concerned not only with the excluded but also on the excluders, thus putting power at the centre of the analysis. From this point exclusion entails social distance or isolation, rejection, humiliation, lack of social support networks, and denial of participation etc. S.R.Chakravarty, C.D'Ambrosio (2006) called it processes which include and exclude. Following this an important aspect of the treatment of social exclusion is to identify these actors, and understand how and why they exclude others. As an example can be *State* – it may play the role of umpire, controlling the exclusion of one group by another, or ensuring that different groups stay in their place and work together. But this positive view of the State can be misleading and lead to exclusion from services and opportunities of those on whom it is not dependent. This perception of agency in exclusion has important implications for the design of social policy. Other important actors here are *enterprises* (create jobs and incomes and so include some in new economic

opportunities, but if their search for competitiveness takes no account of social objectives, they may actively exclude workers from social protection**),** *the military, local authorities, religious bodies and local elites*. The same logic implies a stress on the role of the *excluded* in promoting their own inclusion. G.Jehoel-Gijsbers (2004), G.Jehoel-Gijsbers, C.Vrooman (2007) argued endogenous versus exogenous agency - agency refers to the individual or collective actors that bring about shortages. Social exclusion, on the other hand, also derives from a lack of 'communal resources': a person's neighbourhood and social network, social security agencies, and the social infrastructure. The excluded may have little or no control over such exogenous factors.

Summarizing it can be pointed that social exclusion as conceptual tool is useful for analyzing, understanding and addressing contemporary forms of social disadvantage. Telling in brief social exclusion can be characterized by five key attributes (Social exclusion…, 2008, p. 1):

- *relational*: it is primarily concerned with relations among social groups within a society, major discontinuities or separations among groups within a society, and/or inadequate social participation;

- *multidimensional:* it is characterized by economic, political, social, civic, cultural, geographic, judicial and other quality of life dimensions;

- *dynamic:* it is characterized by evolutionary and cumulative processes in which past conditions and experiences shape current experiences and conditions which in turn, shape future conditions and experiences;

- *relative*: it is measured and defined in terms evolving societal norms, that is, the social norms that prevail in a particular place and at a particular time.

- *agency:* it is typically a consequence of the (non)decisions and (in)actions of agents other than the excluded, and which often lie beyond the control of the excluded.

Finally it should be noted that above discussed theoretical and empirical approaches of social exclusion analysis convey possibility for systematic evaluation of this social phenomenon. All this leads to better understanding of social exclusion factors.

Factors of social exclusion

Giddens (2006) pointed out that social exclusion focuses attention on a broad range of factors that prevent individuals/groups from having opportunities open to the majority of population. G.Jehoel-Gijsbers (2004), G.Jehoel-Gijsbers, C.Vrooman (2007) studies preference give to an 'indirect' definition, by indicating which factors or indicators influence the *risk factors* of social exclusion (Jehoel-Gijsbers, Vrooman, 2007, p.18-19).

Figure 1 shows the conceptual model of risk factors and characteristics of being socially excluded. The various aspects of social exclusion as a state, or being socially excluded, are the variables to be explained. The risk factors are displayed as determinants of these phenomena. The model essentially presumes a one-sided causality: the risk factors are considered to increase the chance of being socially excluded. In this way it is clear what the possible threats / risk / disadvantages can appear

within social groups who have potential to become excluded.

The other positive aspect due to this model is multi-level approach which shows factors of social exclusion in different levels (micro, macro, meso).

Trends of social exclusion development assert from political to social differentiation. According to this development of social exclusion and it factors is twofold (Socialiniai..., 2000; Poviliūnas, 2001; Vitunskienė, 2003):

a) *revolutionary* (till 1992) - social exclusion was diminished due to main economic, political and civil rights implementation;

b) *evolutionary* (from 1992) - social exclusion gradually arises with differentiation of its structure; its evolution is strongly affected with processes of globalisation and national integration policy.
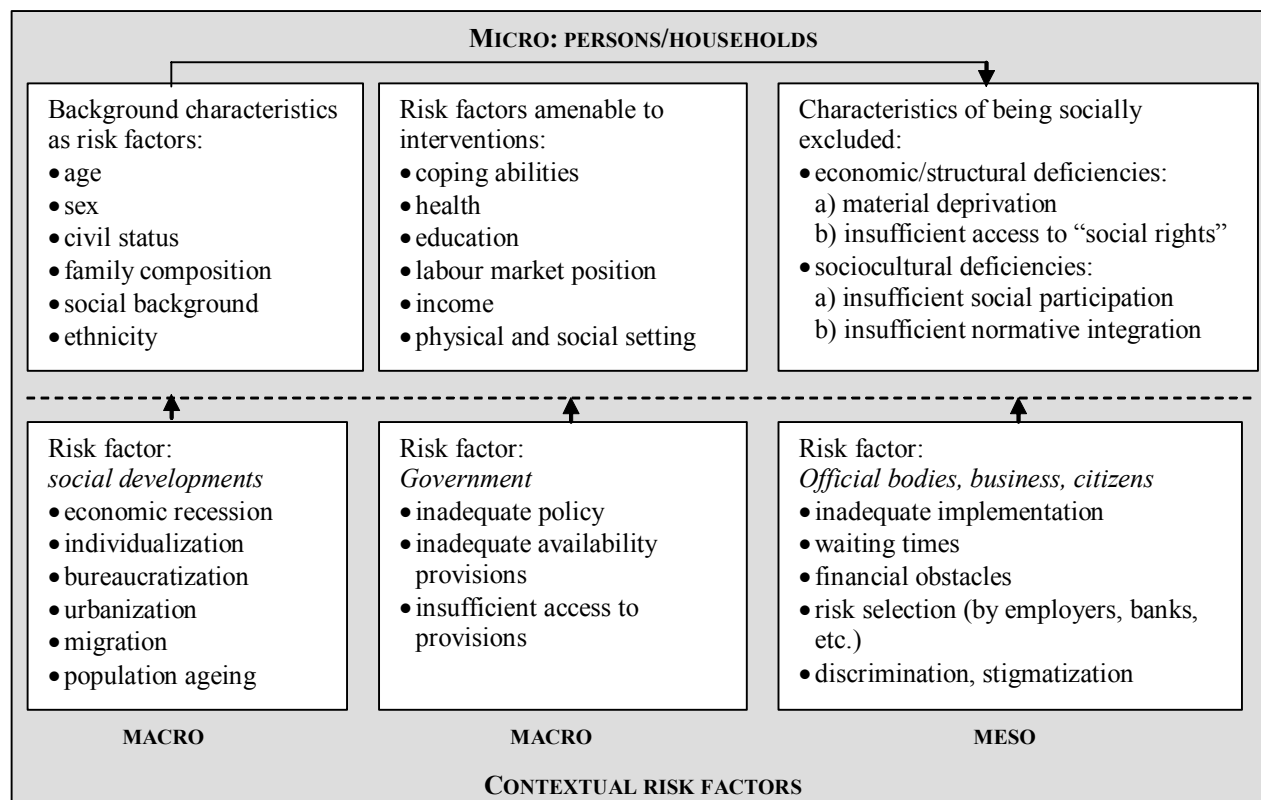

Figure 1. Risk factors and characteristics of being socially excluded
(Jehoel-Gijsbers, 2004; Jehoel-Gijsbers, Vrooman, 2007, p. 19)

Further the analysis of exclusion highlights the forces, mechanisms, people and institutions which give rise to the problems facing the excluded. Multidimensionality of social exclusion also is related with several groups of factors which form social exclusion. The most general group of exclusion factors (Socialiniai…, 2000; Poviliūnas, 2003; Morris, Barnes, 2008) are *legal political, social economical and cultural psychological factors*. The bigger part of them are directly involved or related with all other factors:

- some authors (Zaleckienė, 1998; Socialiniai..., 2000; Poviliūnas, 2003; Popay et al, 2008) emphasize *personal* and *societal* reasons for becoming excluded. Personal reasons emerge when person do not identify himself as a part of society due to his individual, psychological, cultural, economical reasons, though societal factors are expressed as negative society's, state's impact to person or group;

- other group of social exclusion factors are *endogenous* and *exogenous* factors or environment. The endogenous factors are related with personal, and exogenous with societal factors (Rajevska, 2003);

- above mentioned factors' groups can related with standard of living, education, employment /

unemployment, living place (territorial factors), gender etc;

- *quantitative* (income, property, etc.) and *qualitative* (health, education, position in job, etc.) factors which are influenced by non-unisexual society.

It becomes obviously that within the scientific discourse, the dominant view of the concept of social exclusion is not fully clarified. This remark can be applied to conceptualising social exclusion and it factors which are multiple as the concept itself. Notably understandable that it is hard task and still common in social sciences. Despite problems, an uncertainty which arises analyzing social exclusion still it is seen as priority in most researches and social policy agenda.

European Commission (2004) draws attention not only to social exclusion, its factors, but also to indicators which are understood as the implements created to fight with social exclusion. Usually these indicators foster social inclusion/social integration to society – an opposite action to social exclusion. On the one hand the aim of these indicators is to monitor the situation, tendencies of social exclusion. On the other hand different indicators are created for social policy. One major attraction of these indicators is that they draw on a variety of data

sources, including both aggregate-level data (such as children in institutions for young offenders, and the proportion of low birth weight babies) and survey data (attitudinal, behavioural and factual)(Lessof, Jowell, 2000, p. 8). Following this great emphasis is put on Laeken indicators. Europen Comission valuates Laeken indicators as decisive impact on the eradication of social exclusion (Portfolio..., 2006, p. 16). There are primary and secondary Laeken indicators. Primary indicators are "lead indicators which cover the broad fields that have been considered the most important elements in leading to social exclusion"; whereas secondary indicators support these lead indicators by describing in greater detail the nature of the problem or by describing other dimensions of the problem. Laeken indicators are now included in the overarching portfolio, either because they are considered as more appropriate to monitor overall social cohesion (in which case they are only kept as context information) or because they are considered crucial indicators to monitor both social cohesion (and/or its interaction with employment and growth) and social exclusion and poverty (in this case, they are included in both lists) (Portfolio..., 2006, p. 16-17). Findings about social exclusion indicators show that practical task of how to measure social exclusion has less attention then theoretical. Laeken indicators are the most usable indicators used through Europe monitoring social exclusion, though different countries try to adopt them or use national indicators typical to that country.

Conclusions

During recent years social exclusion has become a very important issue in policy, social discourse and social sciences (especially in the interdisciplinary research). Most literature on social exclusion note that concept of social exclusion varies across contexts and situations; it has different appearances on the various continents, and even within them, at the regional and national levels. This concept is both appreciated (due to its positive, useful, valuable, perspective features) and attains critics because of its uncertainty, latitude, and hardly solved matters. Though multidimensionality of social exclusion is very clear, mostly the term social exclusion is related to the involuntary nature of disadvantages which exclude from normal society, restricts basic civil rights of vulnerable social groups. Following this social exclusion is the process through which individuals or groups are fully or partially excluded from full participation in the society in which they live. Most studies on social exclusion stress its multi-faceted character and the interrelations between the factors which characterize it. Miscellaneous factors challenging social exclusion usually are floating and differ in various socially excluded groups. Though the positive matter of this issue is that different organisations (from different sectors), institutions, politicians, academics put significant emphasis finding how to fight with it in real world by creating various social exclusion measures, monitoring indicators and other implements.

References

1. Arthurson, K., Jacobs, K. Social Exclusion and Housing. Australian Housing and Urban Research Institute. December 2003.
   http://www.rwbsocialplanners.com.au/spt2006/Social%20Inclusion/doc546.pdf
2. Beall, J., Piron, L.H. DFID Social Exclusion Review. The London School of Economics and Political Sciences, 2005.
3. Breaking the cycle of exclusion. Roma children in south east Europe. February, 2007.
   http://www.crin.org/docs/Subregional_Study_Roma_Children.pdf
4. Burchardt, T., Le Grand, J. and Piachaud, D. Degrees of Exclusion: Developing a Dynamic, Multidimensional Measure in T. Burchardt, J. Le Grand and D. Piachaud (eds) Understanding Social Exclusion Oxford: Oxford University Press, 2002, P. 30-43.
5. Chakravarty, S.R., D'Ambrosio, C. The Measurement of Social Exclusion. Review of Income and Wealth, Vol. 52, No. 3, September 2006, P. 377-398.
6. Estivill, J. Concepts and strategies for combating social exclusion. An overview Geneva, ILO, International Labour Office, 2003.
7. European Commission. Joint Report on Social Inclusion 2004 incl. Statistical Annex, Office for Official Publications of the European Communities, Luxembourg, COM (2003) 773 final, Brussels, 2004, p.10.
8. Frances, S. Horizontal Inequalities: A Neglected Dimension of Development, WIDER Annual Lectures 5, Helsinki: United Nations University World Institute for Development Economics Research UNU /WIDER, 2004.
9. Giddens, A. Poverty, Social Exclusion and Welfare. Sociology. 5th edition. UK, Polity Press, 2006.
10. Hills, J., Le Grand, J. and Piachaud, D. Understanding social exclusion. Oxford: Oxford University Press, 2002.
11. International Labour Organization. Social Exclusion and Anti- Poverty Strategy, 1996.
    http://www.ilo.org/public/english/bureau/inst/papers/synth/socex
12. Jehoel-Gijsbers, G. Sociale Uitsluiting in Nederland (Social Exclusion in the Netherlands). The Hague: SCP (Social and Cultural Planning Office), 2004.
13. Jehoel-Gijsbers, G., Vrooman, C. Explaining Social Exclusion: A theoretical model tested in the Netherlands. The Netherlands Institute for Social Research/scp. The Hague, July 2007.
14. Juška, A., Pozzuto, R., Johnstone, P. Socialinė atskirtis ir naujų marginalinių grupių atsiradimas postkomunistinėse šalyse: „Nereikalingų žmonių" sindromas Lietuvoje // Socialinis darbas Nr. 1(3), 2003, P. 97-104.
15. Kanopienė, V., Mikulionienė, S. Lietuvos benamiai: gyvenimo sąlygos. - Socialinis darbas. Vilnius: LTU, 2004, Nr. 3 (1), P. 49-64.
16. Kocai, E. Socialinė benamių atskirtis ir jos formavimosi veiksniai: daktaro disertacija. Socialiniai mokslai, Sociologija (05 S). Socialinių tyrimų institutas, Vilniaus universitetas, 2007.
17. Leader programos patirtis mažinant socialinę atskirtį kaime. Leader programos biblioteka. Akademija, 2007.
18. Lessof, C., Jowell R. Measuring Social Exclusion. The Centre for Research into Elections and Social Trends. Working Paper Number 84. September 2000.
    http://www.crest.ox.ac.uk/papers/p84.pdf
19. Morris, K., Barnes, M. Prevention and Social Exclusion: New Understandings for Policy and Practice. British Journal of Social Work (2008) 38, 1194–1211.
20. Popay, J., Enoch, E., Johnston, H., Rispel, L. Social Exclusion Knowledge Network (SEKN). 2006.
    http://www.who.int/social_determinants/resources/sekn_scoping.pdf
21. Portfolio of overarching indicators and streamlined social inclusion, pensions, and health portfolios. European Commission. Brussels, 7 June 2006.
    http://ec.europa.eu/employment_social/spsi/docs/social_inclusion/2006/indicators_en.pdf

22. Poverty and social exclusion in rural areas. Final study report. European Commission, Directorate-General for Employment, Social Affairs and Equal Opportunities Unit E2, 2008.
23. Poviliūnas, A. Pilietinė visuomenė // Žmogaus socialinė raida. - Vilnius, 2001, P.43-61.
24. Poviliūnas, A. Kaimo atskirties profiliai. – Vilnius: KRONTA, 2003.
25. Rajevska, F. Social exclusion in rural areas in Latvia: reasons and possibilities to decrease it // Kaimo plėtra - 2003. - Akademija, 2003.
26. Reimer, B. Social Exclusion in a comparative context. Sociologia Ruralis, Vol. 44, Number 1, January 2004, P.76-94.
27. Robila, M. Economic pressure and social exclusion in Europe. The Social Science Journal 43 (2006) 85–97.
28. Rodgers, G., Gore, Ch, Figueiredo, J.B. Social exclusion: Rhetoric, Reality, Responses. International Labour Organization (International Institute for Labour Studies) 1995, P.13-15.
    http://ilo.law.cornell.edu/public/english/bureau/inst/download/gerrypart1.pdf
29. Room, G. Poverty and Social Exclusion: the New European Agenda for Policy Research in G. Room (ed) Beyond the Threshold, The Measurement and Analysis of Social Exclusion, Bristol Policy Press, 1995.
30. Sen, A. Social exclusion: concept, application, and scrutiny. Social Development Papers No. 1. Office of Environment and Social Development Asian Development Bank, June 2000.
31. Silver, H. Social Exclusion. Encyclopedia of Sociology. Oxford: Blackwell, 2006, p. 4411-4412.
    http://www.brown.edu/Departments/Sociology/faculty/hsilver/documents/hsilver-social-exclusion-encyc.pdf
32. Silver, H., Miller, S.M. Social Exclusion. The European Approach to Social Disadvantage. Indicators, Vol. 2, No. 2, Spring 2003, P.5-25.
33. Silver, H. The process of social exclusion: the dynamics of an evolving concept. CPRC Working Paper 95. October 2007.
34. Silver, H. Social Exclusion: Comparative Analysis of Europe and Middle East Youth. Middle East youth initiative working paper. Number 1, September 2007.
    http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=936445
35. Social exclusion, 2009.
    http://www.answers.com/topic/social-exclusion
36. Social exclusion. Is Utility in the United States' Social Welfare Context? Institute on Social Exclusion, 2008.
    http://www.adler.edu/UserFiles/File/Social_Exclusion_-_Its_Relevance_to_the_US_Social_Policy_Context.pdf
37. Strategies and Tools against social Exclusion and Poverty Programme Strategy. International Labour Office, January 2003, p.3.
38. Socialiniai pokyčiai: Lietuva, 1990/1998. - Vilnius: Garnelis, 2000.
39. Taljūnaitė, M. Pilietybė ir socialinė atskirtis šiuolaikinėje Europoje/ /Filosofija. Sociologija. 2004. Nr. 4. P. 46–49.
40. Vitunskienė, V. Smulkiųjų žemdirbių skurdo ir socialinės atskirties sąveika ekonominės gerovės požiūriu // Kaimo plėtra - 2003. - Akademija, 2003.
41. Vosyliūtė, A. Varguomenė: būtis ir egzistenciniai išgyvenimai // Filosofija. Sociologija. Nr. 4, 2002, P.23-30.
42. Zaleskienė, I. Asmuo, visuomenė ir valstybė. Socialinė atskirtis // Pranešimas apie žmogaus socialinę raidą Lietuvoje. - Vilnius: LFSI, 1998, P.17-

Gintarė Vaznonienė, Algis Krupavičius

Socialinė atskirtis ir jos veiksniai

Santrauka

Šiame straipsnyje analizuojama socialinės atskirties samprata, skirtingi jos analizės aspektai/požiūriai. Didelis dėmesys skirtas veiksnių, iššaukiančių socialinę atskirtį, identifikavimui ir jų pagrindimui. Socialinė atskirtis yra daugiadimensinis reiškinys, jį apibrėžti vienareikšmiškai sudėtinga, todėl tikslingas mokslininkų, tyrėjų, politikų konsensusas, kaip jį reikėtų traktuoti. Galima daryti išvadą, jog šis socialinis fenomenas turėtų vertinamas įvairiais požiūriais, ypatingą reikšmę suteikiant sisteminei šio reiškinio veiksnių ir priežasčių analizei.

About the authors

Gintare Vaznoniene, PhD student of Sociology, Kaunas University of Technology, gintarej@gmail.com, 8-37-300144, research interests: social economic problems of society, social exclusion, poverty, quality of life, social needs analysis.
Algis Krupavičius, Prof. dr., Kaunas University of Technology, pvai@ktu.lt, 8-37-300111, research interests: comparative politics, public policy, parties and elections.

ANALYSIS OF POSSIBILITIES OF ASSESSMENT OF ORGANIZATION'S CHANCES IN COMPETITIVE FIGHT

Leonas Žitkus, Monika Mickevičienė
Kaunas University of Technology, Lithuania

Abstract

It is a matter of a great relevance for managers of organizations acting in conditions of intense competition to know their chances in competitive fight. For successful management of organization knowledge about actions which would allow gaining longterm and sustainable competitive advantage and getting better competitive position in the future for organization is required. On the basis of scientific literature analysis it is proved that concept of competitiveness is unduly abstract and complex, therefore it couldn't be used directly for creating such knowledge. Accordingly decomposition of competitiveness is done and concept of competitive abilities as characteristic indicating direct dependence between individual organization's features and chances of success in competitive fight is crystallized. It is indicated that ability to compete consists of two interdependent parts: capability, i.e. physical capacity (potential) and know-how, i.e. having knowledge how to do it.

Introduction

The phenomenon of struggle of two or more economic units, i.e. competition in seeking the same goal (Bernard, Colli, 1994; Blaszcynski, Stygares, 1995; Syrek, 1994; Bremond, Salort, 1994; Young et al., 2000; Smith et al., 2001; Ketchen et al., 2004) has been a constituent part of man's economic activity since the start of such activity. The nature of this phenomenon and its regularities as the objects of research started to be analyzed at the conjunction of the 18th and the 19th centuries following the formation of the capitalist model of industrial development. Since that time competition has been regarded as the basic economic category requiring no elucidation due to its fundamental nature (Gorynia, 2002). Scientific literature, both foreign and local, contains quite a few definitions of competitiveness differing but only outwardly, i.e. in volume, or in the terms used, which were formulated in seeking to highlight different aspects of this phenomenon.

The very concept of competitiveness can be understood in two ways;
- statically, as some fluxion of the market structure when, due to uneven distribution of resources and consumers, there exists tension among the participants of the market;
- dynamically, as the struggle of market participants under which the market equilibrium is formed and persists for some time.

A single research, though extensive, is unable to cover all aspects of the phenomenon of competition; therefore, more often than not theoretical or applied works on the subject of competition choose a certain viewpoint to competition depending on the purpose of the work. This work will maintain the opinion that competition is a dynamic phenomenon, or, rather, a process in which enterprises seek similar goals which results in hindrance of business activity and makes some of them withdraw from the market (Stankiewicz, 2005). Any equilibrium in the market is temporal, because external conditions (regarding the enterprises),

the number of market participants or their goals may change. The forecast of results of competitive struggle (i.e. market situation at a given moment) is next to impossible, because any market participant has an unlimited choice of possible actions (strategies) at his disposal (Gorynia, 2002; Sawyerr, Mcgee, Peterson, 2003; Alvarez, Barney, 2005). In addition, some competitors may only speculate about the intentions of others.

The process of competition consists of numerous moves of the competing entities by means of which they try to gain long-term advantage and achieve better results (Young et al., 2000; Hitt, Boyd, Li, 2004). The examples of such moves might be launching of the new product which is better than that of the competitors, improvement of internal information system, or international cooperation in international markets. None of these moves is isolated: they must be in compliance with other actions of the enterprise and performed with regard to the moves of the competitors being aware that they may cause undesirable response from the competitors. The series of moves and counter-moves may also lead to the sequence of destructive actions threatening the very existence of the enterprises operating in the market or make them leave the scene (Ketchen et al., 2004).

Understanding of the phenomenon of competition in the sense of dynamics leads to the assumption that there exists certain model of the enterprise's behavior, i.e. the wholeness of the moves, the strategy) which provides successful participation in the competitive struggle. Similarly, improper actions and solutions may disrupt the enterprise (Young et al., 2000).

In terms of the knowledge acquisition, which the enterprises as the participants of the market must possess, the process of the choice of actions to ensure the acquisition of competitive advantage is a very important area of theoretical and practical research. In other words, the pre-assessment of competitive advantage is of utmost importance in investigating the expected efficiency of actions undertaken on the basis of the enterprise's competitive potential which in effect

may be regarded as a degree of the enterprise's ability to participate in the competition struggle.

This paper deals with the scientific problem of the possibility to predict the chances of successful participation of the enterprise in the competition struggle. The solution of this problem by making a direct use of the concept of competitiveness tends to pose a number of difficulties because this concept is too complex and reflects but a generalized situation of the enterprise in the market with regard to similar entities.

Therefore, **the aim** of this work is to substantiate the structure of competitive potential indicating the enterprise's ability to successfully participate in the competitive struggle on the basis of theoretical considerations.

The research methods: the paper carries out decomposition of competitiveness by identifying its three main components (1st part) and the analysis of the role of these components in assessing the enterprise's chances to successfully participate in the competitive struggle (2nd part).

The result of the work: the structure of competitive abilities as the property reflecting the enterprise's chances of successful participation in the competitive struggle is worked out, on the basis of which practically applicable assessment models of these chances can be developed.

Decomposition of competitiveness

Being a dynamic process, competition requires that the enterprises involved in it possess a property which in the literature of this area is generally referred to as competitiveness. Owing to its fundamental nature, this concept in many cases of its usage is not defined or explained. Some well-known scientists frequently using this term fail to provide its definition. The most significant example substantiating this statement is M.E. Porter's book "Competitive Advantage of Nations" (1998). The authors of more recent works devoted to the analysis of different aspects of competitiveness follow the same pattern of behavior (Teece, Pisano, Shuen, 1997; Hall, Soskice, 2001; Walker, 2003; Hermann, 2008;)

The concept of competitiveness defining the enterprise's ability to participate in the competitive struggle (this approach is provided by Bremond, Salort, 1994; Lado, Zhang, 1998; Srivastava, Fahei, Christensen, 2001; Gnywali, Madhavan, 2006 et al.) or as the 'ability to compete' (Gorynia, 1998) is too general and requires additional information on how this ability or capacity is expressed. By relating this problem to the systemic attitude to the enterprise it can be maintained that competitiveness understood this way involves ability or capacity to find, procure and transform the resources acquired into the desired results by additionally making use of the external circumstances. In other words, competitiveness of the enterprises can generally be assessed in terms of the resources available, 'transformational' (technological and human) abilities and the achieved results.

However, as the enterprise is an indivisible system (its entrance, transformations pursued and the results are interrelated), so is the competitiveness as a complex ('systemic') property of the enterprise. The wholeness of all its constituent parts ensures the chance for the enterprise to more or less successfully participate in competitiveness struggle. Such ambiguous situation is very favorable for theoretical considerations on competitiveness; however, this poses considerable difficulties in seeking to evaluate it practically (Li, Deng, 1999; Stankiewich, 2005; Dubinas, Stonkuviene, 2005; Chikan, 2008 et al.).

Firstly, competitiveness irrespective of its fundamental nature is a theoretical concept characterized by a specific feature, i.e. relevance. The abstract character of competitiveness causes the problem of its measurement (assessment), i.e. how to relate it to everyday occurrences and procedures required to do it. Abstract concepts are useful only if they are designed for a concrete problem faced by researchers (Turner, 1985). In the opposite case, this concept developed for this phenomenon will only hinder its understanding. Abstract concepts lack characteristics for their direct evaluation; therefore, they have to be supplemented by so-called operational definitions, i.e. system of procedures providing the possibility for the researchers to highlight phenomena called abstract concepts. The more abstract the concept, the greater number of empiric phenomena it covers, the more numerous operational definitions occur from which a full picture can be made.

Secondly, competitiveness is a relative concept: even though there is one or several operational definitions to evaluate the characteristic feature of an individual enterprise called competitiveness, its competitive abilities are difficult to be measured. For this, competitive potential of other enterprises operating in the market have to be assessed and compared (Fig.1a) or some characteristic level of competitiveness – average, minimal or maximal (Fig. 1b) - has to be known to compare it to competitiveness of the enterprise to be assessed.
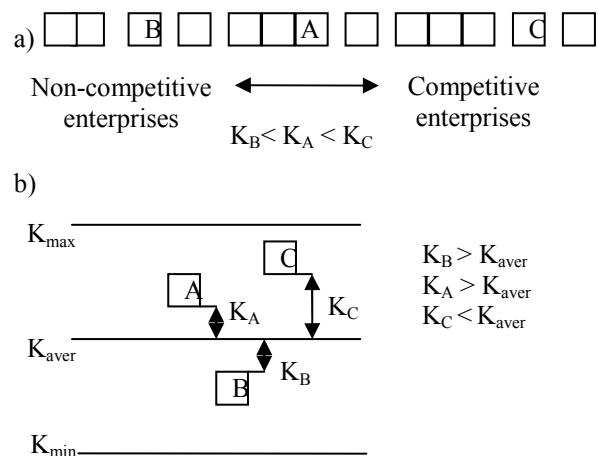

Figure 1. Theoretical assessment diagrams of competitiveness of enterprises:
a) by comparing all enterprises operating in the market;

b) in terms of average competitiveness of enterprises operating in the market.

Thirdly, alongside with other issues identified here, very important is the time dimension within the context of the problems dealt with in this work. The competitiveness measured in terms of the achieved results means that the enterprise was (or failed to be) competitive in the past which produced these results. Nevertheless, a dynamic approach to the problem shows that the enterprises operate in close proximity with one another, and the move of each of them invariably causes response from the competitors (Ketchen, et al., 2004). Naturally, it is hard to expect business development conditions to remain as favorable in the future.

Assessment of resources available can show the enterprise's advantage with regard to other enterprises (provided their situation is comparable), but the scientists are unanimous in that even the possession of exceptional resources does not automatically guarantee better performance (Becera, 2008; Peteraf, 1993; Priem, Butler, 2001; Barney, Arikan, 2001; Newbert, 2007, etc.).

Due to these reasons, in seeking to realize the aim of this work, such element has to be distinguished in the structure of competitiveness which could express competitiveness not as much as a static state (existing or pursued), but, rather, as a transition 'mechanism' from one state to another performing better than that of competitors, because of being better planned, balanced and controlled. For this purpose, the model of competitiveness structure proposed by Polish scientist M.J. Stankiewicz can be used (due to the limited volume of the work the scheme of the model is not provided. It can be found in the book by the author mentioned (2000, p. 87), the most important elements of which are:

Competitive potential – the available material and non-material factors at the disposal of the enterprises. To define this constituent part of competitiveness, the concept of competitive factors (sources) is used (e.g. Lithuanian economy ..., 2005), and competitiveness gained with their help is called competitiveness of factors (Adamkiewicz–Drwillo, 2002, Bossak, 2001).

Competitive advantage is understood as a configuration of factors of competitive potential which ensures manufacturing of the product /service at a reasonable combination of price and quality. Competitive advantage as well as competitive potential will be discussed in further sections of this work.

Competitive position in the model under consideration means the result achieved within the context of the performance of other enterprises; therefore, it is sometimes called resulting competitiveness (Adamkiewicz – Drwilo, 2002; Bossak 2001). There exists an opinion that the better the performance (better competitive position), the higher is the level of welfare achieved by the members of the economic entity (i.e. workers of the enterprise), though this statement can only be regarded as correct under certain conditions.

In the opinion of the author of this paper, competition control is executed through "constant, purposeful, well-balanced influence on its individual elements by assessment of a feedback between them" (Stankiewicz, 2005, p.89).

Still, competitive potential and competitive advantage achieved on its basis should be considered the basic elements of the model. The predicted competitive position is useful for the improvement of the enterprise's competitiveness to the extent of how attractive it is to individual groups interested in its undertakings. The present competitive position (if positive) can be utilized as a certain factor of competitive potential (e.g. a successful company can be attractive to foreign investors).

The structure of competitive abilities

The elements of competitive potential and competitive position in the adopted model of competitiveness reflect static approach to competitiveness (competitiveness as a state at a specific moment of time). The third element, i.e. competitive advantage, according to M.Porter (2001, p.91-188) can be analyzed in two ways:

- as a comparative advantage revealed in comparing the performance of the company with the performance of other enterprises;
- as an absolute advantage determined by measuring the enterprise's competitiveness in terms of some unit of measurement , e.g. sales volume or revenue in a unit of time.

Both points of view reflect the results of the past, i.e. competitiveness in the past. Competitive advantage, however, is not a "phenomenon by itself". In terms of the acquisition of knowledge the company must possess to be able to participate in the competition struggle, the process of choosing factors required to gain competitive advantage is a very important area of practical and theoretical research. In other words, competitive advantage is to be assessed in advance in analyzing the expected efficiency of the enterprise's actions taken on the basis of the company's competitive potential. This efficiency can be regarded as the company's ability to participate in competitive struggle.

The concept of the ability to compete (or competitive abilities) as all the concepts related to competition or competitiveness is not in any way unique, i.e. used exceptionally in this work. Alongside with the concepts of competitive advantage, competitive potential and competitive position it is encountered in numerous scientific and practical works devoted to the study of competitiveness. Unfortunately, the concept 'competitive abilities' has been treated with much greater difference than competitiveness itself and its constituent elements. This aggravates the selection of such definition of competitive abilities ('operational' definition') which can be useful in creating the system of indexes designed to assess them.

It is interesting that the concept 'competitive ability' in scientific sources of Anglo-Saxon origin is but very rarely used in management or economics: in the articles dealing with competitiveness, strategic management and the like, published in the journals "Strategic Organization", Journal of Management", "Journal of Business and Entrepreneurship" and "European Small

Business" published between 1998 and 2009, this concept was encountered only a few times. It is, however, very often used in the area of biology to define the ability of plants or live organisms to survive in their environment. It may be because of this that the definition of this concept can be formulated by using scientific work of this area (Goldberg, 1996): competitive ability is the property indicating the relationship between the individual features of the enterprises and chances for success in competitive struggle.

Competitive abilities in the works of Lithuanian authors are defined very differently. The definitions found very often identify the ability to compete as any of the elements of competitiveness or even as the competitiveness itself. For example, "The Strategy of Economic Growth and Structural Development" maintains that "... the country's competitiveness (national competitiveness) is understood as the ability of the companies and industries to outperform the competitors by gaining and strengthening their position in the international market" (Vilkas, Vasiliauskas, Kuodis, 2002, p. 14). While Prof. B.Melnikas, though without giving the definition, regards competitive ability as the complex state of the economic unit when synergy of all strengths of the unit is manifested (Melnikas, 2001).

The concept 'ability' in the Lithuanian language as well as its analogs in other languages expresses knowledge and capability (Dictionary of the Lithuanian Language) to do something. The word 'knowledge' is related to the knowing of the subject how to do something, while the word 'capability' is related to some physical properties of the subject. In transferring these statements to the area of competitiveness of the enterprises it can be said that ability to compete consists of two interrelated parts (Fig.2.):

- capability - physical ability to do something, i.e. possession of resources, labor, equipment, raw materials, etc., which in the chosen model of competitiveness is expressed as the element of competitive potential;
- knowledge - how to make use of the competitive potential to the best advantage; how much and, most important, what resources are to be possessed and what actions are to be taken to utilize these resources which is defined by the element of competitive advantage.
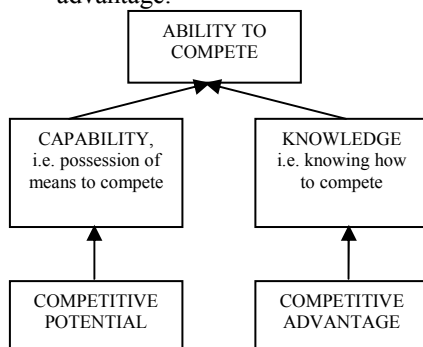

Figure 2. The structure of competitive abilities

It goes without saying that ability to compete depends to a great extent on the general environment of the enterprise which affects both capability and knowledge how to compete; therefore, its methodology of assessment must reflect environment factors.

The validity of these considerations is justified by the works of Polish authors on competitiveness. Unlike the Anglo-Saxon scientific literature, the concept of "abilities" (Pol. zdolnosc) is found fairly often. In some cases competitive abilities are the essential elements in reasoning about competitiveness.

The author of this work where the model of competitiveness is taken as a basis, in one of his earlier works clearly singles out competitive abilities from the general structure of competitiveness by simply joining the elements of the enterprise's competitive potential, competitive advantage and competitive instruments (Stankiewich, 2000, p.79).

In other works and those cited here the competitive position of the economic units and the competitive abilities are clearly separated (Misala, 2001). The first concept (sometimes called resulting competitiveness) is related to the share of the economic unit (enterprise, sector, country) in international product exchange. Competitive abilities, i.e. competitiveness of factors, however, outline long-term capability of the economic unit to resist competitive pressure (Runiewicz, 2006). What is more, speaking about competitive abilities, it is not competitiveness achieved by the ratio between price and quality (which can be attained by operational efficiency), but, rather, sustainable competitiveness is meant (Wysokynska, 2000).

The Polish authors maintain M.Porter's opinion that productivity (outcomes of operational efficiency) is an essential pre-condition of competitiveness, but clearly insufficient under the conditions of dynamic business environment and changing international economic relations. The concepts of productivity and efficiency are ascribed to the area of resource management. The category of competitive ability, however, clearly evaluates market factors and risk, i.e. external circumstances as well as the management quality of the enterprise as an organization, its openness, abilities of human resources for improvement and innovations (Bossak, Bienkowski, 2004).

It must be emphasized that working out of the instrument for assessment the enterprise's competitive abilities as the chance for successful participation in the competitive struggle is not the sole purpose, but, rather, an intermediate result providing the possibility to make use of the available achievements of theoretical and practical research on competitive potential and competitive advantage and to develop the methodology for assessment of the enterprise's chances for success. As a further direction to achieve this goal, the answers to two questions have to be given: 1) what internal and external resources of the enterprise and features can be identified as competitive potential and 2) due to which actions the enterprise acquires competitive advantage.

Conclusions

1. The wish of management theoreticians and practicians to assess the enterprise's chances of successful participation in competitive struggle in advance leads to abandoning the concept of competitiveness as too much complex and of too generalized nature and to look for such elements in its structure which could express competitiveness itself not as a static state (existing or pursued), but, rather, as a transition 'mechanism' from one state into another operating more efficiently than that of the competitors because it is better planned, balanced, organized and managed.
2. Such element can be competitive abilities as the property of the enterprise consisting of two interrelated parts: capability, i.e. physical possibilities to compete and knowledge, i.e. knowing how to compete. In scientific literature these parts correspond to the components of competitiveness called competitive advantage and competitive potential. By making use of this structure of competitive abilities it is possible to further develop assessment methodology for the enterprise's chances of successful participation in the competitive struggle which could reflect significant theoretical and practical advance in the research of competitive advantage and competitive potential.

References

1. Adamkiewicz-Drwillo H.G. Uwarunkowania konkurencyjnosci przedsiebiorstwa. Warszawa: Wydawnictwo Naukowe PWN, 2002.
2. Alvarez S.A., Barney J.B. How do Enterpreneurs Organize Firms under Conditions of Uncertainty? Journal of Management, 31: 776-793, 2005.
3. Barney J.B., Arikan A.M. The Resource-Based View: Origins and Implications. In M.A.Hitt, R.E.Rfeeman, J.S.Harrison (Eds.), handbook of Strategic Management, p. 124-188, Oxford: Blackwell, 2001.
4. Becera M. A Resource-Based Analysis of the Conditions for the Emergence of Profits. Journal of Management, Vol. 34, No. 6, p. 1110-1126, 2008.
5. Bernard, Colli. Slownik ekonomiczny i finansowy. Katowice: Wydawnictwo "Ksiaznica", 1994.
6. Blaszczynski A., Stygares J., Stygares J. Glossary of Economic Terms. Krakow: Szkola Zarzadzania Uniwesytetu Jagiellonskiego, 1995.
7. Bossak J. Międzynarodowa konkurencyjność gospodarki kraju i przedsiębiorstwa. Zagadnienia teoretyczne i metodologiczne. In J.Bossak, W.Bieńkowski (Eds.), Konkurencyjność gospodarki Polski w obie integracji z Unią Europejską i globalizacji, p. 45-46, 2001.
8. Bossak J., Bienkowski W. Miedzynarodowa zdolnosc konkurencyjna kraju i przedsiebiorstw. Wyzwania dla Polski na progu XXI wieku. Szkola Glowna Handlowa w Warszawie, Warszawa, 2004.
9. Bremond J., Sarlot M.M. Odkrywanie ekonomii. Warszawa: Wyd. Naukowe PWN, 1994.
10. Chikan A. National and Firm Competitiveness: A General Reasearch Model. Competitiveness Review, Vol. 18, p. 20-28, 2008.
11. Dubinas V., Stonkuvienė R. Model of Systematic Assesment of Competitiveness in Branches of Economics. It's Application in the Food Sector. Ekonomika, Nr. 71, 2005.
12. Goldberg D.E. Competitive Ability: Definitions, Contingency and Correlated Traids. Philosophical Transactions: Biological science, Vol. 351, Issue 1345, p. 1377-1385, 1996.
13. Gorynia M. Konkurencyjnosc przedsiebiorstwa – proba konceptualizacji i operacionalizacji: strategia przedsiebiorstw w warunkach konkurencji miedzynarodowej. Zeszzyty naukowe, Seria I, zeszyt 266, Poznan: Akademia Ekonomiczna, 1998.
14. Gorynia M. Luka konkurencyjna na poziomie przedsiebiorstwa a przystapienie Polski do Unii Europejskiej. Poznan: Wydawnictwo Akademii ekonomicznej, 2002.
15. Gnyawali D.K., He J., Madhavan R. Impact of Co-Opetition on Firm Competitive Behavior: An Empirical Examination. Journal of Management, Vol. 32, No. 4, p. 507-530, 2006.
16. Hall P.A., Soskice D.W. An Introduction to Varieties of Capitalism. In P.A.Hall, D.W.Soskice (Eds.), Varieties of Capitalism: The International Foundations of Comparative Advantage. Oxford: Oxford University Press, p. 1-68, 2001.
17. Hermann A.M. Contrasting the Resource-Based View and Competitiveness Theories: How Pharmaceutical Firms Choose to Compete in Germany, Italy and the UK. Strategic Organization, Vol. 6(4), p. 343-374, 2008.
18. Hitt M.A., Bouyd B., Li D. The state of strategic management and vision of the future. In D.J.Ketchen, D.D.Bergh (Eds.), Research Methodology in Strategy and Management. Greenwich, CT: JAI Press, 2004.
19. Ketchen Jr. D.J., Snow C.C., Hoover V.L. Research on Competitive Dynamics: Recent Accomplishments and Future Challenges. Journal of Management, 30(6): 779-804, 2004.
20. Lado A.A., Zhang M.J. Expert Systems, Knowledge Development and Utilization, and Sustained Competitive Advantage: A Resource-Based Model. Journal of Management, Vol. 24, No. 4, p. 489-509, 1998.
21. Li Y., Deng S. A Methodology for Competitive Advantage Analysis and Strategy Formulation. An Axample in Transitional Economy: Competitiveness Analysis for Strategy Formulation. European Journal of Operational Research, Vol. 118, No. 2, p. 259-270, 1999.
22. Lietuvos ekonomikos augimo ir konkurencingumo šaltinių (veiksnių) kompleksinė studija, 2005. Prieiga per internetą: http://www.ukmin.lt/lt/strategija/doc/Kompleksine%20studija-2006_03_09-galutine.doc
23. Melnikas B. Konkurencija tarptautinėse rinkose: verslo efektyvumas Rytų ir Vidurio Europos šalyse. Inžinerinė ekonomika, 2(22), p. 34-45, 2001.
24. Misala J. Mierniki konkurencyjnosci gospodarki: aspekty teoretyczne i wnioski dla Polski. Warszawa: PWE, 2001.
25. Newbert S.L. Empirical Research on the Resource-Based View of the Firm: An Assessment and Future Directions. Strategic Management Journal, Vol. 28, p. 121-146, 2007.
26. Peteraf M.A. The Cornerstone of Competitive Advantage: A Resource-Based View. Strategic Management Journal, Vol. 14, No. 3, p. 179-191, 1993.
27. Porter M.E. The Competitive Advantage of Nation. New York: McMillan business, 1998.
28. Porter M.E. Porter o konkurencji. PWE, Warszawa, 2001.
29. Priem R.L., Butler J.E. Is the Resource-Based „View" a Useful Perspective for Strategic Management Research? Academy of Management Review, Vol. 26, No. 1, p. 22-40, 2001.
30. Runiewicz M. Miedzynarodowa konkurencyjnosc panstw nadbaltyckich. Wydawnictwo WSPiZ, Warszawa, 2006.
31. Sawyerr O.O., McGee J., Peterson M. Percieved Uncertainty and Firm Performance in SME's: The Role of Personal Networking Activities. International Small Business Journal, Vol. 21, p. 269-290, 2003.
32. Smith K.G., Ferrier W.J., Grimm C.M. Competitive dynamics research: Critique and future directions. In M.A.Hitt, R.E.Freeman, J.S.Harrison (Eds.), The Blackwell Handbook of Strategic Management. Oxford: Blackwell Publishers Ltd., 2001.

33. Srivastava R.K., Fahey L., Christensen H.K. The Resource-Based View and Marketing: The Role of Market-Based Assets in Gaining Competitive Advantage. Journal of Management, Vol. 27, p. 777-802, 2001.
34. Stankiewicz M.J. Istota i sposoby oceny konkurencyjnosci przedsiebiorstwa. Gospodarka Narodowa, Nr. 7/9, 2000.
35. Stankiewicz M.J. Konkurencyjnosc przedsiebiorstwa: budowanie konkurencyjnosci przedsiebiorstwa w warunkach globalizacji. Dom organizatora, Torun, 2005.
36. Syrek M. Ekonomia. Katowice: Wydawnictwo "Wolumen", 1994.
37. Teece D.J., Pisano G., Shuen A. Dynamic Capabilities and Strategic Management. Strategic Management Journal, Vol. 25, p. 865-886, 1997.
38. Turner J.H. Struktura teorii socjologicznej. Warszawa: PWN, 1985.
39. Vilkas E., Vasiliauskas A., Kuodis R. Ekonomikos augimo ir jos struktūros plėtotės strategija, 2002. Prieiga per internetą: http://www.ukmin.lt/lt/strategija/doc/2.%20ekonomikos%20augimo%20ir%20jos%20strukturos%20pletotes%20strategija.doc
40. Walker G. Modern Competitive Strategy. New York: McGraw-Hill, 2003.
41. Wysokinska Z. Konkurencyjnosc w miedzynarodowym i globalnym handlu technologiami. Warszawa: PWN, 2000.
42. Young G., Smith K.G., Grimm C.M., Simon D. Multimarket Contact and Resource Dissimitability: A Competitive Dynamics Perspective. Journal of Management, 26(6): 1217-1236, 2000.

Leonas Žitkus, Monika Mickevičienė

Įmonės šansų konkurencinėje kovoje vertinimo galimybių analizė

Santrauka

Intensyvios konkurencijos sąlygomis funkcionuojančių įmonių vadovams yra labai svarbu žinoti savo šansus konkurencinėje kovoje. Sėkmingam įmonės valdymui reikalingos žinios apie veiksmus, kurie leistų įmonei įgyti ilgalaikį ir tvarų konkurencinį pranašumą ir ateityje užimti geresnę konkurencinę poziciją. Šiame straipsnyje, mokslinės literatūros analizės pagrindu, yra įrodoma, kad sąvoka „konkurencingumas" yra per daug abstrakti ir kompleksiška, todėl tiesiogiai ja negalima pasinaudoti, kuriant tokias žinias. Dėl to yra atliekama konkurencingumo dekompozicija ir iškristalizuojama konkurencinių gebėjimų kaip savybės, rodančios tiesioginę priklausomybę tarp individualių įmonės bruožų ir sėkmės konkurencinėje kovoje šansų, sąvoka. Nurodoma, kad gebėjimai konkuruoti susideda iš dviejų tarpusavyje susijusių dalių: galėjimo, t.y. fizinių galimybių (potencialo) ir mokėjimo, t.y. žinojimo, kaip tai daryti.
Raktiniai žodžiai: konkurencija, šansai, konkurenciniai gebėjimai, konkurencinis potencialas, mokėjimas konkuruoti.

About the authors

Leonas Žitkus, assoc. Prof. Dr., Kaunas University of Technology, Lithuania. E-mail.: leonas.zitkus@ktu.lt, tel.:+370 37 300138. Research interests: competitive ability of economical subjects, European management aspects, European integration influence on Lithuanian economy and enterprises' work.
Monika Mickevičienė, assist., Kaunas University of Technology, Lithuania. E-mail.: monika.mickeviciene@ktu.lt, tel.: +370 37 139. Research interests: competitive ability of economical subjects.

RESEARCH METHODOLOGY DECISIONS CONCERNING COMPETENCE DEVELOPMENT THROUGH SELF-DIRECTED LEARNING IN WORKING ENVIRONMENT

Vilma Žydžiūnaitė

Mykolas Romeris Uinversity, Lithuania

Abstract

Research problem. The self-directed learning is understood as unplanned, informal or spontaneous process, which is featured by permanence and illuminated as a method or process in which dominate the needs of individual, and learning is not influenced by planned teaching or didactic methods. Also the self-directed learning is studied as a result or aims, and by achieving those, the individual manages personal learning by him/her-self. In this context is evident the dimension of autonomy. The problem for studying the self-directed learning as research phenomenon is the methodological decisions that inspire to rethink the research strategies and integration of methods in order to illuminate the essence of self-directed learning, which is permanent in every context and situation. In this article is presented the problem, which consists of the following question: „What types of research strategies establish the premises to make the research methodology decisions concerning competence development through self-directed learning in working environment?"

Research focus is the decisions in research methodology concerning the competence development through self-directed learning.

Research aim is to present the conceptual model with the focus on research methodology decisions concerning competence development through self-directed learning in working environment.

Method: conceptual study.

Results: (1) illuminated the research methodology decisions oriented to individual, context and process concerning competence development through self-directed learning in working environment; (2) established the model on research methodology decisions concerning competence development through self-directed learning in working environment.

Keywords

Competence development, methodological decisions, research methodology, self-directed learning, working environment.

Introduction

The individual permanently experiences the tension between individual growing and development independently of his / her workplace or degree of globalism. So why the contemporary learnings is defined by feature of social participation (Wenger, 1998), which means not only the inclusion into actual activities with people, who work together in groups or teams. It is also expressed by participation in activities of communities, where are developed identities. In broader content of individual and group participation the researchers study the phenomenons of learning in society, which is operationalized by learning organizations, learning regions, learning cities (Logworth, 2006). Between features of learning society Coffield (2000) mentions two features in the content of social participation:

1. Personal development, when the individuals are involved in various learning forms;

2. Social learning, when the learning is the collective process.

This context of social participation is supported by the idea of long-life-learning idea, which is actualized in transformation of industrial society into knowledge society (Bell, 1976). The knowledge society is characterized by three dimensions that create the premises for contemporary learning because of economic success in knowledge society is dependent on employees' capabilities of continuous and permanent learning by themselves and one from another. And the individual competence development is dependent on mentioned latter aspects concerning the actual working contexts in which the self-directed learning (SDL) takes place as important phenomenon concerning science and. practice (work / activity / performance)

The SDL is understood as unplanned, informal or spontaneous process, which is featured by permanence and illuminated as a method or process where dominate the needs of the individual, and the learning is not influenced by planned teaching or didactic methods (Candy, 2004). Also the SDL is studied as a result or aim, and by achieving those, the individual manages the personal learning by him / herself. In this context is evident the dimension of autonomy. Meanwhile, the SDL is substantiated by constructivist theory, which accentuates the complex individual transformations that arise through active personal participation of the individual and that assure the individual development. In this process the constructivist theory is supplied by social learning theory (Wenger, 1998), which accentuates the social participation of the learner through establishing the social capital. By integrating the social constructivism and social learning theories into SDL process such continuum of learning influences the quality of individual activity / performance results, so why the SDL becomes the one item among others, which creates the premises for development of general competence. The SDL is realized in various environments including also the actual working environment. Thus the evaluation of SDL in working environments concerning the research methodology conceptions and methodological decisions is complex and requires the conceptual discussions.

One of the evaluation methods is recommended by researchers is diary writing (Candy, 2004), which could help to estimate the time and endeavor of the individual. But in this content could be questioned the meaning and value for science of such estimations. So why Fischer

(1998) notes that the interview also creates possibilities to reflect the influence of working environment for the interviewees. The second item in competence development becomes the working place and the changes in the working environment. Connection between SDL and changes in working place creates the context for competence development. The learning and social change always were interconnected; it means that in traditional cultures with limited changes in organizations it is easier to measure and control the learning, and in processes of technological and social changes in organizations is difficult to measure and control the learning. Thus the interaction between working place changes and SDL is controlled by the individual and is dependent on his / her motivational factors. In this interaction are created also the new artifacts of competence development that become the new learning experience. The expression of SDL is poor studied in specific context (Brookfield, 1984), so why Hill, Hannafin (2001) accentuate that the research is needed by which the perceptions and understanding of SDL process would be understood deeper in those contexts. As to Jennings (2007), the main research resource is the individual experiences, but not the results, when the SDL is realized in specific contexts. Also important to note that from the mentioned above considerations is evident that core dimensions in SDL are three (Zydziunaite et al, 2008): employee, process and context.

From the mentioned above conceptual considerations is evident that the conception of SDL is still rather new, the research studies are more or less limited with the focus on competence and the cope of used research methods are very traditional (questioning surveys or interviews). On *one hand* this is understandable because the SDL phenomenon is soft, flexible, "mobile" and it is difficult to evaluate, measure or describe it fully concerning the conceptual and evidence – based arguments. On *other hand*, is it interesting phenomenon, because it is always "in movement", based on permanent and continuous interactions between the individuals, individuals and organizations, individuals and performance. The latter comment means that the SDL is the concurrent part of competence development, human resource development, organizational or society changes. And there the main point is the context, which requires the integrity not only concerning the practical decisions, but is connected to research methodology decisions too. When the amount of empirical research studies on SDL is limited not rare the researchers try to support their ideas giving the multidisciplinary argumentation. On *one hand*, the multidisciplinity helps to perceive the phenomenon as complex, wide and recognize the existing various interactions that require the research-based evidences. On *other hand*, it is risky always support the SDL by multidisciplinity or holism because the conceptual framework of SDL requires the definitions, peculiarities and etc. in order to be able to illuminate the quantitative and qualitative features of this phenomenon. And this requires the methodological considerations and decisions. Thus the **research problem,** which will be discussed in this article, includes one question: „What types of research strategies establish the premises to make the research methodology decisions concerning competence

development through self-directed learning in working environment?" According to mentioned research question the research focus is the decisions in research methodology concerning competence development through SDL.

Research aim is to present the conceptual model with the focus on research methodology decisions concerning competence development through self-directed learning in working environment.

Method

Conceptual study, which requires the conceptual discussions and considerations concerning is chosen phenomenon by the researcher (Alston & Bowles, 2003).

Results

Conceptual research decisions concerning the competence development through self-directed learning in working environment. The literature review is the fundamental decision in striving to understand the acquired knowledge of the topic on which the research will be based. Meanwhile the systematizing is rarely treated as an important step of conceptual research (Cohen *et al*, 2003). The conceptual analysis is not named as a research type or method in general, or even methodological decision, but it is treated as compulsory introduction before the empirical research (Garrard, 2004). It determines that here is still lack of attention to methodological problems concerning the conceptual research. The researchers mention methods that were applied for identification, analysis and evaluation. This limits the reader in evaluation of meaningfulness, importance and validity concerning the conceptual research conclusions. Not rare the scientific areas are not identified in conceptual studies and this limits the understanding the specificity of the studied phenomenon in different areas or spheres. Also it shows that the science is still questioning the meaningfulness of the phenomenon by striving to define it and validate. Instead of comparing and contrasting the different scientific thoughts on the same phenomenon, most often researchers present their discussions or conceptual considerations without differentiating the scientific areas and when the answer is not clear and then the main argument is the holism. It means that the deep and comprehensive conceptual analysis need the researcher's capability to be plugged up into the scientific literature; it means to know what is written and studied before the researcher already knows in the actual area and what is new in this area (McCulloh, 2004).

The conceptual study based on *matrix method* helps to assimilate the read literature and stipulate him / her to active participation in theoretical research, inspires to organize and establish the organized structure (Garrard, 2004). The meaning of the method in research concerning the competence development through SDL in working environment helps to establish the basic for systematic literature review and to present the literature review according to synthesis form. By abstracting every study and using the same scope of topics the researcher acquires the understanding, what is missing and identifies

the areas, where the research is needed (Zydziunaite, 2007). The result of applied matrix method also could be the established theoretical model, which is proved in research. It means the connection between conceptual and quantitative research. The established model in research on competence development through SDL in working environment could mean the different things to different people. In general it explains, what is typical for actual situation, phenomenon or research focus. The conceptual model based on conceptual literature review is connected to conceptual creation of theory (Torrance, 2007). If exists the theory fitting the research aim, then the researcher should test its usefulness and in such case the conceptual research is not meaningful with the aim to create the theoretical model concerning the competence development through SDL in working environment.

By applying the *concept analysis* the actual concept should be chosen by the researcher, and after the objectives of the analysis should be formulated by presenting all the possible variations of the concept. That inspires the researcher to formulate the definition of concept by showing other cases that are connected or different concerning the actual concept. Also the premises of concept establishment and results of its application are substantiated (Walker, Avant, 1995). The main result is to define, what the actual concept is, and what is not (Torrance, 2007). The concept analysis in research on competence development through SDL in working environment could be applied by striving to define or verify the word or its usage concerning the language in general and in scientific literature, and to illuminate the ambiguities of the concept.

Qualitative research decisions concerning the competence development through self-directed learning in working environment. By making decisions on application of qualitative research concerning the competence development through SDL in working environment the researcher substantiates decisions by knowledge that are actual for constructivist perspectives (e.g., individual meanings of experiences, socially and historically development meanings by developing theory) or perspective of participant (e.g., focus on change, decisions, policy, collaboration, team-working), or both perspectives (e.g., research on development, improvement, evidence-based practice). The research strategies are the narrative, phenomenology and hermeneutics (e.g., phenomenological hermeneutics, hermeneutical phenomenology), ethnography, grounded theory, phenomenography, or case studies. By making decisions in application of qualitative research concerning the competence development through SDL in working environment the researcher should be focused on actual level (in Zydziunaite, 2007):

• The *ontological* level is focused on question "What exists?" The research focus is the social reality. Its essence is the meaningful actions and interactions among the individuals (Robson, 2004).

• The *epistemological* level is connected to question: "What could be known about what exists?" (Cormack, 2003). Our knowledge about the social reality is equal to our understanding about meanings and motives that are references for actions and interactions. The relationship between epistemology and ontology in research on

competence development through SDL in working environment could be the following: if the social reality consists of individual experiences and perceptions, then the knowledge about reality will be the experience and perception knowledge. The problem is that in final research report the perceptions and experiences of research participants are "filtered" through researcher's experience and perceptions, so why is very difficult to outline the degree of misrepresentation in data analysis process and interpretation of the received data.

• In *methodological* level are raised the questions concerning the modes, "How to get the knowledge about that, what exists?" The social reality could be discovered through the perspective of individuals, who live in this reality (Parter, 1993). The precision by reproducing the perspectives of research participants is connected to researcher's knowledge about the social environment, which is studied concerning the competence development through SDL in working (specific) environment.

• In *method* level are applied the research techniques to collect the evidences about that, what exists (Lincoln, Guba, 1985). Those are research methods, because involvement establishes premises for the straight experience about subjective meanings and motives.

Quantitative research decisions concerning the competence development through self-directed learning in working environment. By performing the quantitative research concerning the competence development through SDL in working environment the researcher substantiates methodological decisions by positivism and neo-positivism theories for knowledge development (e.g., relationship between the cause and consequence, reduction till specific items, prove of hypotheses and theory testing etc.). But the experiments, questioning surveys according to research tools (questionnaires), which consists of items created by the researcher and are dependent on researcher's scientific erudition, are questionable and diverse concerning the meaningfulness of methodological decisions in order to know the natural mechanisms, processes, spontaneous phenomenons in competence development through SDL in working environment. The deeper knowing of the statistical fact the additional methodological decisions and integration of qualitative and quantitative research are needed in order to have the harmonized and evidence – based view on SDL, which always interplays between the dimensions of individual, context and process.

Mixed research decisions concerning the competence development through self-directed learning in working environment. The research results of Zydziunaite *et al* (2007) revealed that competence development through SDL in working environment, is dependent on "dual" context of working environment: (1) context as dimension means the organizational level; (2) context as characteristic means the situations and activities of the employee in actual situations of working environment. The recommended research methodology design in studying the competence development through SDL is mixed research.

By applying the one method could be evident the deviations and biases, but those could be "neutralized" by other methods (Torrance, 2007). Integration of qualitative and quantitative methods includes the methodological

considerations and decisions about the combination of different type of data. The reasons for combined research influenced the researchers to establish the strategies of mixed research and used the different terms that have the same meanings, e.g. multimethod, convergence, integration, combination (Creswell, 1994). In studying the competence development through SDL in working environment is important to decide what type of mixed research design will be applied and that gives the premise to one of the research types – qualitative or quantitative, and following this, the one will be the core and another as supplement, or both could be used at the same time as equal. So the researcher's deep knowledge and erudition in research methodology and experience in performing the mixed research is the core premise for research focused on competence development through SDL in working environment.

The recommended model concerning the methodological decisions in research on competence development through SDL in working environment I presented in Figure 1.
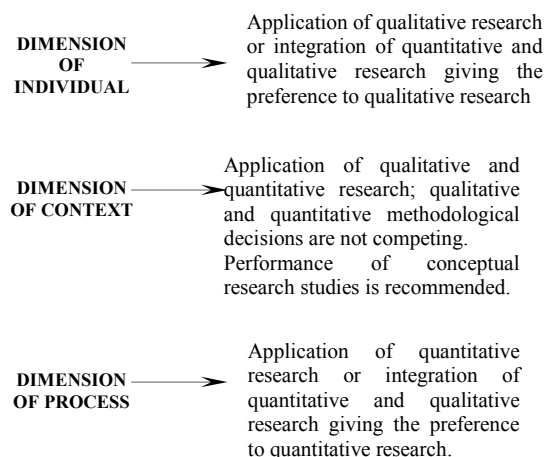

DIMENSION OF INDIVIDUAL → Application of qualitative research or integration of quantitative and qualitative research giving the preference to qualitative research

DIMENSION OF CONTEXT → Application of qualitative and quantitative research; qualitative and quantitative methodological decisions are not competing. Performance of conceptual research studies is recommended.

DIMENSION OF PROCESS → Application of quantitative research or integration of quantitative and qualitative research giving the preference to quantitative research.

Figure 1. The conceptual model of research methodology decisions concerning competence development through self-directed learning in working environment

Conclusions

• The empirical research in competence development through self-directed learning in working environment is philosophical. In this research is very flexible disjuncture between primary and final, and between „what is the case"(facts) and "what could be the case" (values). Concepts are discussed as factual propositions about the data. This is influenced by qualitative studies and their requirement for the narrative for the research. In philosophy does not exists the disjuncture between different schools, methods or movements, and the idea in empirical research that different aspects of the actual case should be studied at the same time by connecting them, also influences the methodological decisions. Such restoration of relations among philosophical and empirical research stipulates the different aims in future on competence development through SDL in working environment.

• Important problem is the possibility that research results of competence development through SDL in working environment would influence the practice. For many practitioners it is difficult to read and criticize the research reports, because they lack methodological competences in order to understand and evaluate the research. If they try to do it, then they find that research reports on the same topic give the different conclusions. So why they raise the questions: „Which conclusions they should trust? or "How to avoid the disconnections in scientific literature?". The risk of these situations is connected with the idea that research is not directed to practitioners in order to deepen their understanding about observed phenomenon of practices or make decisions on actual problems. The other problem is the individual studies, when the researchers read and understand the research by themselves, without discussion with other researchers or experts in a certain area, and through that is influenced the research practice. This influence could not be evaluated and it could not guarantee the quality of the performed research. By striving to avoid such situations, the integrated data analysis should be performed and represented by modes that are understandable for practitioners too.

• Decisions in research methodology concerning the competence development through SDL in working environment are substantiated by pragmatism as theoretical concept and consequent qualitative and quantitative data collection as a part of methodological decisions. In the research the basic premise is that the collection of diverse data stipulates deeper understanding about problem. The researchers who apply the mixed research design should be competent in qualitative and quantitative research methodology, because they need to understand and substantiate the reason and meaning of both research types' integration in order the methodological considerations, decisions and the results would be presented in research report understandable and evident.

References

1. Alston, M., Bowles, W. (2003). *Research for Social Workers*. London and New York: Routledge, Taylor & Francis Group.
2. Bell, D. (1976). *The Coming of Post-industrial Society*. New York: Basic Books.
3. Brookfield S. (1984). Self-directed learning: A critical paradigm. *Adult Education Quarterly,* 35: 18-27.
4. Candy, P. (2004). *Linking thinking: self-directed learning in the digital age*. Report under the Research Fellowship Scheme of the Department of Education, Science and Training.
5. Coffield, F. (2000). (Ed.) *Different visions of a learning society: research findings*. Great Britain: The Policy Press.
6. Cohen, L., Manion, L., Morrison, K. (2003). *Research Methods in Education*. London and New York: Routledge Falmer.
7. Creswell, J. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
8. Fischer, G. (1998). *Beyond 'Couch Potatoes': From Consumers to Designers*. Paper presented at the 3rd Asia Pacific Computer Human Interaction Conference, Kanagawa, Japan. Interaktyvus: http://www.cs.colorado.edu/~gerhard/papers/apchi98. (žr. 2008-09-01)

9.   Garrard, J. (2004). *The Matrix Method.* Sudbury, Massachusetts: Jones and Barlett Publishers.

10.   Hill, J., Hannafin, M. (2001). Teaching and learning in digital environments: The resurgence of resource-based learning. *Educational Technology Research and Development,* 49 (3): 20 - 30.

11.   Jennings S. (2007). Personal development plans and self-directed learning for healthcare professionals: are they evidence based? *Postgraduate Medical Journal,* 83: 18-25.

12. Longworth N. (2006). *Learning cities, Learning regions, Learning Communities: Lifelong learning and local government*. London: Routledge.

13.   McCulloch, G. (2004). *Documentary research.* London and New York: Routledge Falmer.

14. Torrance, H. (2007). *Education and Theory. Strangers in paradigms.* UK: Open University Press.

15. Žydžiūnaitė, V., Lepaitė, D., Cibulskas, G., Sabaliauskas, T. (2008). Development of general competence in the process of self-directed learning in working environment. Original Research Report. Lithuanian State Science and Studies Foundation.

16. Žydžiūnaitė, V. (2007). *Profesinio rengimo aukštojoje mokykloje multidisciplininėms veikloms tyrimų metodologijos sprendimai.* Habilitacijos procedūrai teikiamų mokslo darbų apžvalga. Socialiniai mokslai, Edukologija (07 S). Kaunas: Kauno technologijos universitetas.

17. Wenger, E. (1998). *Communities of Practice. Learning, Meaning and Identity*. UK: Cambridge University Press.

18. Walker, L., Avant, K. (2005). Concept analysis. In L. Walker & K. Avant, *Strategies for theory construction in nursing.* p. 63-84.

Vilma Žydžiūnaitė

Kompetencijos vystymo realizuojant savaiminį mokymąsi darbo aplinkoje tyrimų metodologijos sprendimai

Santrauka

Tyrimo problema. Savaiminis mokymasis suprantamas kaip neplanuotas, neformalus ar spontaniškas procesas, kuris charakterizuojamas ilgalaikiškumu ir įvardijamas metodu ar procesu, kuriame dominuoja asmens poreikiai, o mokymasis nėra įtakojamas planuoto mokymo ar didaktikos metodų. Taip pat savaiminis mokymasis yra tiriamas kaip rezultatas ar tikslas, kurio siekiant asmuo pats valdo asmeninį mokymąsi. Šiame kontekste akivaizdi autonomiškumo dimensija. Problema tiriam savaiminį mokymąsi kaip tyrimo fenomeną yra „metodologiniai sprendimai, kurie skatina pergalvoti tyrimo strategijas ir metodų integravimą, siekiant išryškinti savaiminio mokymosi esmę, kuri turi tęstinumą kiekviename kontekste ir situacijoje. Straipsnyje pristatoma tyrimo problema, kurią sudaro vienas klausimas: „Kokių tipų tyrimo strategijos sukuria prielaidas priimti tyrimų metodologijos sprendimus dėl kompetencijos vystymo realizuojant savaiminį mokymąsi darbo aplinkoje?"

Tyrimo objektas: kompetencijos vystymo realizuojant savaiminį mokymąsi tyrimų metodologijos sprendimai.

Tyrimo tikslas: pristatyti tyrimų metodologijos sprendimų modelį, orientuotą į kompetencijos vystymą realizuojant savaiminį mokymąsi darbo aplinkoje.

Metodas: konceptualioji studija.

Rezultatai:

(1) atskleisti kompetencijos vystymo realizuojant savaiminį mokymąsi darbo aplinkoje tyrimų metodologijos sprendimai, orientuoti į asmenį, kontekstą ir procesą;

(2) sukurtas kompetencijos vystymo realizuojant savaiminį mokymąsi darbo aplinkoje tyrimų metodologijos sprendimų modelis.

About author

Vilma Žydžiūnaitė, PhD of Social Sciences (Educational Science), Professor, Mykolas Romeris University, Faculty of Social Policy, Department of Education Activities. *Research interests:* qualitative research methodology, competence development and evaluation, vocational training and education in, leadership and ethics in health care sector. E-mail: vilma.vilma@ymail.com

DIMENSIONS AND CHARACTERISTICS OF THE SPECIALIST ROLE WITHIN A TEAM (CASE OF A REHABILITATION TEAM)

Vilma Žydžiūnaitė[1], Eglė Katiliūtė[2]

[1]*Mykolas Romeris Uinversity, Lithuania, [2]Kaunas University of Technology*

Abstract

Research problem: Specialists comprising rehabilitation team are professionals in various areas. Practice shows that rehabilitation teams are mainly interdisciplinary. Interdisciplinary rehabilitation teams generally include one or more physicians, nurse practitioners, and social workers. Nutritionists, speech, physical and occupational therapists, psychologists, and others usually participate on a case-by-case basis. Rehabilitation teams are designed to treat the whole person rather than simply the specific medical condition that may have led the person to seek treatment. Teams are concerned about an individual's living situation, independent functioning, nutritional status and collaboration with the patient's spouse. They also focus on health promotion and disease prevention. In this article the focus is on the specific specialist – the nurse; the one who is one of the core specialists in rehabilitation team. Our interest is to define the exact team role which the nurse-specialist performs: a team member, a (team) case manager / a coordinator or a team administrator / care manager's? The research problem includes two questions: *„What are the dimensions of the specialist role in a rehabilitation team? What content does the management and administration characteristics of the specialist role in rehabilitation team include?"* The term 'specialist' in research is adequate to the term 'nurse-specialist'. **Research focus:** the role of the (nurse) specialist in a team. **Aim:** to explain the role of the (nurse) specialist in a rehabilitation team by highlighting the managerial and administrational characteristics. **Methods:** data collection - questioning survey; data analysis - descriptive and factorial analyses determined and explained. **Results**: (1) the dimensions of general specialist role in rehabilitation team; (2) the content of the nurse-specialist role in rehabilitation team concerning management and administration characteristics described.

Keywords
Administration characteristic, case manager, management characteristics, rehabilitation team, role, specialist, team administrator, team member.

Introduction

The traditional attitude, which accentuates the importance of factual knowledge, does not fit the needs of changing society and working activities. The team work, which is based on the member's capabilities to integrate the specialized skills and factual knowledge, cannot be the basic for activity effectiveness. Employers require from their employees the capability to work in complex environments that are characterized by controversial information, non-formal collaboration, dynamic and integral processes. The concept of team work is studied by foreign[1] and Lithuanian[2] researchers. Those studies accentuate the roles, structure, communication and other activity peculiarities of a team. No one study is concentrated on methodological peculiarities of the teams or roles in a team. This article emphasizes the context of rehabilitation team, which always consists of members with various professional qualifications. And the result of the team work is evident through the health status of the patient. In team work-based rehabilitation the focus is on the team members' capabilities to apply multidisciplinary knowledge and perform the role of organizing specialist (Janhonen, 1992) and apply knowledge and skills of social sciences in practice: *management*[3]; *psychology*[4]; *education*[5]. It means that in team work-based

rehabilitation the social and health sciences are interrelated.

'Rehabilitation teams attempt to treat the person as a whole, rather than merely the clinical condition that may have brought the person to the physician's office, clinic or hospital. And more often than not, teams try to consolidate their sites of service to lessen the burden for patients, offering 'one-stop shopping' rather than disparate, disconnected service arrangement. Teams also work to maintain and improve independent functioning often incorporating health promotion and disease prevention into their agenda for patient care' (Regenstein *et al,* 1998, p. 8). On the one hand, it is evident in this context that team members should be oriented to the wellness of the patient, and the attitude of caring and health care is the main in team work in rehabilitation context. On the other hand, in order to be effective it is not enough to stand only for the health care paradigm and the importance of management and administration paradigm in the work of rehabilitation team here emerges too.

'Interdisciplinary rehabilitation teams generally include one or more physicians, nurse practitioners, and social workers. Nutritionists, speech, physical and occupational therapists, psychologists, and others usually participate on a case-by-case basis. Teams are designed to treat the whole person rather than simply the specific medical condition that may have led the person to seek treatment. Teams are concerned about an individual's living

---

[1]Hendrix, 2002; Stewart, 2001; Fisher, 2000; Appelbaum, 1999; Heimer, Vience, 1998; Hopkins *et al,* 1998; Regenstein *et al,* 1998; K.& M. Fisher, 1997; Nolan *et al,* 1997; Hartzler, Henry, 1997.

[2]Seilius, 1999; Smilga, Bosas, 1999; Vijeikienė, Vijeikis, 2000; Barvydienė, Kasiulis, 2001.

[3]Which includes the ability to manage the complex process helping the patient.

[4] Which incorporates the specialist's ability to communicate with the patient according to his / her needs, expectations and to stipulate the patient to strive for maximum of self-care.

[5] Which emphasizes the specialist's knowledge with the focus on how to care the patient, what to teach the patient and in which areas to improve the personal competence.

situation, independent functioning, nutritional status and spouse or caregiver. They also focus on health promotion and disease prevention (Regenstein *et al*, 1998, p. 2). In this article the research is oriented to **the** specific specialist – the nurse - who is one of core specialists in rehabilitation team. Our interest is to define the exact team role, which the nurse-specialist performs: a team member, a (team) case manager/coordinator or a team administrator / care manager? The **research problem** is focused on two main questions: *"What are the dimensions of the specialist role in rehabilitation team? What content does the management and administration characteristics of the specialist role in rehabilitation team? Include?"* The **research focus** presented in this article is the role of the (nurse) specialist in a team. Thus the **research aim** is to explain the role of the specialist in rehabilitation team by highlighting the management and administration characteristics.

Theoretical background

The term 'team' is meaningful in situations, when it is necessary to concentrate the people for the performance of a definite task. Here it is important the level of readiness of the people to be focused on work, work type characteristics and its complexity, and team members' responsibilities. It means that the team work is meaningful in working situations, and the application of the learned things and its usability in specific situations is the crucial activity feature (Jungkunz, 1999). The team becomes complex in an activity context: here is no place for autocracy, and the essential features are collaboration, interpersonal help, and the balance between heterogeneity and homogeneity (Vijeikienė, Vijeikis, 2000).

The *aim* of a team is the main characteristic and it is not meaningful in the following situations, when it is not attached to a purposeful activity (Heimer, Vince, 1998); does not reflect the organizational aims in which the team works (Hendrix, 2002); does not direct people to work (Nolan *et al*, 1997); does not concentrate the team members (Regenstein *et al*, 1998). Hendrix (2002) notes that exact formulations of team aims are important modes of problem-solving at an organization or in a team. Ignorance of the team aim stipulates the managerial and psychological problems (Zydziunaite, 2005).

The main need and aim of an individual is the social need to be the *member* (Barvydienė, Kasiulis, 2001). The need for membership is satisfied together with the need for relationships, because team members interact and without it is impossible to form the team as working group (Regenstein *et al* 1998; Stewart, 2001). It means that team working process is implemented through members' *interactions* and *transactions*. The *team membership* is not chaotic, and here every member knows the own role. Every team member is responsible for performed activities by the team. The need for *leadership* and *membership* is important because it supports the team vitality, and helps to preserve its structure (McGrath, 1991). If the leader insists on his / her role and input exception in a team then it means that the leader does not recognize that he / she is core actor in

a team, and that interrupts the team development (Onyett, Malone, 1990). In team work the actual personal features are those, which help to collaborate, and especially important are high level motivation, loyalty and enthusiasm as premises for effective team functioning. The team is empowered group of employees, who support their activities by organizational values and principles (Hendrix, 2002), and is able to work and represent the organization (Regenstein *et al*, 1998). The *autonomy* is adequate to team type, when it takes self-responsibility and controls the work autonomously. In this team from team members is required the responsibility for the scope of the aims (Appelbaum *et al*, 1999). It means that team members should be responsible not only for the self, but for all team members. The self-managed teams in organizations are the core 'instruments', because they implement self-planning, self-organization, and make decisions according to activity, perform the activity from the start to the end, and does not leave the emerged problems for self-direction (Fisher, 2000). The self-managed teams work according to the components of self-management and collaboration. Nevertheless the team is autonomous, but it implements organizational aims and objectives. The team does not work for the self and it represents the organization and substantiates the work based on organizational values and principles (K. & M. Fisher, 1997). *Team communication* also is important dimension and here are important the speed of information, its precision and acquirement. Satisfaction of team members could be adequate to divided responsibility of leadership and decentralized decision-making in a team. The team is an open system, which could be defined only on the basis of the specific context, environment and team structure, because the activity process is not detached of external team environment (Hartzler, Henry, 1997). The *competence* is directly connected to team roles (Stewart, 2001) as well as work responsibilities that are defined in a job description in terms of ongoing duties and specific tasks. Team members have four main types of responsibility (Onyett, Malone, 1990; McGrath, 1991; Øvretveit, 1995):

- *Profession-specific responsibilities*. Some team responsibilities can be carried out only by qualified people from one profession. People from different professions are employed in multidisciplinary teams because they are trained, qualified and competent to do, without supervision, the tasks, which people from other professions cannot do;
- *Common responsibilities*. Team members have skills and knowledge, which they have in common with one or more other professions in the team. To decide who does the work the team uses criteria other than skill and knowledge. Teams need to clarify which skills and responsibilities members have in common;
- *Case coordination and care management responsibilities*. Some members of teams have skills and knowledge in case coordination or in care management, and are responsible for doing work to coordinate care. Team members need to clarify whether they or other in the team have case coordinating responsibilities, and if so, what these are. If more than one member of the team is likely to be

involved with a client, then a team must have an agreed case coordinator role with defined responsibilities, and a way to decide who will carry out this role. The responsibilities of a care management role are in addition to those of case coordination, which only describes coordination within a team. Some teams have care manager roles with responsibilities for coordinating services outside the team as well as within.

Research methodology

Sample
The researchers of this study did not strive to make research with the generalization for all the community of health care specialists, thus one hospital was chosen and the methodological strategy of that research was a case study. It means that the research process was performed in one hospital and all the health care employees were asked to participate in the study. The comparison of data was impossible because the number of participants according to their professional qualification / work status was unequal. But the research focus is on the role of the nurse-specialist in a rehabilitation team, which is why all the research participants were divided into two groups – nurses and other health care specialists. The questioning survey had been performed in one hospital and all the health care specialist and health allied specialists were participants in the research. The sample was divided into two parts because the questionnaire consisted of items about the nurse-specialist role in rehabilitation team. The nurses answered how they see their role and other specialists also answered how they see the nurse's role in a rehabilitation team. The total sample consisted of 119 participants: 60 nurses (55 nurse practitioners, 5 nurse administrators); 59 other specialists [physicians (24), physiotherapists (19), and nursing helpers (19)]. 21% of research participants are 50-60, and 20% - 31-35 years old. 49 of participants work at the hospital less than 10 years, and 55 – longer than 10 years.

Methods
Data collection: questioning survey; *data analysis:* descriptive statistics and factorial analysis.

Research tool
The questionnaire consists of 90 items. 4 of those are demographic[1]. Other 86 items are related to actual dimensions. Those are 9: responsibility, collaboration, work methodology and purposefulness, communication, stipulation for work, striving for activity results, personal employee's features influencing the work quality, autonomy, self-realization. Every dimension includes the different number of items. The characteristics are 2 – management and administration - of the nurse-specialist in a team (see Table 1).

Table 1

Dimensions, indicators and criterions of the research tool

Dimensions	Items / indicators (No.)	Characteristics
Responsibility	9	
Collaboration	11	MANAGEMENT CHARACTERISTIC OF THE NURSE-SPECIALIST IN REHABILITATION TEAM
Work methodology and purposefulness	5	
Communication	6	
Stimulation for work	2	
Striving for activity results	3	
Personal employee's features influencing the work quality	7	
Autonomy	2	
Self-realization	5	
Responsibility	5	ADMINISTRATION CHARACTERISTICS OF THE NURSE-SPECIALIST IN A REHABILITATION TEAM
Collaboration	2	
Work methodology and purposefulness	5	
Communication	9	
Stipulation for work	1	
Striving for activity results	1	
Personal employee's features influencing the work quality	5	
Autonomy	7	

From the data in the table it is evident that every dimension interrelates with both characteristics. Because in the presented research it is strived to diagnose three possible roles of a nurse-specialist and the descriptive statistics helps to disclose that:

• If the role is based on more than 50% of items of management characteristic, the specialist performs the role of a *(team) case manager / coordinator*;

• If the role is based on more than 50% of items of administration characteristic, the specialist performs the role of a *team administrator / care manager*;

• If the role consists in equal parts of management and administration characteristics in percents, the specialist performs the role of a *team member*.

Results

Factorial analysis. The results of factorial analysis illuminated that the most meaningful and valuable dimension is *communication*, which together connected 12 factors. The dimensions such as *responsibility, autonomy, stipulation for work* and *striving for activity results* are less significant. Each of the latter four dimensions mentioned consists of 2- 3 factors. The dimension of *self-realization* is empty.

The dimension of communication in a rehabilitation team is focused on discussions about activity aims, objectives and tasks, considerations of several alternatives on decision-making and information interchange among team members. It shows that discussions and consensus on the actual decision-making is the value in rehabilitation team, and here the separate roles are undistinguished; the team member roles are integrated through the focus on case.

The dimension of collaboration emphasizes the rehabilitation team climate where the team members could refer unpopular opinions, and conflicts or problems are discussed openly and the rehabilitation team unites in taking responsibility in unsuccessful cases. It means that

---

[1] Gender, work status, work experience in nursing, composition of the specialists in a team.

collaboration interrelates with the communication, and both dimensions are the essential part of team climate[1].

The dimension of work methodology and purposefulness accentuates the propositions concerning the activity cases from all the team members and the equity of professional or administrational status in a rehabilitation team. This dimension is not focused on specific skills or knowledge as the main requirement for the nurse-specialist role in rehabilitation team, but it is focused on a balance between team members' professional qualifications.

The dimension of striving for activity results connects two factors with the main focus on self-directed team working. In this dimension is mentioned that priorities on activity tasks are clear in every case, even in situations when the rehabilitation team should perform wide scope of tasks. This dimension creates premises for the nurse-specialist role effectiveness when the rehabilitation team is autonomous and here is defined the set of priorities[2].

The dimension of stipulation for work shows the status impact on the evaluation of a rehabilitation team members' competence: the formal team leader analyses the capabilities and responsibilities of team members by differentiating them, but all the rehabilitation team gives every team member chances for professional improvement. The context illuminates the rehabilitation team efforts to keep the balance between formal leadership and the entire team consensus without exceptions concerning the nurse-specialist role. The stipulation for work is transformed as a responsibility of the team leader.

The dimension of responsibility is focused on three main nuances: the constant composition of a rehabilitation team, perceptions of the rehabilitation team members on their own capability limitations, and self-evaluation concerning the achieved activity results and their own mistakes. It means that responsibility is related to the rehabilitation team member abilities to reflect *before-, in-* and *after-*action[3] and recognize the achievements, results and mistakes in order to reflect on and make effective activity strategies. This dimension is interconnected with three dimensions: (a) collaboration, because the constant composition of a team is a part of its culture; (b) striving for activity results, because the team autonomy is prioritized as a premise for effective activity, and the team member's reflection is supported as an autonomous initiative and spontaneous learning through practice and experience; (c) dimension of stipulation for work, because the team member's competence includes his / her ability to reflect and evaluation of team member's competence also includes the various forms of reflection (through discussion, personal reflection, questions, etc.).

The dimension of autonomy shows three directions of the nurse-specialist in a rehabilitation team: psychological support for the patient and team members, dependence on decisions of other team members' decisions and personal caring about the own professional development. The content of dimension highlights that the nurse-specialist

role in a rehabilitation team is not related to decision-making, as this specialist is dependent on other team members'decisions. The nurse-specialist performs the sub-role of a mediator in (team) case management between the team members and in team coordination in patient and rehabilitation team interactions. Only the nurse's responsibility for her/his own professional development relates this dimension with the dimension of stipulation for work. It shows that the nurse-specialist should stipulate the self for competence development in order to prove the professional confidence in a rehabilitation team, but her/his role is not autonomous and dependent on the others' decisions. Thus the nurse-specialist role in a rehabilitation team is as often as not supplementary.

The factorial analysis highlighted that *the dimension of self-realization* concerning the nurse-specialist role in a rehabilitation team does not exist and it supports the tendencies explained in dimensions of autonomy, stipulation for work and responsibility.

The dimension of staff employees' features influencing the work quality connected the factors into three main modes and the most valued and meaningful one for the rehabilitation team is diligence[4] of the nurse-specialist, and the second mode being empathy[5]. The insignificantly valued personal feature of the nurse-specialist in a team is communicability[6]. This dimension interacts with the dimension of autonomy: the nurse-specialist in a rehabilitation team is dependent and every team member expects her to be diligent by performing technical manipulations and other technical tasks. Also they want her to be empathic, support the team members and patients by intermediating, their interactions in- and out of the rehabilitation team. The content of this dimension creates premises to understand that communicability is not emphasized because being patient and obedient to the team leader is also highly valued.

Descriptive analysis. The biggest part (87%) of research participants accentuate that the full value rehabilitation team consists of personnel of the department, the patient and his / her family members. It shows that health care personnel of the hospital is not detached of the patient and is focused on the integration between the personal, and between personnel and patients. That is the premise for the implementation of harmonized health care practice based on team work, in which the personnel performs three core roles – *the team member's, the (team) case manager / coordinator's* and *the team administrator / care manager's*. *Nurses* emphasize that in administration characteristics stipulation for work and responsibility is highly valued, and the first is more important than the second. In management characteristics nurses accentuate autonomy and work methodology integrated with the purposefulness. The latter component is more important. Autonomy and work methodology in management characteristics is more valued than that in administration. Factorial analysis showed that nurses in a rehabilitation team do not have autonomy and are dependent on others. It highlights the realistic view of the nurse-specialist role

---

[1] The content of both dimensions – communication and collaboration – illuminates that the nurse-specialist role in rehabilitation team is in balance with other specialists' roles.

[2] The dimension is interconnected with the dimension of work methodology and purposefulness.

[3] To be a reflective practitioner.

[4] Consists of 7 factors

[5] Consists of 3 factors

[6] Consists of 2 factors

in a team: in order to perform the roles of the (team) case manager / coordinator or the team administrator / care manager they need more autonomy interrelated with responsibility in decision-making.

Table 2

Nurses' attitudes on nurse-specialist role characteristics in rehabilitation team

Dimensions	Mean	Characteristics	Mean
Staff employees' features influencing the work quality	4,39	MANAGEMENT CHARACTERISTIC OF THE NURSE-SPECIALIST IN REHABILITATION TEAM	3,50
Work methodology and purposefulness	3,57		
Autonomy	3,52		
Responsibility	3,48		
Communication	3,43		
Stipulation for work	3,43		
Collaboration	3,27		
Self-realization	3,22		
Striving for activity results	3,17		
Staff employees' features influencing the work quality	4,40	ADMINISTRATION CHARACTERISTIC OF THE NURSE-SPECIALIST IN REHABILITATION TEAM	3,51
Stipulation for work	3,95		
Responsibility	3,79		
Work methodology and purposefulness	3,47		
Communication	3,31		
Striving for activity results	3,27		
Autonomy	3,10		
Collaboration	2,81		

For *other personnel* also most meaningful is the administration characteristics of the nurse-specialist in a rehabilitation team than the management characteristics. In the administration characteristics more valued is work methodology and purposefulness rather than responsibility. Both components are the most important for them. In the administration characteristics the 'other personnel' value three components in order of importance: stipulation for work, responsibility and responsibility. Those results do not oppose the results related to the 'nurses' subsample.

Table 3

Other personnel attitudes on the nurse-specialist role characteristics in a rehabilitation team

Dimensions	Mean	Characteristics	Mean
Staff employees' features influencing the work quality	4,43	MANAGEMENT CHARACTERISTIC OF THE NURSE-SPECIALIST IN A REHABILITATION TEAM	3,38
Autonomy	3,45		
Work methodology and purposefulness	3,35		
Responsibility	3,31		
Self-realization	3,27		
Communication	3,25		
Stipulation for work	3,19		
Striving for activity results	3,04		
Staff employees' features influencing the work quality	4,43	ADMINISTRATION CHARACTERISTIC OF THE NURSE-SPECIALIST IN REHABILITATION TEAM	3,42
Stipulation for work	3,73		
Responsibility	3,62		
Collaboration	2,56		
Communication	3,32		
Work methodology and purposefulness	3,26		
Autonomy	3,24		
Striving for activity results	3,19		

It means that both groups of research participants treat the nurse-specialist role in a rehabilitation team as that of a 'team member'.

Conclusions

1. The dimensions of the nurse-specialist role in rehabilitation team are communication, collaboration, work methodology and purposefulness, striving for activity results, and personal features that influence the quality of work. Every dimension is characterized by the following peculiarities:

- The dimensions of communication and collaboration are interconnected because the nurse-specialist role is not distinguished among other roles in a rehabilitation team, and all the roles in a team are strived for keeping balance.
- The dimensions of striving for activity results interrelates with the dimension of work methodology and purposefulness because both dimensions emphasize the self-directed team work concerning every case and the list of priorities related to the context of activity case.
- The dimensions for stipulation for work, responsibility, self-realization and autonomy are dependent on the other team members, thus they could not be treated as actual dimensions of the nurse-specialist role in a rehabilitation team.
- The dimension of personal employee's features concerning effective and high quality work interrelates with diligence as the main feature of the nurse-specialist in a rehabilitation team. The contents of diligence is focused on the nurse's carefulness, fairness, patience and sincerity. It shows the stereotyped attitude to the nurse-specialist role with expectations that the nurse-specialist role is based only on personal features that do not require professional competence, thus the professional competence is detached of the 'ideal' picture of the nurse.

2. The management and administration characteristics of nurse-specialist role in rehabilitation team include the specific content:

- The results show that 'nurses' and 'other specialists' do not connect the nurse-specialist role to the management or administration characteristics in a rehabilitation team. The nurse-specialist role is treated only as *a team member's* one. Here is no evident difference between the nurse's self-evaluation and other personnel evaluation concerning the nurse-specialist role in a rehabilitation team.
- Both groups agree that the administration characteristic is more important than the management characteristic of the nurse-specialist role in a rehabilitation team. The descriptive analysis results support the results of factorial analysis that the management and administration characteristics concerning the nurse-specialist role in both groups –

'nurses' and 'other personnel' - is focused on the nurse's personal features influencing the work quality. The 'other personnel' in management characteristic also mention the autonomy, which they value higher than personal features. This could show their expectations concerning the change of the nurse-specialist role in a rehabilitation team, where the nurse needs more autonomy as a competent specialist.

• The management characteristic of the nurse-specialist role in a rehabilitation team could be named as 'desired' and interconnected with more autonomy and responsibility in decision-making. Management and administration characteristics should not be attached only to personal features of the nurse, as those features do not require professional qualifications. The nurse is a qualified, highly educated and experienced specialist, who is capable of managing the cases of the patient and / or team according to the context and situation.

References

1. Appelbaum, S., Bethune, M., Tannenbaum, R. (1999). Downsizing and the emergence of self – managed teams. International Journal of Participation & Empowerment, 5 (7): 109 – 130.
2. Barvydienė, V., Kasiulis, J. (2001). Vadovavimo psichologija. Kaunas: Technologija.
3. Fisher, K. (2000). Leading self – directed work teams: a guide to developing new team leadership skills. New York: McGraw – Hill, Inc.
4. Fisher, K., Fisher, M. (1997). The Distributed Mind: Achieving High Performance Through the Collective Intelligence of Knowledge Work Teams. Stamford, Connecticut: Appleton & Lange.
5. Hartzler, M., Henry, J. (1997). Tools for Virtual Companion. USA: American Society for Quality.
6. Heimer, C., Vince, R. (1998). Sustainable learning and change in international teams: from imperceptible behavior to rigorous practice. Leadership & Organization Development Journal, 2 (19): 83 – 88.
7. Hendrix, G. (2002). The importance of goals to the Success of Work Teams /CSWR Papers. Center for the Study of Work Teams. University of North Texas. http://www.workteams.unt.edu/reports/ ghedrix.htm
8. Hopkins, D., West, M, Ainscow, M. (1996). Improving the Quality of Education for All. London: David Fulton.
9. Janhonen, S. (1992). The core of nursing as seen by the nurse teachers in Finland, Norway and Sweden. PhD Dissertation. Finland, Oulu: Oulu University, Department of Nursing.
10. Jungkunz, D. (1999). Išsilavinimas ir kvalifikacija – profesinio rengimo tikslai didaktinių modelių kontekste. Profesinis rengimas. Tyrimai ir realijos, 2: 22 – 31.
11. McGrath, M. (1991). Multi-disciplinary Teamwork: Community mental handicap teams. Avebury: Aldershot.
12. Nolan, M., Booth, A., Nolan, J., Mason, H. (1997). Preparation for multi – professional/multiagency health care practice. The nursing contribution to rehabilitation within the multi – disciplinary team: literature review and curriculum analysis. Research Highlights, 28: 1 – 6.
13. Onyett, S., Malone, S. (1990). Making the teamwork work. Clinical Psychology Forum, 28: 16-18.
14. Øvretveit, J. (1995). Coordinating community care. Multidisciplinary team and care management. Buckingham, Philadelphia: Open University Press.
15. Regenstein, M., Meyer, J., Bagby, N. (1998). Geriatric Teams in Managed Care Organizations. A Promising Strategy for Costs and Outcomes. Washington, DC: Economic and Social Research Institute.
16. Seilius, A. (1999). Kolektyvinis valdymas: teorija ir praktika. Organizacijų vadyba: sisteminiai tyrimai, 12: 189 – 224.
17. Smilga, E., Bosas, A. (1999). Vadovas ir jo komanda: vadovavimo (funkcionavimo) – bendradarbiavimo procesas ir jo ypatybės. Organizacijų vadyba: sisteminiai tyrimai,12: 211 – 225.
18. Stewart, J. (2001). Managing Change Through Training and Development. London: Kogan Page.
19. Vijeikienė, B., Vijeikis, J. (2000). Komandinio darbo pagrindai. Vilnius: Rosma.
    20. Zydziunaite, V. (2005). Teamwork competencies and their research methodology from the standpoint of nurses' activity. Kaunas: Judex.

Vilma Žydžiūnaitė, Eglė Katiliūtė

Specialisto vaidmens komandoje dimensijos ir charakteristikos (reabilitacijos komandos atvejis)

Santrauka

Specialistai, dirbantys reabilitacijos komandoje, gali būti įvairių profesijų atstovai. Praktika rodo, kad reabilitacijos komandos dažniausiai būna tarpdisciplininės. Tarpdisciplinines reabilitacijos komandas neretai sudaro vienas ar daugiau gydytojų, slaugytojai praktikai ir socialiniai darbuotojai. Dietologai, logopedai, kineziterapeutai ir fizioterapeutai, psichologai ir kiti specialistai komandoje dalyvauja tik kai kuriais atvejais. Reabilitacijos komandos sudaromos siekiant rūpintis žmogumi visapusiškai, o nesikoncentruoti tik į asmens poreikius ir gydymo proceso monituravimą. Komandos rūpinasi asmens gyvenimo situacija, nepriklausomu funkcionavimu, mitybos būkle ir bendradarbiavimu su paciento artimaisiais. Reabilitacijos komandos taip pat koncentruojasi į sveikatos stiprinimą ir ligų prevenciją. Šiame straipsnyje koncentruojamės į slaugytojo-specialisto vaidmenį reabilitacijos komandoje. Slaugytojas šioje komandoje yra vienas pagrindinių specialistų, tačiau atliktame tyrime domėjomės, kokį vaidmenį iš trijų – komandos nario, atvejo vadybininko / komandos atvejo vadybininko ar komandos administratoriaus / priežiūros vadybininko – atlieka slaugytojas šioje komandoje? Tyrime sprendžiama *moksло problema* ir apima su minėtu kontekstu susijusius su klausimus: *"Kokios yra specialisto vaidmens dimensijos reabilitacijos komandoje? Koks turinys sudaro specialisto vaidmens vadybos ir administravimo charakteristikas reabilitacijos komandoje?"* Tyrime "specialisto" terminas tapatus "slaugytojo-specialisto" terminui. *Tyrimo objektas* – specialisto vaidmuo komandoje. Tyrimo tikslas – apibūdinti specialisto vaidmenį reabilitacijos komandoje išryškinant vadybos ir administravimo charakteristikas. *Duomenims rinkti* taikytas apklausos metodas; *duomenys analizuoti* taikant aprašomąją statistiką ir faktorinę analizę. *Imtį* sudarė 119 dalyvių, suskirstytų į "slaugytojų" ir "kito personalo" grupes. *Tyrimo rezultatai* atskleidė, jog slaugytojo-specialisto vaidmeniui komandoje svarbios komunikavimo, bendradarbiavimo, darbo metodiškumo ir tikslingumo, rezultatų siekimo ir asmeninių savybių, kurios daro įtaką darbo kokybei, dimensijos. Apibūdindami slaugytojo-specialisto vaidmenį reabilitacijos komandoje 'slaugytojai' ir 'kitas personalas' svarbesne traktuoja administravimo nei vadybos charakteristiką.

About the authors

Vilma Žydžiūnaitė PhD of Social Sciences (Educational Science), Professor, Mykolas Romeris University, Faculty of Social Policy, Department of Education Activities. Research interests: qualitative research methodology, competence development and evaluation, vocational training and education in, leadership and ethics in health care sector. E-mail: vilma.vilma@ymail.com
Eglė Katiliūtė PhD of Social Sciences (Educational Science), Assoc. Professor, Kaunas University of Technology, Head of Studies Quality and Monitoring Office. Research interests: personnel management, total quality management, research in educational and social policy. E-mail: egle.katiliute@ktu.lt

THE COMPETENCE DEVELOPMENT THROUGH SELF-DIRECTED LEARNING IN WORKING ENVIRONMENT IN SOCIAL SERVICES' SECTOR: DIMENSIONS OF AN INDIVIDUAL, PROCESS AND CONTEXT

Vilma Žydžiūnaitė, Daiva Lepaitė

Mykolas Romeris Uinversity, Lithuania; Vilnius University, Lithuania

Abstract

Research problem. In this research is presented the problem, which consists of the following question: „What kind of content includes dimensions of an individual, process and context concerning the competence development through self-directed learning in working environment in social services' sector?" is presented.
Research focus is the competence development through self-directed learning in working environment.
Research aim is to illuminate and substantiate the dimensions of competence development through self-directed learning in working environment with the focus on social services.
Sample. The sample of all the research project is divided into two parts: in the qualitative research phase had participated 24 research participants; in the quantitative research phase had participated 500 respondents. In the article are presented results only of the qualitative research with the focus group.
Methods. For *data collection* were applied the focus group interview (discussion) and questioning survey using the closed-ended questionnaire. The *data were analyzed* by applying the qualitative content analysis and statistical procedures such as description statistics, factor and regression analyses. In the article are presented the results of qualitative phase of the study.
Results: determined the urgent for social services competence development dimensions and their content.

Keywords

Competence, competence development, dimension, self-directed learning, social constructivism, social services, working environment.

Introduction

Research studies performed in the field of social sciences disclose processes of human resource development and their effective management at organisation's level, as well as processes of human resource development and improvement of organisation's activity (von Krogh, Roos, 1996). Research on the identification of competence structure (L. & S. Spencer, 1993) contributes to the evaluation in managerial viewpoint what gaps of individual's (organisation employee's) competence, which influence the quality of organisation's activity. In studies of the social field development of human researches transforms into *competence development* (Hird, 1995) at individual's level, and *development* in educational researches happens during the application of *different interventions or contemporary learning methods* in the environment of professional activity (Eraut, 1990; Barnet, 1994, 1999). Competence development is a matter fact of formal learning according to formalised programmes of studies or qualification upbringing or non-formal learning. In the research studies being lately performed the *self-directed learning* (*SDL*) becomes evident as separate phenomenon and it is not related to the non-formal learning. However the research on the conception of self-directed learning (Davis et al, 2000; Delamare le Deist, Winterton, 2005) is more theoretically conceptualised than possessing empirically-based arguments. It also lacks empirical-factual material, which substantiates and proves dimensions of the relation of self-directed learning and competence development in the environment of person's workplace.

The research studies being performed disclose *SDL* not as the process clearly misunderstood by a person (employee);

they seek to identify how an employee should understand *rational relations of SDL and competence development.* These relations can be disclosed by researches within the environment of professional activity, which is directed to the rendering of different *social services.* The employees working for the organisations providing such services constantly face atypical situations, which are influenced by most hardly-identified variables of environment. Thus the influence of different variables is hardly measured, and this strengthens consciously incomprehensible *SDL*, which happens when a person continuously interacts in a working environment. Under this premise, rational deflection of the sources of the change of professional activity work environment for the aims of competence development has to be fixed as the factor improving the management of activities. In this research[1] is presented **the problem**, which consists of the following question: „What kind of content includes dimensions of an individual, process and context concerning the competence development through *SDL* in working environment in social services' sector?" The improvement of management of professional activity is treated as positive outcome being projected, and **research focus** is the competence development through *SDL* in working environment as educational premises of this outcome. In this focus the dimension context, which makes the essential influence upon the development of competences within work environments, when the activity changes and employees interrelate, employees and clients cooperate at organisations or beyond organisations, are not disclosed. The **research aim is** to illuminate and substantiate the

---

[1] V. Žydžiūnaitė, D. Lepaitė, G. Cibulskas, T. Sabaliauskas (2008). Development of general competence in the process of self-directed learning in working environment. Original Research Report. Lithuanian State Science and Studies Foundation.

dimensions of competence development through *SDL* in working environment with the focus on social services.

Theoretical background

In the research *the conception of competence development* is treated as the development of *human resources* (Rothwell, 1996), but not as the conception of *education*. Thus the development conception is closer to managerial viewpoint, where the development of human resources is perceived in *the context of activity*, but not in the context of formal education and educational interventions applied within it when developing general and specialised competence. In this respect the research substantiates the *relation of competence development and SDL*. As in the research *SDL* is treated as a way of learning, thus this form obtains the meaning of expression by two dimensions of *development conception*, i.e. *in content and process* (French, Bell, 1984), where: 1) content[1] involves aims and objectives of activity as well as it answers the question *what performers and receivers of a particular activity strive for and what a particular professional group must perform*; 2) process[2] discloses *how* this professional group pursue the aim or *how* they perform particular tasks. Thus these two dimensions are integrated into the methodological approach of research instruments of competence development. In addition, the *development conception* as autonomous theory (Tight, 2004) discloses two dimensions as well (Bee, 1998): *development and change sources*. Thus the second dimension directly reveals the relation between development and learning process because development theories disclose the hierarchical sequence of development, and change theories describe the changes experienced by learners.

Traditionally development and learning were separate conceptions, but in the concept of development except three levels[3] (Tight, 2004): *macro, mezzo and micro; it was substantiated that the development was related to an individual at the third level*. As the development conception incorporates the element of change sources, which involves the changes experienced by learners as well; so the relation between development and learning discloses more complex character of the development conception. If development should also be related in the level of an individual and organisation, so the above-mentioned *dimension of process* is also revealed in development because individuals and organisations grow and in some time attain the expression of potential. The change source dimension, which becomes a learning resource, is important at the organisational level because the changes and experiences of learners are being fixed in the sense of development. Thus development and learning become the integral conception (Garavan, 1997)

because learning is the basic „contributor" for the development process. Learning not only influences the formation of person's knowledge and abilities/skills but also socio-cultural environment (Harrison, 1992); thus social participation helps create relations among members of the community of professional activity. As competence development is also influenced by social environment, i.e. changing interpersonal relationship: when a team or work situation is being changed, so competence development becomes dependent on *activity context*.

The *contextuality* of competence development is created by work environment, which is defined by physical, cultural and social conditions (Cheetham, Chives, 1998) that influence individual's activity. It means that development of person's competence can be influenced if any of these conditions changes. The context of competence development also depends on person's experience, due to which specialised competences can be transferred to other fields. Thus the learning experience being transferred and being defined by increased confidence, teamwork, as well as life, managerial and other cultural experiences can create new context in another professional environment. In this context *work, learning and cooperation* become three interrelated dimensions, which are analysed in *SDL* as holistic phenomenon according to the integrated viewpoint (Fisher, 1998). The context of competence development not only influences planning, observation and assessment of person's learning process, but also it functions as motivating factor. Also possibilities to observe how a person uses different resources and methods, which influence learning in the specific context of the learning emerges. The resources include different forms, which do not limit in human and information resources (Hill, Hannafin, 2001), thus they become important parameters of the context.

In the research *the conception of SDL* (Beckett, Hager, 2002; Brockett, Hiemstra, 1991) is treated as the form of no-subject-controlled and incidental unconscious learning, which most frequently is not identified by an individual. *SDL* is often understood and perceived as learning mode or strategy (Knowles, 1975; Moore, 1980) and these two conceptions are analysed as *integral conception* because *learner's autonomy* is one of common features (Candy, 1994). However a *SD* learner consciously perceives and controls his/her learning process in the sense of the result being sought; meanwhile an individual in social environment or an employee in his/her workplace creates different social relations by performing work assignments, but he/she does not envisage conscious experience of learning. *SDL* can occur not only at the level of an individual but also of an organisation among employees or within their groups. Thus in order to identify the expression of this type learning, the dimensions of *an employee, process and activity context* (Hill, Song, 2007), which reveal features of *SDL* and premises for its expression, are distinguished. The learning occurs in the situation where specific area and the problem identified by an individual interact in a defined environment (Lave, Wengel, 1991). Such situation presupposes motivational factors. Candy (1991) assumes that in the case of *SDL* people can distinguish not only in high motivation for learning, but also in

---

[1] Considering the competence development this dimension substantiates motivation of individual's or group's activity, which is an important premise for self-directed learning. Also this variable creates the context of activity because aims and objectives of activity are implemented in certain environment.

[2] This dimension helps to reveal the very process of self-directed process in the context of the activity being performed.

[3] The macro level means national and international relations; the mezzo level – dimension of organisation and community.

identification with the activity, because the areas of the activity, in which he/she has already accumulated certain experience. Cognitive motivating factors require the environments, in which people experience and understand the expedience of learning (Csikszentmihalyi, 1990). Learning by need (Fisher, 1991) creates possibilities for a person to develop his/her competence because new knowledge is acquired in the situation of emergence of the problem being solved, i.e. the *situation of activity becomes a motivating environment, to which a person contributes by solving the problem.* SDL takes place at a workplace as well; thus the change sources occurring at a workplace become a positive motivating factor. The interaction of self-learning and the change occurring at a workplace influences more precisely planned learning as well as it reveals one more interaction between *SDL* as individual process and the aims of organisation's activity. This interaction can be defined by the environment of *SDL* by Knowles (1984), in which a person initiates the diagnosing of his/her learning needs, creates learning experiences, localises necessary resources and evaluates his/her learning. However the workplace can be limited by very specific functions and tasks, which can suppress the development of employee's competence. In this sense, according to Argyris (1962), formal structures of organisations and traditional practice of management are incompatible with the growth and development of an employee. In order to solve this contradiction the author suggests organisational learning, which represents the managerial attitude at the level of learning organisation[1]. In order to perform the analysis of artefacts of competence development, the integration of competence conception discourse and theory of social learning creates premises to treat context of activity and the change taking part within an organisation as learning environment, and the conception of a reflective practitioner (Schon, 1987) creates premises for an employee to treat his/her competence development as learning without reference to its forms. Thus *the conception of competence development mainly integrates three constructs,* i.e. *competence* and *its development* through *SDL* through activity treating the very activity as the *context* of employee's workplace.

Research methodology
Sample

In the research project in total are performed 2 samplings – for qualitative and quantitative phases. In the qualitative

phase had participated 24 research participants; in the quantitative phase had participated 500 respondents. In the article are presented the results only connected to the data that were received from focus group with the social service employees – 6 research participants. Such number of research participants is enough (Morgan, 1988) because the theoretical saturation were achieved in the process of data collection. The main criterion for selection into focus group was the work in social service sector. The focus group consisted of 6 social workers: 5 female, 1 male. The age means - 37,33 years; working experience mean - 7,33 years.

Methods
Data collection

In[2] the article are presented results that are connected 1st phase and focused on the employees from the sector of social services. The aims of the focus group was to analyze the qualitative data, establish the empirical models on the basis of qualitative research results and collect the empirical facts that would allow the extraction of (sub)categories[3].

Data analysis

For the data analysis were applied the qualitative content analysis according to Wamboldt (1992)[4].

Research tool

The semi-structured interview consisted of three parts that included the scope of questions[5].

Results
Dimension of an individual

The need for competence to perform the activity competent. The social workers are concerned with the individual analysis of the task, establishment of essential aspects of the task and consequential time – planning. They lack focus on achievement of high quality result.

---

[1] *Summarising dimensions of competence development in the context of SDL within a working environment* it became evident that:
• The processes of activity taking place at the workplace (within an organisation) influences dynamism and actualisation of internal structure of competence, subject to the context of activity;
• Not only internal structure of competence conception but also its dimensions (a person, process and context), which help the discourse of competence to unfold at different activities, is important;
• Competence development takes place by influencing elements of internal structure of competence through different processes of change at a workplace or activity. This influence upon competence development is consciously miscomprehended by an individual, thus it is treated so that *SDL*, the result of which, i.e. changing dynamism of competence can be identified by performing reflection, takes place. Thus new artefacts of competence development, which become new experience of learning, are created.

[2] In all the research project for *data collection* in 1st phase were applied the focus group interview and in 2nd phase - questioning survey.
[3] Those were the basis for establishment of research tools for the 2nd phase.
[4] 1) The choice of analysis unit, which represents the action, process, experience, perception and etc. (part of the sentence, sentence, paragraph). 2) Multiple reading of the focus group interview text. 3) Open coding of the selected interview text units by signing the essential thoughts, meanings that are expressed in an actual interview text unit. 4) Comparison of open codes by finding the identical and different codes. 5) Selection of different codes. 6) Unification of codes that are connected by the common meaning or idea into subcategories. 7) Unification of subcategories into categories according to common meaning, e.g., process, action, experience of research participants. 8) Representation in tables the evidences from interview texts by connecting to the actual subcategories and categories.
[5] I. Employee: What competencies you need in order to perform the high quality activities? How do you empower yourself for the professional development?
II. Process: How do you supply the lack of knowledge and capabilities in organizational environment?
III. Context: What situations in working environment stipulate you for the development? How the working environment influences your identification with the activity?

Those specialists are concerned only with the primary implementation of activity, what is the limitation to achieve the quality of activity. When employees discuss or work in group, the final aim of activity they discuss theoretically and avoid to be focused on possibilities and quality of performance of the intermediate activities. That shows the gap between the perceptions, reflections and activity implementation among social workers. The premises for *SDL* in working environment are established by implementation of long-term activities in groups or teams, where is the possibility to support each other, to be recognized and valued specialist[1]. The competence of social worker in activity includes integration of personal features, reflection, theoretical and practical knowledge. The social and cognitive competencies are the essential.

Generality and specificity of applied competencies by the employee. Social workers accentuated that in their activities is important to apply the capabilities flexible by transferring them into various contexts and situations. Employees mention the general competencies such as situational evaluation and activity planning. The specific competences are the adequate expression of emotions by interacting with clients, capability to harmonize the research with the experiential learning and representation of organisation and associates. The mentioned general competencies are the premise for social workers to perform the concrete activities at a time and to make the adequate decisions. The specific competences create to them possibilities for successful communication with clients, to avoid the ruled activity and not to come to personal prominence, and to perceive the self as organizational personality.

Acceptable learning modes. The social workers mention the following modes of learning that are accepted in working environment as crucial:

(1) Learning from personal and other experience especially by working with the clients and striving for the effective types for conveying the information; (2) Individual learning by searching the information and acquiring the new important knowledge; (3) Action learning by choosing the means and experiencing the changes in working environment – by this way the social workers have the possibilities to improve the personal practical actions and behaviour; (4) Co-operative learning by collaborating with others and in activity process communicating through questions and answers concerning the content and

analysis of actual tasks; (5) Formal learning (lectures, courses, seminars). The mentioned learning modes are connected to communication processes, when the social workers communicate, listen, answer and discuss with colleagues, clients, analyze the tasks in working groups and discuss the possible decisions and their implementation in practice.

Dimension of process

Compensation of deficiency in knowledge and capabilities in organizational environment. Social workers are not uniting in attitude concerning compensation of knowledge and competence deficiency in organizational environment. Here were extracted three attitudes[2]. The presented attitudes show that understanding between the organisation and every employee is important premise for self-empowerment for permanent improvement and *SDL* in organizational environment by experience sharing, discussing, and performing the common activities. It means that collaboration, communication, interactions (as a social competence) and planning, systematizing, evaluation of needs for learning and improvement (as managerial competence) are integrated naturally in contexts of in-action activities.

Need for knowledge and knowledge and competencies for entrenchment in organisation. Social workers mention that their knowledge and capabilities are the basic to entrenchment in organisation. The organisation values the competence of employee, because it is the possibility to expect that competent employee will perform the activity competent. Also it is important the positive evaluation from colleagues concerning the employee's competence, because it is the stimulus for the employee for improvement and it raises the professional dignity. The knowledge and capabilities is the premise for employee's organizational identification. At the same time, when the employee is seen as an expert, the organisation assesses his / her importance in professional context. The organisation supports the competent employees, but it is satisfied with the employee's "creativity", when they perform only the regulated activities. In this context emerges the controversy between the organizational attitudes to professionalism and entrenchment of employees in organisation through their knowledge and capabilities. On one hand, the organisation stipulates the motivated employees by various motivational means; on other hand, the organization is rigid in understandings about the employees' creativity, because it is connected only to regulated activities. This situation creates premises for limited organizational perceptions about the employee's competence, i.e. with the orientation only to

---

[1] Social workers mention the following competencies that are important for activity implementation in social services' area: self-confidence and empathy; specific knowledge include the general sophistication and specific practical knowledge „know how"; emotional intelligence is integrated with the knowledge and personal features, and it is reflected through specialist's capability of self-management by communicating with colleagues and emotional expression with the orientation to personal dignity of others, prognosis of consequences of inadequate communication by reflecting the personal experience in communication; capability to diagnose is based on perceptivity of social worker and situational evaluation; in self-reflection the essence is the capability of self-reflection in various situations; the communication is experienced through communication „one-to-one" with colleagues and clients; theory and practice is integrated according to practical situation and content; social workers perform the research by searching for the information and systematizing, and analyzing it, by implementing the evaluative research and preparing the publications; the activity analysis is expressed through experienced learnings; the complexity of thinking is implemented through multi-side evaluation of situation by seeing the common content and avoiding the spontaneous decisions, and making decisions according to possibilities and consequences.

[2] 1. Inadequate organizational attitude to employee's competence – employees and organization are opposite in their evaluations, and it shows the gap between employees and organisation, when the need for competence is evaluated.
2. Sharing the information in organization is realized, but here is a lack of system and planning in the implementation of those processes, because it is performed spontaneous.
3. Establishment of knowledge and competence development system by learning through the experience-sharing, and to discuss by being focused on the expressed need by every employee for individual learnings in organizational context.

routine, regulated activities that are performed according to fixated rules. Thus it is convenient to talk only about skills. This premise is supported by empirical evidence, because social workers mention that every employee individually performs the experience-sharing. It means that such process is only individual, not systemic initiative of employee. Employees note that the need for permanent learning especially emerges, when the inter-organizational activities are realized. It is evident, because the permanently developed and improved competence of employees creates premises for successful inter-organizational activities. The information sharing and interchanging between organizations creates the situations for the social worker to collaborate in organizational and inter-organizational environment. The inter-organizational collaboration creates the area for *SDL* of employees. So why is evident that organizational closeness is the limit for employees' self-development and *SDL* in working environment.

Dimension of context

The working environment, which influences the identification of the employee with the activity[1]. The chaos in activity and experienced tension in working environment negatively influences the involvement of employee to activity and his / her conscious participation in achieving the organizational aims. Thus the organizational endeavour to satisfy the non-material and material needs of employees is the stimulus for those specialists not only to empower for improvement, but also is the premise for the identification with the organisation.

Possibilities of the employee to reflect on activity. Social workers reflect on performed activities not only in working environment. The individual reflection in- and after-action is the balance for collective reflective discussion, but the value of the latter is not ignored. The reflection on action is stipulated by discussions one-to-one or in groups by sharing the experiences and solving the problems. The informal discussions on activities in the groups of colleagues are the premise for individual reflections of social workers about the performed activities.

Availability of individual or group reflections for employee. The individual reflection is valued as prior to group. Social workers note that group discussions lack of sequence. By reflecting individually the social workers are more concentrated and analyze consequently the

actual situations, plumb the depths concerning the actual situations, activities and actions.

Conclusions

The context of competence structural development highlighted that in the structure of general competence of social service sector employees do not extracted the single capabilities, knowledge, skills, attitudes and values. Every capability, which is applied in social service sector, is connected to several competencies that are naturally integrated in particular contexts and situations. It means that every particular capability is an element of several competencies and in order to realize the particular capability in activity / working environment spontaneously establishes the integral competence, which spontaneously becomes general competence of the employee. Thus in working environment the structural model of competence spontaneously transfers into holistic model.

The relationship between competence and development is meaningful only when it is connected to the employee and organization, because in this interaction and / or interface emerge the process dimension: employees in organizational process and context have the self-directed premises for learning, development, improvement and at the same time the potential of the employees also grows in individual level, and the organizational potential – in organizational level. The activity changes in organization and outside the organization also establishes the self-directed premises for employees to learn autonomously and by interacting with others in activity context (working environment). In the latter the employee gives the new meanings for personal activities autonomously and collectively (working in groups and teams) and that becomes the resource of *SDL*, which naturally stipulates the changes and new experiences of the employee as the learner in working environment. That becomes for the employee and organization the permanently changing and continuing resource or potential for *SDL*. It means that the meaning, activity, collective and integrated activity in organization through identification with the organization and social group (organizational community) and the identity by discovering the self in activity connects the holistic understanding of competence with the concepts of development and *SDL*.

---

[1] The factors influencing the employee's identification with the activity are the following:

1) Integration of employee's autonomy and collaboration, when social workers have freedom to participate in decision-making; in organisation dominate dignity-based relationships; in employees' discussions, team or group working individual work, are discovered the activity areas where every social worker individually or their groups see their working area and experiences the professional self-realization, and the performed activities stipulate the employees' satisfaction.

2) The positive attitude of organizational administration to employee's activity and self-improvement, which includes the organizational attention to employee's needs and expectations, and material resources. The mentioned elements for social workers create premises for identification with the organization.

References

1. Argyris, Ch. (1962). Interpersonal Competence and Organizational Effectiveness. Homewood, III.: Dorsey Press.
2. Barnett, R. (1999). Learning to work and working to learn. In: Understanding Learning at work. D. Band & J. Garrick (eds.). London & New York: Routledge.
3. Beckett, D., Hager, P. (2002). Life, work and learning: practice in postmodernity. UK: Routledge.
4. Brockett, R., Hiemstra, R. (1991). Self-direction in adult learning: perspectives on theory, research, and practice. London: Routledge.
5. Candy, P. (2001). Self-direction for lifelong learning: A comprehensive guide to theory and practice. San Fransisco: Jossey-Bass.
6. Cheetham, G., Chivers, G. (1998). The reflective (and competent practitioner: a model of professional competence which seeks to harmonise the reflective practitioner and competence-based approaches. Journal of European Industrial Training, 22 (7): 10 - 15.
7. Csikszentmihalyi, M. (1990). Flow: The Psychology of Optimal Experience. New York: Harper Collins Publishers.
8. Davis, B., Sumara, D., Luce-Kapler, R. (2000). Engaging Minds. Learning and Teaching in a Complex World. UK: Lawrence Erlbaum Associates Pub.
9. Delamare le Deist, F., Winterton, J. (2005). What is competence? Human Resource Development International, 8 (1): 27 – 46.
10. Garavan, T. (1997). Training, development, education and learning: different or the same? Journal of European Industrial training, 21: 39-50.
11. Eraut, M. (1990). Developing professional knowledge and competence. New York: Basic Books.
12. Fischer, G. (1998). Beyond 'Couch Potatoes': From Consumers to Designers. Paper presented at the 3rd Asia Pacific Computer Human Interaction Conference, Kanagawa, Japan. Prieiga internetu <http://www.cs.colorado.edu/~gerhard/papers/apchi98. Peržiūrėta 2008-09-01
13. Hill, J., Hannafin, M. (2001). Teaching and learning in digital environments: The resurgence of resource-based learning. Educational Technology Research and Development, 49 (3): 20 - 30.
14. Hird, V. (1995). Nursing competencies: the artistry of Nursing. http://www.clininfo.health.nsw.gov.au/hospolic/stvincents/1995/a05.html Peržiūrėta 2002 02 04.
15. Knowles, M. (1984a). The Adult Learner: A Neglected Species. 3rd ed. Houston, TX: Gulf Publishing.
16. Knowles, M. (1984b). Andragogy in Action. San Francisco: Jossey-Bass.
17. Lave, J., Wenger, E. (1991). Situated Learning: Legitimate Peripheral Participation. Cambridge, UK: Cambridge University Press.
18. Moore, M. (1980). Independent study. In R. D. Boys, J. W. Apps (Eds.). Redefining the discipline of adult education. San Francisco: Jossey-Bass. p. 16-31.
19. Morgan D. (1988). Focus groups as qualitative research. London: Sage.
20. Rothwell, W., Kazanas, H. (1996). Human resource development: a strategic approach. Massachusetts: HRD Press Inc.
21. Schön, D. (1987). Educating the Effective Practitioner. San Francisco: Jossey-Bass.
22. Song, L., Hill, J. (2007). A conceptual model for understanding self-directed learning in online environments. Journal of Interactive Online Learning, 6 (1): 26-34.
23. Spencer, L., Spencer, S. (1993). Competence at work. USA: John Wiley & Sons, Inc.
24. Tight ,M. (2004). Key concepts in adult education and training. UK: Falmer Press.
25. Wamboldt B. (1992). Content analysis: method, applications, and issues. Health Care for Women International, 13: 131-32

Vilma Žydžiūnaitė, Daiva Lepaitė

Kompetencijos vystymas realizuojant savaiminį mokymąsi darbo aplinkoje socialinių paslaugų sektoriuje: asmens, proceso ir konteksto dimensijos

Santrauka

Socialinių mokslų srityje atliekami tyrimai atskleidžia žmogiškųjų išteklių vystymo ir jų efektyvaus valdymo procesus organizacijos lygmenyje, žmogiškųjų išteklių vystymo ir organizacijos veiklos tobulinimo procesus. Kompetencijos struktūros nustatymo tyrimai padeda tikslingai vadybiniu požiūriu diagnozuoti kokios yra organizacijos darbuotojo kompetencijos spragos, kurios turi įtakos organizacijos veiklos kokybei. Socialiniuose tyrimuose žmogiškųjų išteklių vystymas transformuojasi į *kompetencijos vystymą* asmens lygmenyje, o *vystymas* edukaciniuose tyrimuose vyksta *įvairių intervencijų ar šiuolaikinių mokymosi metodų* taikymo profesinės veiklos aplinkoje metu. Kompetencijos vystymas gali vykti formaliuoju būdu ar neformaliuoju būdu. Pastaruoju metu atliekamuose tyrimuose pradeda atsirasti ir *savaiminio mokymosi* (SM) būdas kaip atskiras reiškinys ir nebesiejamas su neformaliuoju mokymosi būdu. Tačiau SM koncepcijos tyrimai yra labiau teoriškai konceptualūs nei turintys empiriškai pagrįstus įrodymus. Taip pat stokojama empirinės-faktinės medžiagos, pagrindžiančios ir įrodančios SM ir kompetencijos vystymo ryšio dimensijas asmens darbo vietos aplinkoje. Atliekami tyrimai atskleidžia SM ne kaip asmens (darbuotojo) aiškiai nesuvoktą procesą, o siekia nustatyti, kaip darbuotojui pačiam suvokti SM *ir kompetencijos vystymosi racionaliuosius ryšius*. Šie ryšiai gali būti atskleisti tyrimais profesinės veiklos aplinkoje, kuri nukreipta į įvairių *socialinių paslaugų teikimą*. Darbuotojai, dirbantys šias paslaugas teikiančiose organizacijose nuolat susiduria su netipinėmis situacijomis, kurias veikia daugelis sunkiai nustatomų aplinkos kintamųjų. Todėl įvairių kintamųjų įtaka būna sunkiai pamatuojama, o tai sustiprina sąmoningai nesuvokiamą SM, kuris vyksta nepertraukiamai asmeniui dirbant ir sąveikaujant. Esant šiai prielaidai profesinės veiklos darbo aplinkos kaitos šaltinių racionalus nukreipimas kompetencijos vystymosi tikslams turi būti fiksuojamas kaip veiklos valdymą tobulinantis veiksnys. Šiame straipsnyje pristatoma **tyrimo problema** remiasi vienu klausimu: „*Koks turinys sudaro asmens, proceso ir konteksto dimensijas, susietas su kompetencijos vystymu realizuojant SM darbo aplinkoje socialinių paslaugų sektoriuje?*" **Tyrimo objektas** – kompetencijos vystymas remiantis SM darbo aplinkoje. Šiame kontekste neišryškinta konteksto dimensija, kuri daro esminę įtaką kompetencijos vystymui darbinėse aplinkose, vykstant veiklos kaitai, sąveikaujant tarpusavyje darbuotojams, darbuotojams ir klientams, bendradarbiaujant organizacijose ir už organizacijų ribų. **Tyrimo tikslas** – atskleisti ir pagrįsti kompetencijos vystymo dimensijas realizuojant savaiminį mokymąsi darbo aplinkoje socialinių paslaugų sektoriuje. **Tyrimo dalyviai** buvo socialiniai darbuotojai. **Metodai: duomenų rinkimas** realizuotas taikant focus grupių metodą; *duomenys analizuoti* taikant kokybinę kontentinę analizę. **Tyrimo rezultatai.** Bendrosios kompetencijos struktūros vystymosi kontekstualumas atskleidė, kad socialinių paslaugų sektoriuje dirbančių darbuotojų bendrosios kompetencijos struktūroje nestebimi pavieniai gebėjimai, žinios, įgūdžiai, nuostatos ar vertybės. Kiekvienas gebėjimas, taikomas socialinių paslaugų sektoriuje susijęs su keliomis kompetencijomis, kurios konkrečiuose kontekstuose ir situacijose natūraliai, savaime integruojasi. Tai reiškia, jog kelių kompetencijų elementais yra kiekvienas konkretus gebėjimas ir jam realizuoti veiklos aplinkoje savaime susiformuoja integralioji kompetencija, kur savaime tampa bendrąja darbuotojo kompetencija. Tai reikštų, jog veiklos aplinkoje kompetencijos struktūrinis modelis savaime „perauga" į holistinį modelį.

About the authors

Vilma Žydžiūnaitė, PhD of Social Sciences (Educational Science), Professor, Mykolas Romeris Uinversity, Faculty of Social Policy, Department of Education Activities. Research interests: qualitative research methodology, competence development and evaluation, vocational training and education in, leadership and ethics in health care sector. E-mail: vilma.vilma@ymail.com

Daiva Lepaitė, PhD of Social Sciences (Educational Science), Assoc. Professor, Vilnius University, Center of Examination. Research interests: project management, competence structure and development, curriculum evaluation, human resource development. E-mail: daiva.lepaite@ec.vu.lt

CORPORATE IMAGE AS A PRECONDITION OF COMPETITIVE ADVANTAGE

Daiva Žostautienė[1], Vilma Marcinkevičienė[2]

[1]*Kaunas University of Technology, Lithuania,* [2]*joint stock company NEO ALJANSAS, Lithuania*

Abstract

There are a lot of companies producing similar products; consequently it might cause difficulties for customers to orientate in the market. Only by creating strong and positive customers' view of the company, the company may be assured of gaining customers' loyalty. A positive image is one of the main prerequisite for the company seeking long-term and stable success in business; it is the main tool that helps to attract new customers and partners, promotes sales and company's development. The company that is unable to define exactly its uniqueness and competitive advantages compared with its competitors will be forced to yield its market portion As a result, the company must observe the image created about the company in the market and decide if created image satisfies the company and influences constant beneficial results.

The positive image helps the company to acquire strong competitive advantage over the others. In order to attract more customers and increase its influence, and the market share, the company must point out its major target groups of activities that help to assure successful company's development and implementation of long term company's goals. The importance of the image can be declared by the fact that the company with strong positive image maintain higher sales figures compared with the company with negative image in the market. What is more, companies that implement stronger positive image have more abilities to influence higher market price of goods/services. There are declared theoretical aspects supported by research results, which reveal positive correlation between positive company's image creation and company's competitiveness.

Keywords

Image, competitiveness, competitive advantage.

Introduction

Having today's market conditions, all companies, whether it is a manufacture, sales representative, or service providing company, all must increase their competitive advantage in order reach the goal to be the most competitive and stay in the market. As a result, they must organize their marketing policy in the way to affect the customer to choose only their offered goods and services instead of competitors'. There are many tools to reach that goal; however, the most crucial device that would influence customers' loyalty is company's image. The image is very important for the development of sustainable, loyal and highly skilled personnel, which will play a significant role in establishing the most important company's goals.

According to R.Virvilaite and V.Janonis (2007), company striving to achieve better results in the market in comparison with its competitors needs to acquire and retain particular uniqueness that cannot be imitated and would provide a competitive advantage. In today's economy, it is very important for a business to create a good image, but more important it is to maintain it in a high level. Every company must pay special attention to the company's image creation in developing its business strategy. Image and means used in image formation must be chosen, according to the company's activity and product specifications. Each company is unique; consequently, the image of a specific company can not be the same as other company's. It must reflect the company's exclusivity and uniqueness.

The object of investigation: the company's image.

The goal of the study: to reveal the company's image as an important competitive advantage assumption.

   Objectives of the study:

   1. Disclose the concept and the essence of the company' image

   2. Highlight the need for the formation of the competitive advantage.

   3. Disclose the importance of the company's image in gaining a competitive advantage.

   4. Provide service company's image study methodology.

   5. Provide research results' interpretation.

Research methods: scientific literature analysis and summary, survey questionnaire.

The concept of the company's image

Image expression's "parents" are called V. Gardenia and S. Levi (1955), who were the first called image as a personal knowledge and understanding of the object in the environment (Gardner, Levy, 1955) in their article "The Product and the Brand" (1955) V. Trunovas (2007) describes image as a strategic tool to achieve the objectives of the company (Trunov, 2007). Image building and strengthening is the activity, which results do not appear immediately and results are not always equal to the input. However, it often can be an excellent investment in the company's future. Different management and marketing specialists provide different definitions of the image (Table 1).

According to the definitions in Table 1 the following conclusions may be drawn:

- order to describe the image, two sides are necessary: one - a source of information and the other - the recipient of that information;
- Image is formed information about object that actually exists in reports, symbols;
- In the communicational process, the image "passes to In
- the audience";
- Image is not necessarily real characteristics of the object, but it is accepted exactly in this way.

Table 1

Variety of the Image Concept

Year	Author	Image concept
1956	K.E. Boulding	Synthesis of human perception and understanding of the perception.
1991	R. Norman	A model that express our expectations and perception of a specific phenomenon. The model is not fixed and defined; it is formed by each person or a group of people individually.
1998	I. Siniajeva	It can not be framed. It is either framed observation in a society by itself or business communication.
2000	D.Leontjev	An image is an impression constructed deliberately and consciously, sight/picture is what evolves spontaneously. The sight/picture will become an image only created particularly to be.
2004	J. Maščinskienė, R. Kuvykaitė	Unique set of associations, which are formed in customers minds at a specific point of time.
2007	J. Burns	Firstly, the image of a company is shaped by company's intangible assets - employees, the ability to manage, and only then cash that are in company's account.
2008	I. Alešina	Impression of the company in a society.

The concept of "image" is used in the scientific literature various meanings. Some authors apply this term when they talk about individual human characteristics: behavior, and clothing style, the style; others emphasize the importance of corporate image. Authors (Počepcov, 2001) that emphasize the importance of personal image mainly pay attention to the clothing, language, gestures, etiquette issues, describes the details of clothing coordination rules, stresses necessity to develop written and oral communication skills. Authors that emphasize company's image importance pay main attention to the definition of the image itself, its questions of the development by using company's advertisement, public relations and other means. Company's image concepts are very ambiguous, since scientists evaluate it from different positions highlighting different aspect. It is impossible to create a definition, which would include all diversity of the concept. In this case, it is most accurate to apply G. Drūteikienės (2007) definition of the company's image: the image of the company as a combination of ideas, feelings, perception and imaginations, that a person or a group has related to the company and is not influenced by material and nonmaterial elements of the organizational elements, communication and personal/social values.

Necessity of creating competitive advantage

Having current market conditions, when a level of competition in the market is high, and the market is saturated with goods and services, standard strategies lose power to effect positively and gain desired goals. According to M. Casson (1995), a competitive advantage is a source of economic rents, which can be possessed by companies with valuable tangible and intangible resources, which competitors do not have. The advantage is usually gained by appropriate sources of technology and the advantageous business strategy; however the company that dispose only resources may guarantee only a short-term competitive advantage, but for a long-term profitability and continuous growth to be maintained it takes much more. It should be always taken into consideration that technology is improving very quickly,

it can be easily copied, innovation is spreading rapidly and is also rapidly becoming obsolete, and the market leader is no longer the one who has the latest technology but the one that is able to offer new or refined product, and those whose competitive advantage is determined by unique resources (Drūteikienė, 2007).

According to A. Sabonienė (2000), implemented competitive advantages ensure success of the company's competitive capability. However, in the development of competitive advantages of enterprises, the objective is not only the use of cheap labor and favorable interest rates; the goal is to create an effective and active industrial sector, which would produce high quality and competitive goods in the domestic and international markets.

Strategic selection of company's activities develops not only competitive advantages, but also enables the maintenance of competitive advantage. In addition, perfectly coordinated activities are very difficult to be copied by competitors and sometimes it is impossible. According to M. Porter, highlighting unique characteristics in the company's competitive strategy, greatly increases the company's unique industry position and strengthens the competitive advantage (Maksvytienė, 2002).

Competitive advantages may be related to various aspects of the company, the price of goods or services, the range of goods (services), quality of the goods (and services), the level of services, etc. However, a significant proportion of the factors may be easily imitated by competitors. A slight advantage over competitors may not have any affect in maintaining strong competitive advantage. Therefore, businesses must seek to gain long-term advantages. Long-term competitive advantages are advantages, which real benefit is that they cannot be imitated by competitors easily and within a short period of time as they depend on the relations between company and other participants of the market (Zvireliene, Buciuniene, Salciuviene, 2007). They do not own the advantages, only to facilitate the competitive struggle. Remaining long-term competitive advantage in the maintenance becomes problematic when companies operate in rapidly developing markets or branches.

Rapidly changing demands or strong pressure of competitors, their rapid increase, innovation, rapid innovation and market growth, all those factors of competitive advantage makes preservation of competitive advantage to become more complex. According E. Rühle (1996) a company can not successfully work maintaining only one competitive advantage in hypercompetitive environment. Strategy under these conditions should be constant improvement of advantages of all temporary relationships mixture. Under these conditions, the company's activities are the new endless creation of new competitive advantages and attenuation of advantages. For this reason, the only advantage is sustained ability to create new advantages.

Effective image building techniques investigation is promoted by a rapidly spreading the value-based corporate management theory. G. Drūteikienė (2007) confirmed that most frequently business success in the market is determined by taking all the company's managed resources, however not all company's assets can be declared in its financial reports (usually only physical values are declared). Company's image is also important for its finances management. It is a part of intangible assets, and may be converted in capital/money value and can be included in the company's balance sheet assets. Here it is called prestige; its capital/money expression in English is called "goodwill." This financial value most often appear when a good company is going to be bought, when a buyer pays for it more than the assets value shown in the purchased company's balance sheet. Value of the company identification is very important for evaluating company's shares. To determine the value of the business is very important for the analysis of corporate acquisitions, mergers, and making right decisions.

The importance of the image in gaining competitive advantage

The company that is creating its image in order to gain the competitive advantage should not consider that the only aim is a favorable image creation for its customers, because it would loose the opportunity to attract more potential clients and increase their influence over others, and receive favorable decisions for themselves. As a result, there must be identified main influencing groups. A typology of company influencing groups is presented in Figure 1.
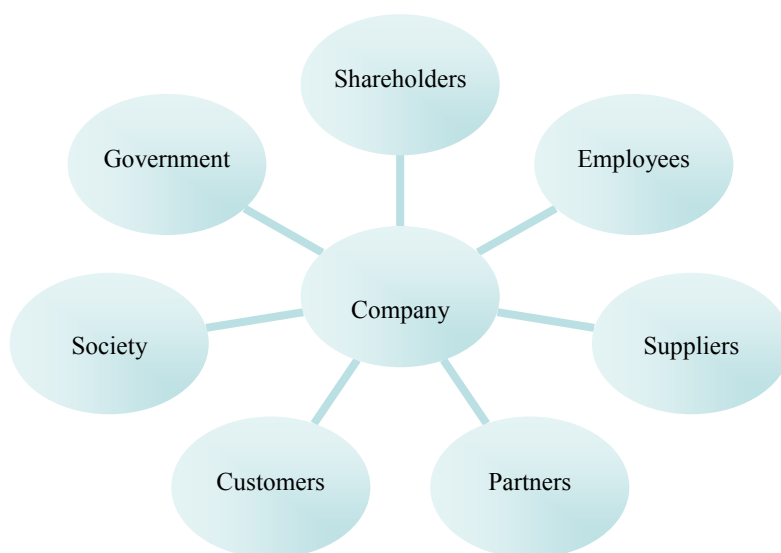

Figure 1. A typology of company influencing groups (D. Bickerton, 2000)

Given the influence of group interests, the concept of competitive advantage is interpreted as firm's ability to create and provide higher value than competitors and achieve higher profitability than average industry (Miller, 1999):

- Ordinary shareholders: profitability, dividends, share price;
- Customers: suitable products/services;
- Employees: working place, salary, career opportunities;
- Suppliers: turnover through sales, growth opportunities, supply stability;
- Society: jobs, economic growth, civic well-being;
- Partners: stable business, working capital.

A company, which cannot specifically identify its differences and what it can offer unique, will be forced to resign its positions, therefore, it must decide whether created image satisfy the company fully. As a result, it is necessary to evaluate the public's view about the company and later the company's managers must decide whether they are satisfied with the current image. According to G. Drūteikienės (2007), in order to create the most favorable image of the company, which would help to achieve competitive advantage and increase its value, there should be implemented the image management cycle. A rational management cycle consists of three phases - planning, implementation and control, which consists of five stages (Figure 2): Self-analysis, company's image strategy formulation, company's image building programs preparation, company's image-building programs implementation, and corporate image building programs evaluation.

| Self analysis | → | Strategy formation | → | Programs preparation | → | Programs implementation | → | Programs evaluation |

Figure 2. Stages of image formation (G. Drūteikiene, 2007)

Evaluation closes the image creation circle and the cycle starts again from the beginning: the image is planned, taking into account the evaluation; next it is organized, implemented and evaluated again. Due to the existence of such an image creation cycle there is a continuous and long-term planning process.

Like any other process, the company's image-building program must be completed by evaluating, which is done in order to determine the effectiveness of this activity. The evaluation must answer the following questions:

- What is the effectiveness of these programs in achieving defined objectives?

- Can the results of the program be explained by other processes which are not included in this program?

- Did these programs use effectively resources, taking into account the fact that these resources could be used for other purposes?

V. Gudonienė (1999) proposes to evaluate the effectiveness of image creation programs by several parameters:

1) Audience awareness and understanding, in order to know whether the target group received the message, was attention paid to it and whether it was understood;

2) Memorizing and responding, mainly used in investigating the effectiveness of advertisement, when a few weeks after the ads it is desired to determine whether the target audience remembers the message, its key themes, concepts, contents;

3) Attitudes and preferences, in order to determine not only what people say, but what they know, think, feel, as ready to act;

4) Behavior, where the aim is to learn, or at least to the extent the behavior of the target audience (Gudonienė, 1999).

Image-building efficiency programs must be also related with all company's objectives, targets and results (sales growth, profitability, market share, product price, etc.). Even before planning of image-building programs is started, it is necessary to identify clear set of company's goals and criteria by which the program will be evaluated. However it is very important to evaluate that the positive image creation is a long process based on knowledge. It is not enough to direct the attention to the actions of several months and reach for good results in this process. The companies must create, coordinate and control this activity step-by-step (Glinskiene, Gudas, Rajeckaite, 2007).

Company's image is very important in gaining advantage over competitors. It is the image of the company that gives uniqueness for the company, because in today's world, economical value is no longer merely a source of material goods production, it is also intangible assets' development and management. Researchers when analyze specific sources of company's advantages identify intangible assets – knowledge, the image and reputation (Caves, 1996). Thus, company's image in the scientific literature is declared as a very important intangible asset, which is extremely difficult to create, copy (Barney, 1991). Besides this, company's image effects the customers' evaluation of perceived service quality which consists of technical and functional quality (Žostautienė, Čerkauskytė, Clotey, 2007). A. Cretu and R. Brodie (2007) made the conclusion that the company's image has a rather broad influence on perceptions of customer value and customer loyalty. Therefore, this factor becomes very important in order to increase company's competitiveness.

According to K. E. Clow and D. Baack (2007), the image of the company consists of tangible and intangible elements (see Table 2).

Table 2

Company's Image Elements (K.E.Clow and D.Baack, 2007)

Material elements	Nonmaterial element
The price of goods or services	Company's employees and the environment protection
Place, where the good is sold	Company's personnel's ideals and beliefs
Place, where the good is produced	Country's culture and the company's place
Advertising, promotions and etc.	Media
Company's name and logo	Behavior of employees
Packaging and label	

As we can see from the table above, company's image creation involves not only material elements. Negative media or negative local culture influence can damage greatly company's good image, financial circulation and profits, particularly working in the international or global scale. Organization image can be derived from many factors.

According to G.Drūteikienė (2002), A.Jagelavičienė, J.Stravinskienė, A.Rūtelionė (2006) the most important image factors are organization individuality and its identity, respectability, relates honesty, loyalty, commitment, strengths, perfection and dependence.

According to B. Vengrienė (2006), company's image is not only important to customers it is also important to

staff, workers' assembly, resource acquisition, its share price and capital decisions of owners.

Company's image is important not only to customers and employees, it is also significant for business partners – management of resource with which the company faces in its activities by way of purchasing equipment, materials, raw materials, obtaining loans, insuring their assets and etc. Good image helps in negotiations to obtain more favorable terms or discounts, and, conversely, if uncertain image is formed, negotiations always become complex.

Important thing is that image is necessary even for financial activities maintaining companies in order to gain success. According traditions these types of companies never required having marketing methods, telling the truth, these types of companies dispresed these methods. However, today companies performing financial activities are increasing, their increase world widely and the image of the company becomes important in order to be able to compete with competitors. It can be claimed that every company by its activities is seeking to gain biggest financial profit possible, and as better image it has as easier it is to gain it.

Positive customer's attitude to the company offering goods for the market is the base for successful marketing activity. Well know and good image company effects customer's evaluations and making decision on goods purchasing.

It can be claimed that good image of the company becomes a necessary condition to achieve a stable and long-term business success, it helps to attract new customers and partners, it also helps to promote and increase company's sales volume, increase the company's access to external financing sources, high quality resources necessary for the company and by that way leads the company to its dynamic improvement and development. There was made a study in order to clarify, how a positive company's image impacts performance of the company.

Service company's image study methodology

Analysis of scientific literature showed that the positive image has significant impact on the company's sales volumes and the goods/services price. When a company does not pay attention to its image formation, the society forms an image by itself. However, in this case the company cannot control the situation and cannot shape public view. Since a profit is the main goal of each company, for this purpose the company must focus a lot on creating a positive image.

Image must to attract certain segments of the market, consumer groups, but sometimes the creation of a favorable image does not justify the costs incurred. It is extremely difficult to create a universal image that would be favorable to all consumer groups, which have dealings with the company. As more the image is accurate and specific as more it is possible that it will be suitable only for certain groups of consumers and at the same time, switched to other groups of users rejection. This is a very serious deficiency. In order to avoid that, the company tries to form a neutral image. It is the image formation

wanted by JSC "Neo Alliance", since this company contains very different consumer groups:

Issue of a study: if the company does not form a positive image, it can lead to performance degradation, and in some cases even can lead to a bankruptcy.

The aim of the study: to find out the individual service user observations on the current JSC "Neo Alliance", known under "IMPULS" name, image and identify the main factors that have the greatest impact on company's competitiveness.

Declared scientific literature analysis has helped to organize the conduct of the investigation. The study was conducted using a quantitative approach - questionnaire survey.

In questionnaire survey, the respondents themselves (in writing) responded to questionnaire questions. To ensure the quality aspect, the respondents in forwarding them or giving them questionnaires, were introduced with the issues that subjective view could lead to some difficulties. Questionnaires were delivered personally or sent by e-mail.

The sample group was chosen on the basis of random selection method, based on the fact that each population member has an opportunity to enter the sample because of the general population, respondents selected on the basis of the mechanism incidentally.

Sample group consisted of Panevezys city and district residents. Since according Lithuanian Department of Statistics data for 2008, there were 156639 people living in Panevezys area, the study sample size was determined by V. Paniotto sample size determination formula (Luobikienė, 2000). Formula:

$$n = 1/ (\Delta^2 + 1/N);$$

where: n - the sample size;

Δ – standard deist ion (Δ = 0.1 when the degree of reliability is 90 percent).

N - Whole number of members (N = 156639). Sample sizes determined by formula - 99.93. Residents were surveyed in January and February of 2009. There were 130 questionnaires distributed. 109 questionnaires were returned, 5 of them were damaged. In order for the sample group to be representative, there were included not only Panevezys residents but also district residents, who are potential JSC "Neo Alliance" service users.

The study questionnaire consists of 23 questions, listed in logical sequence according to aspects wanted to be defined. First, it was tried to clarify the importance of the company's image. Three units of questions were dedicated to clarify whether the positive image has an impact on a company's performance and what are the important factors in forming an image.

Next block of questions was designed to clarify "Impulse" reputation formed and its identity. It is important to find out what the reputation among consumers of the company is, since it forms the basis of the company's image. The identity of the company highlights he the main aspects that makes "Impuls" different/unique from other companies that provide same services.

Customer service is very important in improving the company's image. Service quality levels were intended to be clarified by four questions in the survey.

Aspects that describe company's demographic and geographic characteristics were included last set of 5 questions. These five block questions identify respondents' gender, age, incomes, and place of living.

Respondents had to choose one best suitable answer form possible responses provided in the survey.

Results of the study

This study aimed to clarify the image of JSC "Neo Alliance", managing "Impuls" clubs formed among Panevezys city and district residents.

Most of the resident (84%) pointed that company's image is important in choosing the company. 8% answered that image is not important, and the rest 8% stated not having the opinion on this question. Research results showed that consumers' opinion is the same as scientists' observations stated in the article, that image has a great impact for company's results (see Figure 3). That was also proved also by research results. 67% of respondents stated that image has a very big impact (34%), and big impact (33%) (see Figure 3).
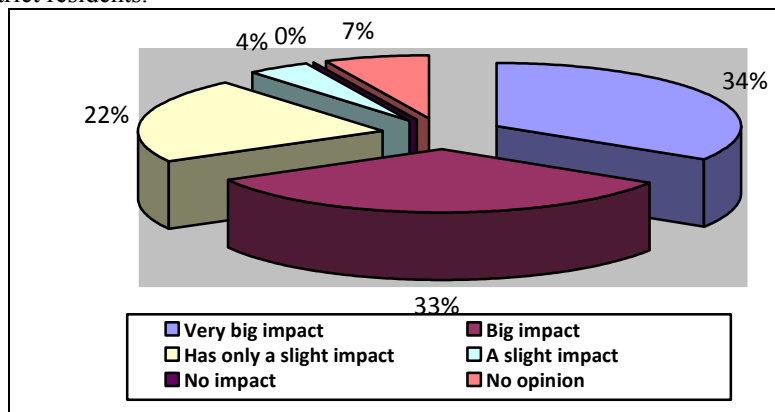
Figure 3. Image importance for company's results

The pricing system in this company is related to attracting customers, and their desires and whished realization. In order to meet all customers demands, variety of services were created and constant discounts are provided so that customers were able to use their services always.

One of the main aspects that have an impact in forming positive company's image is the quality of customers' service, since the customer is the main element of a company providing services. The better the customers will be served, the better the image of the company will

be earned. According to the December Abingdon (2008), when the company becomes highly visible, it is necessary to initiate the formation of public opinion, that it would create company's image associated with high quality and good product (Abingdon, 2008). Survey respondents had to indicate how they value the quality of services in "Impuls" (see Figure 4). 59 % of respondents assessed that service is very good and 26 % answered good, that indicates that customers are satisfied with the quality of service.
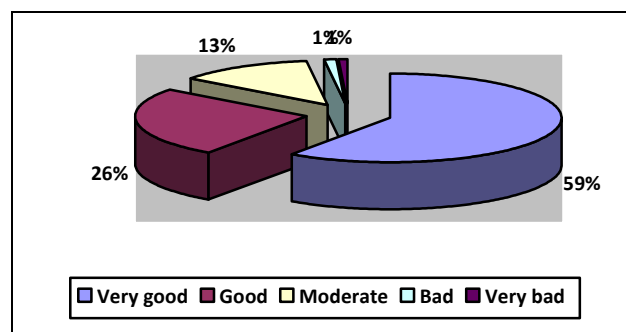

Figure 4. "Impuls" quality service

These results are also confirmed by the fact that even 95 percent of respondents to the another question indicated that they would recommend "Impuls" services to their relatives and friends.

It should be pointed that "Impuls" image is filtered experienced service quality. This certain person's or group created image (whether good or bad) is a

reflection of reality and the image that determines, whether you choose it or the other company providing sports services. "Impuls" image is created by workers and the environment, service, company culture and market segment.
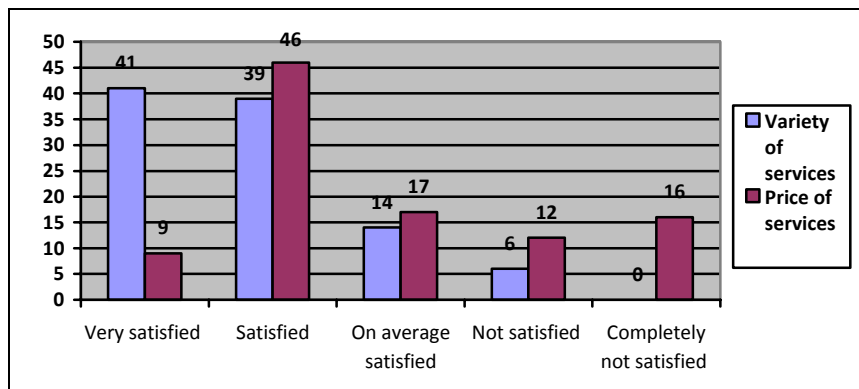
Figure 5. Customers attitude toward "Impuls" provided variety of services and price

Figure 5 shows consumer's approach to "Impuls" variety of services and prices. As it can be seen form the table, even 80 % of users stated being very satisfied (41 per cent.) and satisfied (39 %.) with the variety of services that the company offers them, however 28 % of respondents indicated that the prices are too high. Same respondents JSC "Neo Alliance" image marked as sufficiently positive, which indicates that they adopt the fact that for high-quality services there can not be the lowest price.

Current market conditions, when there is a great variety for choice, the main problem is not to provide services, but to sell them. At this point, image importance and strengthening is revealed. JSC "Neo Alliance" tries to use all means to gain competitive advantage in the service market.

Conclusions

1. Company's image can be defined as a set of functional, emotional elements, common for a number of enterprise and making it different from other companies.

2. When the market is filled with a lot of different companies producing similar goods, it is difficult for many buyers to orientate in the market, so they often choose well-known enterprise's product. Many corporate executives clearly realize that the positive image of the

company is a great value. Positive image is the main mean that helps in gaining the greatest competitive advantage over the other firm. In order to attract more customers and increase their influence and market share the company has to distinguish its fundamental impact on the activities of groups, which help to development successful business and long-term enterprise objectives achievement.

3. A positive image simplifies access to the various resources (financial, human, information, etc.) it also can influence increase of company's market value. The importance of the image can be seen in the situation that firms with a positive image, bigger sales, compared with the company that has a negative image. What is more, the company that has a better image may set a higher sales price.

4. Based on the current corporate image studies, and taking into account the cost of the survey, a quantitative survey - questionnaire survey, was one of the best JSC "Neo Alliance" image study.

5. According to the survey results the conclusion can be made that customers evaluate JSC "Neo Alliance" image importance and pay attention choosing the service supplier. Company's exclusivity and service quality, company's efforts to stand out from the others are factors, which contribute a positive image, which becomes an assumption of competitive advantage.

References

1. Abingdon D. Nestandartinė rinkodara. Vilnius. 215 p. ISBN 978-9955-460-75-6. 2008
2. Barney J. Firm resources and sustained competitive advantage. Journal of management, No. 17 (1), 1991. p. 99-120.
3. Bickerton D. Corporate reputation versus corporate branding: the realistic debate. Corporate Communications: An International Journal. 2000.
4. Burns J. 2007. Studying the Role of Organization's Image. [2009-01-10]. http://ezinearticles.com/?Studying-the-Role-of-Organizations-Image&id=47246.
5. Boulding K.E. The Image: Knowledge in Life and Society. University of Michigan Press. 1956.
6. Casson M. Enterprise and Competitivenes. Oxford. 1995.
7. Caves R. E. Multinational Enterprise and Economic Analysis. Cambridge: Cambridge University Press. 1996.
8. Clow K. E., Baack D. Integrated advertising, promotion and marketing communications, 3 ed. Prentice Hall. 2007. 638 p. ISBN 978-0-19-457906-3.
9. Cretu A., Brodie R. The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective. // Industrial marketing management, Vol. 36 (2), 2007.p. 230 – 240.
10. Drūteikienė G. Organizacijos įvaizdžio valdymas. Vilnius. 2007. 99 p.
11. Drūteikienė G.. Organizacijos įvaizdžio kūrimo procesas ir jo vadyba. 2002. Vilnius.
12. Jagelavičienė, A., Stravinskienė, J., Rūtelionė, A. Image factors which determine the choice of the bank. Engineering economics = Inžinerinė ekonomika. Kaunas: Technologija. ISSN 1392-2785. No. 4(49). 2006. p. 87-94.
13. Janonis V., Virvilaitė R. Brand image formation. Engineering economics = Inžinerinė ekonomika. Kaunas: Technologija. ISSN 1392-2785. No. 2(52). 2007. p. 78-90.
14. Gardner B., Levy S. J. The product and the brand. Harvard Business Review. Vol. 33 March-April N. 2. 1955.
15. Glinskienė R., Gudas K, Rajeckaite M. Significance of the organization's image. Conference Information: 2nd International Conference on Changes in Social and Business Environment, Panevėžys. 2007. p. 55-59.
16. Gudonienė V. Tarptautiniai ryšiai su visuomene: ryšių su visuomene tarptautinės normos ir standartai. Vilnius. 1999.

17. Maksvytienė I.Ekonominis konkurencingumas: metodologinis aspektas. Organizacijų vadyba: sisteminiai tyrimai. Nr. 2. Kaunas. 125-133 p. 2002. ISSN 1392-1142.
18. Maščinskienė J., Kuvykaitė, R. Markės svarba formuojant prekės įvaizdį. Organizacijų vadyba: sisteminiai tyrimai. Nr. 30. 2004. 123-136 p. ISSN 1392-1142.
19. Meech D. Corporate Identity and corporate Image. Critical perspectives in Public Relations. International Thompson Business Press. 1996.
20. Miller D. Beyond strategy: configuration as a pillar of Competitive advantage. Business Horizons. 1999.
21. Norman R. Service Management: Strategy and Leadership in Service Business. Gr. Britain: John Willey and sons. 1991.
22. Olins W. Prekės ženklas. Vilnius, 2006. p. 256. ISBN 9955-14-145-X.
23. Rühli E. "Hypercompetition" and Strategic Reorientation of Asea Brown Boveri. Competitive Intelligence Review. Vol. 7, no 2, 1996. p. 36-45.
24. Sabonienė A.. Konkurencinių pranašumų formavimo pramonės įmonėse ypatumai. Ekonomika ir vadyba. Kaunas. 2000. 378 p. ISBN 9986-13-749-7.
25. Vengrienė B.. Paslaugų vadyba. Vilnius. 2006. 271 p. ISBN 9986-19-854-2.
26. Žostautienė D., Čerkauskytė R., Clotey B. . Trading company's service quality evaluation applying Ch. Gronroos perceived service quality model // Changes in Social and Business Environment: proceedings of the 2nd international conference, Panevėžys, 2007. p. 313-317.
27. Žvirelienė R., Bučiūnienė I., Šalčiuvienė L. The role of ethics in the customer retention. Conference Information: 2nd International Conference on Changes in Social and Business Environment, 2007. Panevėžys, p. 318-322.
28. Алешина И. (2008) Корпоративный имидж: стратегический аспект. [2009-02-01]. http://window.edu.ru/window_catalog/pdf2txt?p_id=19321&p_page=3.
29. Леонтьев Д. Ф.. От образа к имиджу. Реклама и жизнь. Но 11. 2000
30. Почепцов Г. Г. (2001). Имиджиология. Москва. [2009-01-15]. http://revolution.allbest.ru/economy/00006319_0.html.
31. Трунов В. А. (2007). Имидж фирмы в условиях рыночной экономики: вектор научного поиска. [2009-01-15]. http://www.lomonosov-msu.ru/2007/08/vitos37@yandex.pdf.

Daiva Žostautienė, Vilma Marcinkevičienė

Įmonės įvaizdis kaip konkurencinio pranašumo prielaida

Santrauka

Šio straipsnio **tikslas** yra atskleisti įmonės įvaizdį kaip konkurencinio pranašumo prielaidą.
Tikslas pasiekiamas atsakant į šiuos iškeltus **uždavinius**:
- atskleidžiant įvaizdžio sampratą ir esmę,
- išryškinant konkurencinio pranašumo formavimo būtinybę,
- atskleidžiant įmonės įvaizdžio svarbą siekiant konkurencinio pranašumo
- pateikiant paslaugų įmonės įvaidžio tyrimo metodologiją bei
- pateikiant tyrimo rezultatų interpretaciją.

Naudoti tyrimo metodai: mokslinės literatūros analizė ir apibendrinimas bei anketinė apklausa.
Rinkoje labai daug įmonių, gaminančių panašias prekes, todėl pirkėjui labai sunku joje orientuotis. Sukūrus tinkamą pirkėjo požiūrį į įmonę, galima tikėtis, kad vartotojas taps nuolatiniu įmonės prekių/paslaugų pirkėju. Geras įvaizdis būtina sąlyga įmonei, norinčiai pasiekti ilgalaikę ir stabilią verslo sėkmę, padeda pritraukti naujus klientus ir partnerius, skatina pardavimus bei įmonės plėtrą. Įmonė, kuri negali tiksliai įvardinti, kuo skiriasi nuo kitų ir ką unikalaus gali pasiūlyti, bus priversta užleisti savo pozicijas, todėl turi nuspręsti, ar esamas įvaizdis ją tenkina. Įmonės vadovai turi suvokti, kokį įvaizdį visuomenė susidarė apie įmonę, o dar vėliau įmonės vadovybė turi nuspręsti, ar ją tenkina esamas įvaizdis, kurio dėka įmonė gali užsitikrinti išskirtinį ir sunkiai nukopijuojamą konkurencinė pranašumą.
Įgyti kuo didesnį konkurencinį pranašumą prieš kitas įmonei padeda teigiamas įvaizdis. Norėdama pritraukti kuo daugiau klientų ir padidinti savo įtaką bei užimamą rinkos, dalį įmonė turi išskirti pagrindines savo veiklos įtakos grupes, kas padeda užsitikrinti sėkmingą verslo plėtrą bei ilgalaikių įmonės tikslų įgyvendinimą. Įvaizdžio svarba pasireiškia tuo, kad įmonių, turinčių teigiamą įvaizdį, pardavimai didesni, lyginant su įmone, kurios įvaizdis neigiamas. Taip pat įmonės turėdamos geresnį įvaizdį, gali nustatyti aukštesnę prekės pardavimo kainą.
Atlikus anketinę apklausą ir apibendrinus rezultatus, galima teigti, kad empirinis tyrimas patvirtina įvaizdžio kaip konkurencinio pranašumo svarbą vartotojų aspektu. Dauguma respondentų (84 proc.) nurodė, kad renkantis įmonę jiems svarbus įmonės įvaizdis. 8 proc. atsakė, jog įvaizdis jiems nesvarbus, o likę 8 proc. šiuo klausimu neturi nuomonės. tyrimui. Įmonės siūlomų paslaugų išskirtinumas bei kokybė, įmonės pastangos išsiskirti iš kitų, yra veiksniai, kurių pagalba susiformuoja teigiamas įvaizdis, kuris tampa sunkiai nukopijuojamu konkurenciniu pranašumu.

About the authors

Daiva Žostautienė, Assoc. Prof. Dr. of Social (Management and Administration) Sciences, Department of Management, Faculty of Management and Administration, Kaunas University of Technology Panevezys Institute; tel. +370 45 570030, e-mail: daiva.zostautiene@ktu.lt, marketing, marketing culture

Vilma Marcinkevičienė, master of Social Sciences, head of joint stock company NEO ALJANSAS, Panevezys, tel. +370 600 68 410 514, e-mail: vilma.marcinkeviciene@gmail.com, marketing

PECULIARITIES OF MARKETING CULTURE ELEMENTS' EXPRESSION IN COMPANIES OPERATING IN DIFFERENT ACTIVITY FIELDS

Daiva Žostautienė

Kaunas University of Technology, Lithuania

Abstract

The elements of marketing culture emphasize the individuality of the company when it interacts with market participants, i.e. consumers of the company's goods, its partners, governmental institutions, competitors and other companies which have no direct impact on the operations of the company. The disclosure of the peculiarities of marketing culture elements' expression in the aspect of companies operating in different activity fields will assist in determining what marketing culture is prevalent in the companies operating in different activity fields and whether there are differences between elements' expression in companies operating in different activity fields.

The first part of the article presents the concept of marketing culture and the second part contains the analysis of elements of marketing culture. The interpretation of the research results on peculiarities of marketing culture elements' expression in production, service and sales companies is provided in the third part of the article.

Keywords
Marketing culture, elements of marketing culture.

Introduction

The rapid changes in the environment force the companies striving to remain in the market to invoke marketing more actively. The theory of marketing culture has not been widely researched. The fundamental works used till this day were created by C. Webster (1990, 1993, 1995), A. K. Kohli and B. J. Jaworski (1990), J. C. Narver and S. F. Slater (1990), Ch. Homburg and Ch. Pflesser (2000), D. Žostautienė and R. Urbanskienė (2002). Scientists emphasize marketing culture as the characteristic significant to culture through which companies create better value to consumers and thus reinforce their position in the market. Even less attention in the science works is paid to elements of marketing culture (values, norms, means and behaviors). There is also the lack of peculiarities of the expression of these elements in production, service and sales companies.

The purpose of the article is to disclose peculiarities of marketing culture elements' expression in companies operating in different activity fields (production, service and sales).

The object of the article: marketing culture elements.

   The tasks of the article:
1. To disclose the conception of marketing culture.
2. To present marketing culture elements.
3. To provide the interpretation of the results of the research "Peculiarities of marketing culture elements' expression in companies operating in different activity fields (production, service and sales)".

   The work methods:
1. scientific literature analysis;
2. questionnaire survey.

The conception of marketing culture

There are several different definitions of marketing culture or market-oriented culture in the literature, and the most significant of them are the works by J. C. Narver and S. F. Slater (1990), C. Webster (1993), C. Webster (1995), D. Žostautienė and R. Urbanskienė (2002), etc.

C. Webster (1995) implies that organizational culture is based on unwritten rules and guidelines, which originate from formally defined processes and processes functioning in a company. Therefore this author defines organizational culture as the model of shared values and beliefs which aids in understanding how the company functions and establishes behavioral norms.

Organizational culture is described as main assumptions, values and means, experienced and acquired by members of an organization (Schein, 1992; Hatch, 1993). The concept characterizes three fundamental elements of the modern theory of organizational culture: assumptions, values and means. Basing on these elements E. H. Schein (1992) pointed out 3 levels of organizational culture: level 1 – visible structures and processes of a company, level 2 – strategies and objectives, level 3 subconsciousness, beliefs, perception, feelings and thoughts.

When studying market orientation, J. C. Narver and S. F. Slater (1990) singled out marketing culture as a very important constituent of the company's (organization's) culture due to which the companies provide higher value of goods to the customers and thus strengthen their position in the market in the most effective and efficient way. C. Webster (1995) defines marketing culture as the company's unwritten behavior and rules wherein the behavioral norms of employees are presented; or as the significance of the expression of the marketing functions in all company's operation areas; or as a specific method whereby marketing activities are implemented in the company.

While researching marketing culture D. Žostautienė and R. Urbanskienė (2002) summarized the definitions of the scientists and determined that it is the constituent of organizational culture and it is market-oriented and is comprised of such elements as values, norms, means and behaviors, which define individuality of the company when it interacts with market participants. Market

participants are consumers of the company's goods, its partners, governmental institutions, competitors and other companies which are related to the company however have no direct impact on its operations. Marketing culture expresses itself through relationships of the company and other market participants.

Elements of marketing culture

Similar as in organizational culture there are four elements of marketing culture defined (Homburg, Pflesser, 2000), i.e. norms, values, means and behaviors.

According to E. H. Shein (1992), values are defined as the desire, particular vision, which is the characteristic of an individual or the group and influences choices which depend on the prevailing traditions, means and other behavioral results. The fundamental values of the company serve as the foundation when forming norms. The difference between values and norms is that the latter are more specific and more related to certain behavior. Norms are also created for the desired behavior or the result of the behavior, which is common to a certain group. Similarly as E. H. Schein (1992), Ch. Homburg and Ch. Pflesser (2000) identified 3 levels, which comprise marketing culture (Fig. 1).
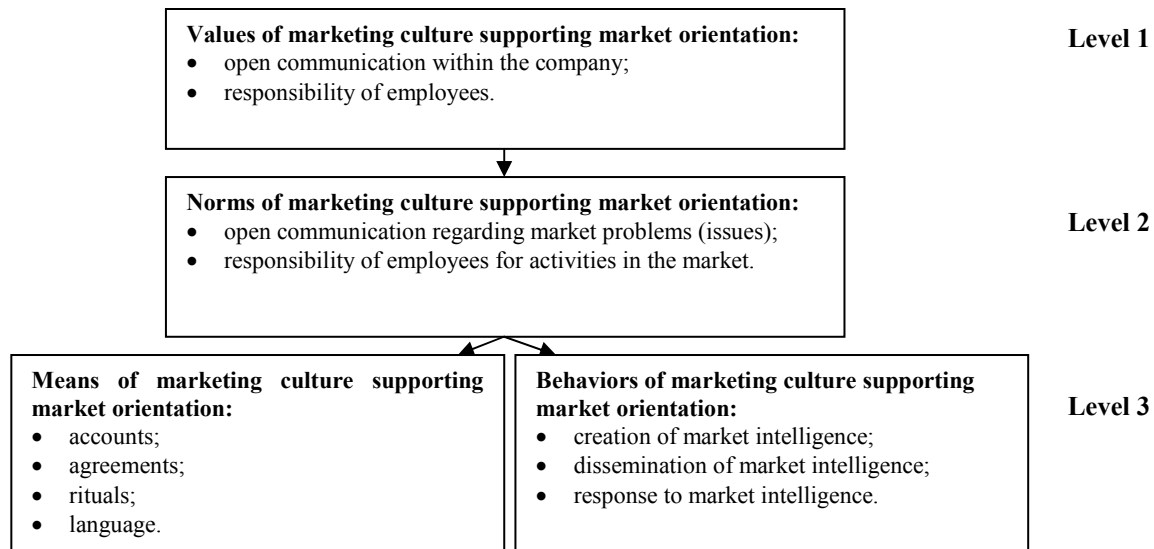

Figure 1. Three levels comprising the model of marketing culture (Homburg, Pflesser, 2000, 451 p.)

The means comprised of accounts, agreements, rituals and language which are created by the company have strong symbolic significance (Schein, 1992). When defining the behaviors of marketing culture, the following components of market-oriented behaviors distinguished by A. K. Kohli and B. J. Jaworski (1990) are based upon:
1. creation of market intelligence;
2. dissemination of market intelligence;
3. response to market intelligence.

Intelligence may be perceived as the ability to properly forecast the changes in the future by basing the prognosis on the required information and individual or company's (organization's) culture. The main characteristic of intelligence is orientation towards future. Creation of market intelligence is the effective market knowledge, covering the present and secret consumer needs by helping to foresee and satisfy them (Kohli, Jaworski, 1990; Narver, etc., 2004). Dissemination of market intelligence is the effective responding to the market by disseminating intelligence not only within the company, but also in its external environment (Kohli, Jaworski, 1990). Response to market intelligence covers the selection of proper markets; development and offering of products and services or their modifications, which satisfy the present and future needs; goods and services production, distribution and support in the way so that the response of the end-user is positive.

When employees of the company appreciate this benefit, they become loyal and the employee turnover in the company become significantly lower, therefore it is also financial beneficial to the company to implement the model of J. C. Carr and T. B. Lopez (2007), which reflects the benefits obtained by the company and its employees (Fig. 2).

Market-oriented culture elements, indicated by J. C. Narver and S. F. Slater (1990), are applied in the model: focus on consumers, focus on competitors and inter-functional coordination. These are the fundamental elements to be assimilated by employees in order to facilitate the company's integration in the market. Meanwhile the components of marketing culture behaviors contribute to the practical implementation of market-oriented culture elements, intended for the company and its employees, and thereby achieving benefits both to the company and its employees.

Creation of market intelligence is not limited to the opinions of consumers; this also includes the analysis of the factors, which cover their needs. It is also important to understand that the creation of market knowledge is not only the responsibility of the marketing department. It is created by all company's departments and their personnel.
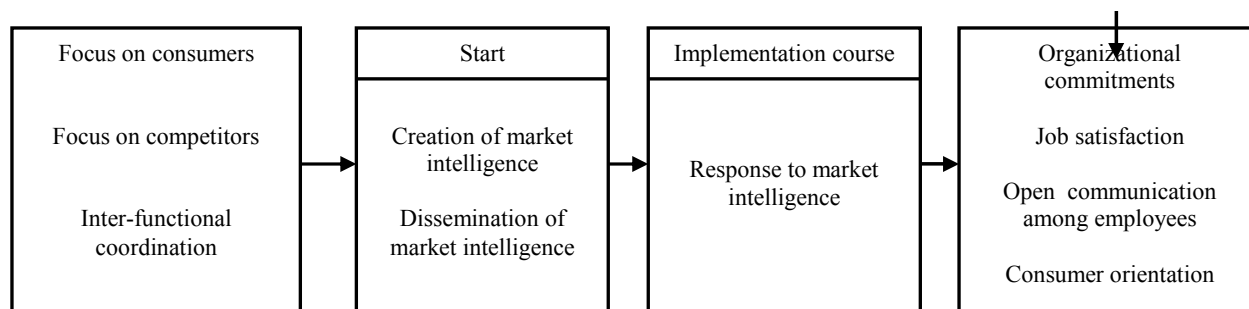
Focus on consumers	Start	Implementation course	Organizational commitments
Focus on competitors	Creation of market intelligence	Response to market intelligence	Job satisfaction
Inter-functional coordination	Dissemination of market intelligence		Open communication among employees
			Consumer orientation

Figure 2. Creation of marketing culture and implementation results (Carr, Lopez, 2007, 116 p.)

After disclosing the elements of marketing culture our aim is to determine if their domination in companies differs depending on the company's activity field.

Peculiarities of marketing culture elements' expression in companies operating in different activity fields (production, service and sales)

Peculiarities of marketing culture elements' expression in companies operating in different activity fields

The research is aimed at identifying the expression of elements of marketing culture in production, service and sales companies basing on the example of the companies operating in the city of Panevėžys.

The research was carried out in August-September 2009.

The questionnaire survey was prepared based on scientific works of C. Homburg and C. Pflesser (2000), D. Žostautienė and R. Urbanskienė (2002), M. A. Farrell (2005), B. Gainer and P. Padanyi (2005). Managers of companies, directors, deputy directors and heads of divisions related to marketing activities have been surveyed while making an assumption that executive personnel of the company has sufficient knowledge about marketing

According to the database of the Department of Statistics on indicators (access via the Internet: http://db1.stat.gov.lt [viewed on 15-04-2009]), as of the beginning of 2009 there were 2431 company operating in the city of Panevėžys, predominantly wholesale and retail sales companies (1364), service providers – 684, production companies – 380.

Statistically processed data of the survey is considered to be true and reliable due to the mathematical nature of the statistical analysis itself. However, when presenting the results, representativeness of the research is very important. The number of respondents who need to be surveyed in order to meet the criterion of

representativeness can be calculated according to Paniotto's formula:

$$n = 1/ (\Delta^2 + (1 / N)), \qquad \text{(Formula 1)}$$

where:
n – sample size (n),
Δ- error (Δ=0,5),
N – population size (N=2431).

In sociological studies, 5 percent is considered a standard error, when probability is 0.954. Based on Paniotto's formula, the surveyed sample is comprised of 345 companies.

$$n = 1/ (0,05^2 + (1 / 2431)) = 345. \quad \text{(Formula 2)}$$

While taking into account the probability of refusing to participate in the research, 500 questionnaires have been prepared and distributed (delivered personally, sent by e-mail, mail and fax). Out of them, 198 not damaged and fully completed questionnaires were returned from companies engaging in different activities in the city of Panevėžys.

All result tables of the research contain average ratings. Tables of marketing culture elements' assessment were compiled for each element of marketing culture individually (values, norms, means and behaviors), while separating their manifestation in production, service and sales companies.

The importance and observance of norms of marketing culture mostly depend on values upheld. Ratings of marketing culture elements (values, norms, means and behaviors) of the companies working in different activity fields are presented in Table 1. Among those who replied, there were very few who disagreed completely or had no opinion, while the most frequent response showing the significance of values of marketing culture was 4.

Table 1

Rating of marketing culture values, norms, means and behaviors in production, service and sales companies of the city of Panevėžys

Elements of marketing culture	Production companies	Service companies	Sales companies
Values			
Open communication within the company	4,45	3,75	4,37
Responsibility of employees	4,12	4,12	4,36
Norms			
Open communication regarding market problems (issues)	3,3	3,25	2,93
Responsibility of employees for activities in the market	4,2	3,52	3,5
Means			

Accounts about role model employees, oriented to fulfillment of consumer needs, and conversations about problems, impeding market orientation	3,4	2,5	3,85
Agreements, related with market-orientation	2,4	4,6	4
Market-orientation **rituals.**	3,6	3,4	2
Market-oriented **language.**	3	3,6	2
Behaviors			
Creation of market intelligence	3,5	3,2	3,2
Dissemination of market intelligence	4,5	4,1	3,5
Responding to market intelligence	4,3	3,1	2,8

In all companies operating in different activity fields marketing cultures were assessed and considered significant in the activities of the company (the most frequently indicated value was 4 according to Likert scale), however when proceeding to norms and rather more perceptible elements of marketing culture, such as means and behaviors, clear decrease in evaluations is visible (value attributed according to Likert scale was 2-3), therefore the conclusion can be made that in practice the values as such are only of declarative nature and they are not yet predominant in companies so they could become a certain norm in the behavior of employees. The results are especially not good in sales and service companies. It is surprising that particularly services are distinguished from other goods by their uniqueness and in the sales of goods the human factor is extremely important as is servicing, therefore service and sales companies must pay special attention to customer service by cultivating responsibility of employees and encouraging flexible and fast solution of the arising issues and problems.

The obtained results about means of marketing culture confirm that respondents in companies are not sufficiently well familiarized with the benefit of means to the performance of companies. The most common ratings according to Likert scale were 2 or 3. In order to achieve the wider application of means of marketing culture in companies they need to be acquainted with the benefits provided by the means, i.e. companies become more oriented towards their consumers. Each mean separately provides the following benefits:

1. Language obliges employees to strive to achieve more than their personal interests and educates them.

2. Accounts are generally related to the actions of consumer-oriented employees, they also help employees, especially the new ones, to understand values of the company (consumer service, producing items of good quality or balanced operations of the company, benefits of market leadership).

3. Rituals encourage informal communication among employees, managing personnel and consumers of the company's goods.

4. Agreements make the first impression both on consumers and employees about the company and encourage informal communication, which reinforces interrelationships.

Furthermore, means of marketing culture encourage creativity in the development of new products and have a tendency to change in the case of the changes in the company's strategy.

Ratings of behaviors of marketing culture in companies operating in different activity fields varied. Market-oriented behaviors are most expressed in production companies, and behaviors of service and sales companies' employees, basing on the study results, are not sufficiently strong, therefore the inadequate response to market changes and consumer expectations may become a precondition for insufficiently successful operations or there are plenty of opportunities still not utilized. The results of the research disclose that the expression of behaviors of marketing culture in production companies is the highest. Public dissemination of information on priorities of consumers to commodities and essential changes in business (dissemination of market intelligence) as well as meetings with consumers and consumer opinion studies (response to market intelligence) are predominant. Of all elements of behaviors dissemination of market intelligence, i.e. dissemination of information concerning the market or consumers needs within the company is most prevalent in service and sales companies. However these companies should pay attention to creation of market intelligence and responding to market changes. Otherwise they may be confronted by difficulties both in their direct activities in satisfying consumer needs, since it is impossible to satisfy the needs which the company is not familiar with, and in the course of time consumer needs tend to change, and by encouraging employees to work in the set direction by providing them with the opportunity to be valuable and necessary to the company.

Conclusions

1. Marketing culture can be defined as integral part of organizational culture than is market-oriented and is comprised of the elements, revealing the individuality of the company as it interacts with the market participants.

2. While concluding that marketing culture forms a part of organizational culture, another conclusion follows that the main elements of marketing culture are similar to the elements of organizational culture: norms, values, means and behaviors. However, their specifics manifest themselves when striving for companies' individuality and distinctness, fulfilling the expectations of their customers and other market participants and in the relationships of the company with other market participants.

3. After summarizing the data obtained during the research it can be maintained that production, service and sales companies agree that values of marketing culture are required and necessary in order to remain in the market. The norms in theory are as significant as values, however in practice the former are neither fully acceptable nor becoming customary in everyday

activities of employees. Furthermore, the research on the expression of behaviors and means discloses that these elements of marketing culture are not predominant in the activities of the companies. Attention of sales and service companies should be particularly drawn to the creation of market intelligence, its dissemination and response to market intelligence, because through them marketing culture can be modeled in order to achieve the satisfaction of consumer need and cooperation of the company's employees and their loyalty towards the company.

References

1. Carr J. C. Examining market orientation as both culture and conduct: modeling the relationships between market orientation and employee responses/ J. C. Carr, T. B. Lopez// Journal of marketing theory and practice. 2007, Vol. 2, p. 113 – 125. EBSCOhost [online]. Available from Internet: <http://web.ebscohost.com/ehost/pdf?vid=2&hid=21&sid=aa4ea3d8-83f7-4a1e-a8da-e9508997830d%40sessionmgr3>.
2. Farrell M. A. The effect of a market – oriented organisational culture on sales – force behaviour and attitudes// Journal of strategic marketing. 2005, No. 13, p. 261 – 273. Business Source Complete [online]. Available from Internet: <http://web.ebscohost.com/bsi/pdf?vid=7&hid=17&sid=c313aaa1-dc03-45b6-9ee4-daffa8da3332%40sessionmgr9>.
3. Gainer B. The relationship between market – oriented activities and market – oriented culture: implications for the development of market orientation in nonprofit service organizations/ B. Gainer, P. Padanyi// Journal of business research. 2005, No. 58, p. 854 – 862. Science direct [online]. Available from Internet: <http://www.sciencedirect.com/science/article/B6V7S-4BM92C5-3/2/633eeed7919040960cfcd339b3b8eb7b>.
4. Hatch M.J. The Dynamics of Organizational Culture. Academy of Management Review, 18 (4), 1993. p. 657-693.
5. Homburg Ch. A multiple – layer model of market – oriented organizational culture: measurement issues and performance outcomes/ Ch. Homburg, Ch. Pflesser// Journal of marketing research. 2000, Vol. 37, p. 449 – 462. Business Source Complete [online]. Available from Internet: <http://web.ebscohost.com/bsi/pdf?vid=19&hid=17&sid=c313aaa1-dc03-45b6-9ee4-daffa8da3332%40sessionmgr9>.
6. Kohli A. K. Market orientation: the construct, research propositions and managerial implications/ A. K. Kohli, B. J. Jaworski// Journal of marketing. 1990. Vol. 54, p. 1 – 18. Business Source Complete [onlinve]. Available from Internet: <http://web.ebscohost.com/bsi/pdf?vid=20&hid=17&sid=c313aaa1-dc03-45b6-9ee4-daffa8da3332%40sessionmgr9>.
7. Narver J. C. The effect of a market orientation on business profitability/ J. C. Narver, S. F. Slater// Journal of marketing. 1990, Vol. 54, p. 451 – 468. Business Source Complete [online]. Available from Internet: <http://web.ebscohost.com/bsi/pdf?vid=35&hid=17&sid=c313aaa1-dc03-45b6-9ee4-daffa8da3332%40sessionmgr9>.
8. Prieiga per Internetą: <http://db1.stat.gov.lt/statbank/SelectVarVal/Define.asp?MainTable=M4010119&PLanguage=0&PXSId=0&ShowNews=OFF>.
9. Schein E.H. Organizational Culture and Leadership. Second Edition. San Francisco: Jossey-Bass Publishers, 1992, p. 418.
10. Webster C. Toward the measurement of the marketing culture of a service firm// Journal of business research. 1990. Vol. 21, issue 4, p. 345 – 362. Business Source Complete [online]. Available from Internet: <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=18811821&site=bsi-live>.
11. Webster C. Marketing culture and marketing effectiveness in service firms// Journal of services marketing. 1995, Vol. 9, issue 2, p. 6 – 21. Emerald [online]. Available from Internet: <www.emeraldinsight.com/10.1108/08876049510085973>.
12. Webster C. Refinement of the marketing culture and the relationship between marketing culture and profitability of a service firms// Journal of business research. 1993, Vol. 26. p. 111 – 131. EBSCOhost [online]. Available from Internet: <http://web.ebscohost.com/ehost/detail?vid=4&hid=17&sid=f4207f1c-e8e2-42b0-a6d8-eb5603219d3e%40SRCSM1&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=bth&AN=17292218>.
13. Žostautienė D., Urbanskienė R. Formation and dimensions of marketing culture under the contemporary conditions of competition// Ekonomika. Vilniaus universitetas, 2002. p. 217 – 232.

Daiva Žostautienė

Skirtingų veiklos sričių įmonių marketingo kultūros elementų raiškos ypatumai

Santrauka

Spartūs aplinkos pokyčiai verčia įmones, siekiančias išsilaikyti rinkoje, aktyviau remtis marketingu. Marketingo kultūros teorija nagrinėta mažai. Pagrindinius darbus, kuriais remiamasi iki šių dienų, atliko C. Webster (1990, 1993, 1995), A. K. Kohli ir B. J. Jaworski (1990), J. C. Narver ir S. F. Slater (1990), Ch. Homburg ir Ch. Pflesser (2000), D. Žostautienė ir R. Urbanskienė (2002). Mokslininkai marketingo kultūrą išskiria, kaip svarbų kultūros bruožą, kurio dėka įmonės suteikia didesnę vertę vartotojams ir taip stiprina savo padėtį rinkoje. Dar mažiau dėmesio moksliniuose darbuose skiriama marketingo kultūros elementams (vertybėms, normoms, priemonėms, elgsenai), bei pasigendama šių elementų raiškos ypatumų gamybinėse, paslaugų bei prekybos įmonėse. Marketingo kultūros elementai pabrėžia įmonės individualumą, jai sąveikaujant su rinkos dalyviais, t. y. įmonės prekių vartotojais, partneriais, vyriausybinės institucijomis, konkurentais ir kitomis įmonėmis, neturinčiomis tiesioginės įtakos įmonės veiklai.
Pirmoje straipsnio dalyje pristatoma marketingo kultūros sąvoka, antroje dalyje nagrinėjami marketingo kultūros elementai, trečioje – pateikiama marketingo kultūros elementų raiškos ypatumų gamybinėse, paslaugų ir prekybos įmonėse tyrimo rezultatų interpretacija.

About the author

Daiva Žostautienė, Assoc. Prof. Dr. of Social (Management and Administration) Sciences, Department of Management, Faculty of Management and Administration, Kaunas University of Technology Panevezys Institute; tel. +370 45 570030, e-mail: daiva.zostautiene@ktu.lt, marketing, marketing culture

Author index

A

Aavik Andrus, 26
Adomėnienė Ieva, 103
Andersson Sören, 103
Antinienė Dalia, 7
Apaydın Fahri, 14
Armagan Cuneyt Ahmet, 20
Augustinienė Aldona, 403

B

Bagdonienė Liudmila, 31
Bankauskienė Nijolė, 279
Baronaitė Aistė, 40
Beržinskienė Daiva, 154
Bileišis Mantas, 45
Bonkevičiūtė Jurgita, 51
Bruneckienė Jurgita, 59
Burkšienė Valentina, 167

C

Cesevičiūtė Ieva, 438
Chlivickas Eugenijus, 66
Chreptavičienė Virginija,72
Claudon Michael, 154

Č

Čiburienė Jadvyga, 119
Čiučiulkienė Nijolė, 268

D

Daiktere Ineta, 83
Daraškevičiūtė Birutė, 88
Deltuvaitė Vilma, 97
Dėmenienė Alina, 302, 463
Druica Elena, 305

F

Fiodorova Vilma, 175

G

Glinskienė Rasa, 26, 103
Golubeva Ausma, 110
Grama Simona, 115
Gudaitytė Dalija, 125
Gültüvin Gür E., 296
Guščinskienė Jūratė, 119

H

Hopenienė Rimantė, 31
Horbačauskienė Jolita, 125

I

Išoraitė Margarita, 132

J

Jakštienė Sandra, 154
Jakštienė Vitalija, 146
Janiūnaitė Brigita, 146, 160
Jucevičienė Palmira, 167, 175, 181
Jucevičius Giedrius, 191, 209, 248, 313
Jucevičius Robertas, 196, 217, 356, 422
Juodeikaitė Audronė, 201

K

Karazijienė Žaneta, 333
Karpavičius Tomas, 209
Katiliūtė Eglė, 488
Kavaliauskaitė Violeta, 217
Kiil Kuldar, 289
Kliminskas Ričardas, 223
Krašenkienė Asta, 235, 463
Kriaučiūnienė Sigita, 196
Kriščiūnas Kęstutis, 241
Kromalcas Saulius, 248
Krupavičius Algis, 469
Kuchma Iryna, 438
Kumpikaitė Vilmantė, 229
Kutkaitytė Evelina, 268
Kvedaraitė Nida, 328

L

Langvinienė Neringa, 31, 349
Lekavičienė Rosita, 7
Leliūgienė Irena, 201, 268
Lepaitė Daiva, 494
Lipinskienė Diana, 257, 263

M

Marcinkevičienė Rita, 241
Marcinkevičienė Vilma, 500
Markevica Ausma, 273
Mickevičienė Monika, 477
Milaševičiūtė Justė, 430
Mileris Ričardas, 273
Morkūnaitė Giedrė, 263
Mozūriūnienė Vyda, 181

N

Narbutas Valdas, 154
Nedzinskas Egidijus, 279
Nemec Juraj, 66

O

Oficerovienė Asta, 289
Omay Umut, 296
Özdemir Selim, 345

CHANGES IN SOCIAL AND BUSINESS ENVIRONMENT (CISABE'09)
Proceedings of the 3th International Conference. Held on November 4-5, 2009, Panevezys, Lithuania

POKYČIAI SOCIALINĖJE IR VERSLO APLINKOJE (CISABE'09)
3-os tarptautinės konferencijos, įvykusios Panevėžyje 2009 m. lapkričio 4-5 d., pranešimų medžiaga (anglų kalba)