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PREFACE

Your read journal were papers were selected from international conference. Faculty of Social Sciences at Klaipėda University was organize the 10th annual International Scientific Conference. Conference topic: "Social Sciences for Regional Development: Influence and Perspectives". The Conference were held in Klaipėda University (Klaipėda, Lithuania) on the 25th–26th of September 2014. The Conference was dedicated to the 20th anniversary of Faculty of Social Sciences. The main purpose of the Conference is to promote the actualization of social science research, revealing social sciences' impact on regions. The conference aims to bring together scientists and researchers from different countries who study regions and who are able to offer a new theoretical ideas and their practical application in relevant case studies. Proposed topic areas: Economics; Management; Politics and administration; Sociology, Media and Communication studies; Social geography and regional development. The papers is covered the conference aim and there are a lot of interesting and different papers how was mentioned above. We hope that you'll find this journal quite attractive.

Deputy of scientific editor
Prof. dr. Ligita Šimanskienė, Klaipėda University (Lithuania)

PRATARMĖ

Jūsų rankose žurnalas, kuriame spausdinami straipsniai, atrinkti iš tarptautinėje konferencijoje skaitytų pranešimų. Klaipėdos universiteto Socialinių mokslų fakultetas 2014 m. rugsėjo 25−26 dienomis jau dešimtą kartą organizavo kasmetinę tarptautinę konferenciją „Socialiniai mokslai regionų plėtrai: įtaka ir perspektyvos", ji skirta Socialinių mokslų fakulteto 20-mečiui. Konferencijos tikslas – skatinti socialinių mokslinių tyrimų aktualizaciją, atskleidžiant socialinių mokslų įtaką regioninei plėtrai. Konferencijos kryptys: ekonomika, vadyba, politikos mokslai ir viešasis administravimas, sociologija, medijos ir komunikacija, socialinė geografija ir regionalistika.

Žurnale pateikiami įvairių sričių mokslininkų požiūriai, vertinant skirtingas perspektyvas. Tikime, kad mūsų leidinys bus jums patrauklus ir paskatins mokslo pažinimą.

Redaktoriaus pavaduotoja
Prof. dr. Ligita Šimanskienė, Klaipėdos universitetas (Lietuva)

TURINYS

THE DEVELOPMENT OF RETAIL STORE TYPES IN THE CONTEXT OF REGION AND CONSUMER BEHAVIOUR

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ABSTRACT
The aim of the article is to analyze the prevalence of retail stores in Latvian regions and consumer behavior in Latvia. The authors have analyzed the prevalence of largest retail stores in regions and consumer behavior in retail using available statistical data and research done by the authors. As a result of the study, the role of shop assistants was determined during the purchasing process, and the results of the study have been compiled from the viewpoint of generations. These results can help retail companies to work more effectively by choosing the most appropriate retail store types
KEY WORDS: *Consumer behavior, Retailing, Retail store types, Generation.*

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Introduction

Research problem: Latvia saw one of the highest increases in retail sales in 2013. Persisting macroeconomic stability and rising real disposable incomes resulted in higher private spending, which was one of the main contributors to the country's GDP over the review year. Lower income tax and rising real wages resulted in higher real disposable incomes in 2013 and improved consumer confidence, thus encouraging people to spend more on discretionary goods, both in the grocery and non-grocery sector. Non-grocery retailers outperformed their grocery peers in 2013, mainly thanks to a further improvement in customer purchasing power which in turn shaped buyer preferences in favour of larger purchases that were not affordable during the economic downturn. Despite the growth of non-store retailing, traditional retailing in stores has held its positions. Therefore, it is important to recognize store types and their development trends.

Research purpose is to produce recommendations for store development in regions using statistical data and the study made by the authors.

Research object are particularities of consumer behaviour and retail stores in Latvia.

The main goal is to analyze the prevalence of store types in the regions of Latvia. The study attributes particular importance to the role of shop assistants and their influence on the decision making of customers during the purchasing process.

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Research tasks are to analyze statistical data of retailing and retail stores in regions; to analyze the importance of shop assistants and what the seller does correctly or incorrectly; to establish division of generations and their proportions in Latvia; to develop decision making tools for retailing companies.

Research methods: The authors employ well-known methods of research – analysis and synthesis methods, grouping, comparison etc.

1. Development of retail stores in Latvia

Latvia saw one of the highest increases in retail sales in 2013. Persisting macro-economic stability and rising real disposable incomes resulted in higher private spending, which was one of the main contributors to the country's GDP over the review year. Increasing private spending encouraged retailers to open new stores and expand their assortments with higher-priced grocery and non-grocery goods, thereby providing additional stimulus to retail sales growth. Lower income tax and rising real wages resulted in higher real disposable incomes in 2013 and improved consumer confidence, thus encouraging people to spend more on discretionary goods, both in the grocery and non-grocery sector. Non-grocery retailers outperformed their grocery peers in 2013, mainly thanks to a further improvement in customer purchasing power which in turn shaped buyer preferences in favour of larger purchases that were not affordable during the economic downturn. Higher disposable incomes enabled Latvians to renew spending on electronics, home appliances and home improvement products, thereby stimulating overall non-grocery growth. An additional boost to non-grocery sales came from customers' willingness to improve their appearance by buying new apparel, footwear and beauty products. With a value share of 10 %, Depo DIY SIA was the leading player in non-grocery retailers in 2013. The company's strong position can mainly be attributed to its large stores which offer a broad variety of goods, ranging from home improvement and gardening to food and pets. (Euromonitor, 2014) These tendencies can be seen by examining the net turnover share in trade shown in Table 1.

Table 1. Net turnover share in trade for 2012, %

Trade	Net turnover share, %
Food and beverage	55
Home and garden	22
Equipment and suupplies for office and production	7,8
Clothing, footwear and accessories	5,5
The rest	10

Source: Statistical data, 2014

Meanwhile, the dominating grocery players, Rimi Latvia SIA and Maxima Latvija SIA, enlarged their non-grocery assortments, especially in supermarkets and hypermarkets, in order to defend their market share from non-grocery rivals. Maxima Latvija SIA runs sales through conveniences stores, supermarkets and hypermarkets while Rimi Latvia SIA operates through Supernetto discounters, supermarkets and hypermarkets. Both grocery retail chains compete for the leading position in the market by attempting to provide the best possible prices, large discounts and comprehensive loyalty programmes. Companies are regularly running massive advertising campaigns via TV, outdoor media and the internet. (Euromonitor, 2014) Store-based retailing is expected to perform healthily over the forecast period and record modest growth rates as the Latvian economy stabilises. The non-grocery channel is projected to see slightly faster expansion compared to grocery retailing as consumers will allocate a major portion of rising real disposable incomes to discretionary items. In contrast, non-store retailing is predicted to continue to record rapid annual growth rates thanks to the surging popularity of shopping over the internet (Euromonitor, 2014). The increasing use of smartphones and tablet computers fuelled growth within non-grocery retailing during 2013. Internet retailer 220.lv SIA was the leading player in 2013, accounting for 8 % of total non-store retailing value sales. The company managed to outperform previous market leader direct seller Avon Cosmetics Latvia SIA, mainly due to the increasing popularity of shopping online and soaring demand for electronics and appliances. It should be noted that 220.lv SIA has a very broad product assortment ranging from fragrances and child goods to furniture and sports (Euromonitor, 2014).

Despite the growth of non-store retailing, traditional retailing in stores has held its positions. Therefore, it is important to recognize store types and their development trends. However, there is no unique method of categorizing retailers.

Some studies (e.g. Jin and Kim, 2003; Arnold and Reynold, 2003; Geuens, Brengman and Rosette, 2001; Bloch, Ridgway and Dawson, 1994) provide evidence that shoppers patronise diverse store formats as they find an opportunity to interact with others as well as store personnel, share their experience and knowledge with others, and bond with others at store format (Jayasankaraprasad and Kathyayani, 2013: 9).

The authors will use the conventional classification method of retail stores based on their size and assortment. These include malls (shopping centers), hypermarkets, department stores, supermarkets, specialized supermarkets, warehouse stores, specialized stores, convenience stores (neighbourhood stores), boutiques, pop-up stores, discounters and express stores (Berman, Evans, 2003: 280‒282; Newman, Cullen, 2005: 24‒27). The article will analyse the most widespread retail store types, such as hypermarkets, supermarkets, convenience stores (neighbourhood stores), in Latvia as a whole and in its regions. The largest members of the market which represent these retail store types are Rimi, Maxima, Top, AIBE and LaTS. Their turnover and profits/losses have been summarised in Table 2.

Table 2. Financial data of largest retailers (thsd lats/thsd euro)

Retailer	Year	Turnover (thsd lats/thsd euro)	Profit/loss (thsd lats/ thsd euro)
Maxima	2012	450 368.000/640 815.931	14 342.000/20 406.828
	2011	413 210.000/587 944.861	1 870.000/2 660.770
	2010	390 450.000/555 560.298	10 700.000/15 224.728
Rimi	2012	443 326.000/630 796.068	8 950.000/12 734.703
	2011	417 160.000/593 565.205	6 345.000/9 028.122
	2010	391 800.000/557 481.175	5 228.000/7 438.774
top!	2012	7 980.000/11 354.517	19.994/28.449
	2011	5 490.000/7 811.566	6.363/9.054
	2010	4 100.000/5 833.774	0.068/0.097
AIBE	2012	5 940.000/8 451.859	No data
	2011	4 895.697/6 965.949	-109.924/-156.408
	2010	4 200.000/5 976.062	-77.893/-110.832

Source: www.nozare.lv 2014

In the study "101 most valuable Latvian enterprise" done by the business idea magazine "Kapitāls", IBS Prudentia and Riga Fund stock exchange in 2012 "Maxima Latvija" (with a value of Ls 174.1 million on the 01.01.2012) was in 10th place, whereas in the 2013 study (with a value of Ls 173.4 million on the 01.01.2013) it was in 11th place. Their largest competitor "Rimi Latvia" in the 2012 and 2013 studies with a value of Ls 131.5 million on the 01.01.2012 and a value of Ls 141.7 million on the 01.01.2013 was in the 16th place (www.nozare.lv, 2014).

There are 196 food stores operating under the trademark *top!*, 99 of which are *top!* and 97 *mini top!* stores owned by 17 local enterprises (April 2014): "Firma Madara 89", LLC, JSC "LPB", JSC "Diāna", "Lars Limited" LLC, "Gabriēla" LLC, "Dekšņi" LLC, "Mārksmens" LLC, "Madara 93" LLC, "AA & Co" LLC, "Krista – A" LLC, JSC "Roga – Agro", "ESSA" LLC, "G.A.L." LLC, "Lekon" LLC, "Ogres Prestižs" LLC, "Pārtikas veikalu grupa" LLC and "Oregano" LLC. "Iepirkuma grupa" LLC is the enterprise that represents the supermarket chain *top!* and provides for joint purchasing procedures and common marketing activities for the whole supermarket chain. (www.toppartika.lv). In contrast, "Latvijas tirgotāju kooperācija AIBE" is an enterprise with international experience. Its founders are not only Latvian entrepreneurs and the trading camera, but also the cooperation "Aibe mažmena" in Lithuania. At the moment there are around 450 stores in Latvia, which operate in various Latvian regions as part of AIBE.

Rimi and Maxima are represented in the hypermarket, supermarket, convenience store and discounter segments, whereas *top!* and AIBE operate mostly in the convenience store segment.

The entry and increasing activity of large supermarket chains in the convenience store segment in various regions in Latvia shows both that these regions are becoming more appealing and that the supermarket chains are willing to strengthen their positions in this retail segment. Turnover, staff costs and number of employees according to region are shown in Table 3.

Table 3. Main entrepreneurship indicators in trade by statistical region for 2010–2011

Trade	Region	Indicators					
		2010			2011		
		Turnover (thsd euro)	Personal costs (thsd euro)	Number of persons employed	Turnover (thsd euro)	Personal costs (thsd euro)	Number of persons employed
Wholesale and retail trade; repair of motor vehicles	Riga region	13149341	592882	86132	15145932	604808	80072
	Pieriga region	2255263	150154	23774	2591351	155979	21944
	Vidzeme region	578355	37000	9009	568641	36121	8286
	Kurzeme region	725000	42872	10333	1005471	50438	10991
	Zemgale region	867594	41862	10023	1024269	45084	9491
	Latgale region	512566	37738	12275	619538	40770	11479
Retail trade, except of motor vehicles and motorcycles	Riga region	3379139	251563	45059	3436765	262780	42868
	Pieriga region	1022969	92135	16652	1016873	92921	14885
	Vidzeme region	245180	24530	6237	231154	22451	5585
	Kurzeme region	276083	26602	7245	342175	32657	8044
	Zemgale region	304158	27719	7007	363038	29621	6930
	Latgale region	262337	27794	9085	283136	29435	8556

Source: Statistical data, 2014

From Table 3 it is evident that the lowest trade figures are in the Latgale and Vidzeme regions, whereas the best figures are in the Riga and Pieriga regions. Respectively, staff costs are the highest in the Riga and Pieriga regions and the lowest in Latgale and Vidzeme regions but turnover per retail employee is the highest in the Riga region, the lowest in the Vidzeme region.

The number of Rimi, Maxima, *top!* and AIBE stores in regions is shown in Table 4.

Table 4. Number of shops of Maxima and Rimi by statistical region

Region	Maxima			Total	Rimi			Total
	XXX hyper-market	XX super-market	X neighbour-hood store		Hyper-market	Super-market	Supernetto (discounter)	
Riga region	3	5	47	55	12	21	24	57
Pieriga region	–	6	18	24	4	3	8	15
Vidzeme region	–	5	11	16	–	2	5	7
Kurzeme region	–	4	12	16	2	6	6	14
Zemgale region	–	3	11	14	2	2	7	11
Latgale region	–	3	16	19	1	3	5	9
Total	3	26	115	144	21	37	55	113

Source: www.rimi.lv, www.maxima.lv, 2014

It can be seen from Table 4 that the strategy of Maxima is oriented towards opening hypermarkets only in Riga, whereas Rimi also has hypermarkets outside Riga, except the Vidzeme region.

The number of stores of *top!* and AIBE in regions is shown in Table 5.

Table 5. Number of shops of Top! And AIBE by statistical region

Region	**Top!**		**Total**	**AIBE**
	supermarket (top)	**convenience store (mini)**		**convenience store**
Riga region	5	–	5	37
Pieriga region	15	13	28	18
Vidzeme region	25	25	50	18
Kurzeme region	29	45	74	4
Zemgale region	14	5	19	41
Latgale region	7	7	14	45
Total	95	95	190	163

Source: www.top.lv, www.aibe.lv, 2014

Most of AIBE stores are located in Latgale, Zemgale and Riga regions but *top!* stores – in Kurzeme and Vidzeme regions.

2. Consumer behaviour in retail

The study results can be analysed and interpreted from various perspectives but in order to achieve the aim of the study the survey results were summarised by dividing all respondents into generations.
Generations which have been surveyed during the study are (Levy, 1998: 98−104):

- “Net” generation: 0–19 years old;
- “Y” generation: 20–30 years old;
- “X” generation: 31–45 (50) years old;
- “Post-war” generation: 51−62 years old;
- “Silver” generation: older than 63 years.

A questionnaire was made to carry out the reasearch. When answering questions about whether or not the shop assistant, when selling a good in a shop, influences customer decision about buying the good, 50 % of respondents answered positively, whereas 48 % thought that the actions of the shop assistant influence them rarely.

When compiling answers about what is done incorrectly in stores, respondents indicated that the shop assistant:

- is impolite, communicates very little or does not communicate at all. A contrasting opinion was also expressed that shop assistants are too active and insistent with their offers;
- are willing to help as soon as the customer has entered the store without having the chance to see the assortment;
- is in a bad mood, is impatient;
- often is busy with his/her own affairs, chats, eats, argues, plays videogames and so on;
- enforces his/her own opinion, is too persistent, does not give the customer the chance to assess the good on his/her own;
- stands next to the customer and observes him/her, follows the customer like a shadow, thinks of the customer as a potential thief;
- is not interested in selling;
- is not knowledgeable about the assortment of goods and their applications, often is incompetent;
- does not like if the customer touches the good with his/her hands but ultimately does not purchase it (more applicable to clothing stores) and so on.

After analysing the answers, the authors conclude that Latvian customers pay attention, analyse and observe the work of shop assistants. Customers form their opinion about the company according to the actions of the shop assistant, who thus forms the overall image of the company. During more detailed interviews customers revealed that it is very difficult to change the negative experience they have had and very often information about their negative experience is spread within the social class of the customer through word of mouth.

The results of the study also indicated positive experience during shopping and that this experience encourages repeated purchases. This validates the assumption of the authors that the sales assistant plays a very important role in the process of purchasing goods. Taking into account theories of determining and analysing customer needs, it can be concluded that any complaint encompasses potential needs. The authors would like to emphasize that, when analysing customer complaints, a list of customer needs can be constructed, which can be used by shop assistants working in the store. This approach to shop assistant training can ensure that the actions of shop assistants are oriented towards satisfying customer needs and expectations.

Respondents also mentioned various situations when during selling something was not done correctly or when the customer did not benefit from the purchase. Therefore, in order to clarify how often this happens, various specific questions were asked.

The “Net” generation said that sometimes the shop assistant convinces them to make a purchase. In addition, occasionally a purchase is made only because the good was well-position in the store. According to the “Net” generation, the layout of shops is important, but the shop assistant can rarely convince them to purchase a good which will not benefit them economically or socially. Respondents have also noted that sometimes conflict situations arise with the shop assistant, and that 50% of the time the cause is due to the shop assistant and 50% of the time the cause is due to the customer or various external factors. However, it is clear that the opinion of the shop assistant could differ from the opinion of the customer.

The answers of the “Y” generation were similar, but some slight differences could be noticed. Respondents in this generation said that they have occasionally purchased a good if it is well-positioned in the store. They also noted that the layout of the store *always* plays a role in the purchasing process and choice of goods. The shop assistant rarely influences them; however, sometimes conflict situations arise. According to the “Y” generation, the cause of these situations is more often the customer rather than the shop assistant. 55 % of the respondents have noted that the conflict is caused by various external factors. Respondent answers indicate that the “Y” generation is characterized by social maturity and the ability to individually make well-grounded decisions. It is possible that the “Y” generation carefully plans its expenditure and does not make unreasoned purchases.

After studying the answers given by the “X” generation to the aforementioned questions, it can be concluded that shop assistants sometimes convince this generation to make a purchase and that members of this generation often purchase goods if they are well-positioned in the store. This generation considers that store layout is more important than shop assistant influence. Conflict situations, which occur rarely (this is a sound indicator based on the age group and social experience of this generation), are more often initiated by customers themselves, but more rarely by shop assistants or various external factors.

The Silver and Post-war generations have mutually similar views; however, they are not identical.

Summarizing the results of the study, it can be concluded that: when the age of the customer changes (according to the indicated generations), the influence of the shop assistant on the decison to make a purchase changes as well. As the age increases, the influence of the shop assistant increases as well, whereas for younger customers a more important factor is the layout of the store.

This can be explained using various psychological, social, economic and other factors. It should be noted, however, that the habits of the new generation of consumers are changing and that the causes of these changes are directly or indirectly related to the development of information technologies and the internet.

The study confirms that, during the purchasing process, shop assistants, communication and other factors play an important role.

By using the available statistical data about regions it is possible to determine the development trends of every region and find correlations with retail stores located there. Looking at the population statistics it can be seen that the Vidzeme region has the lowest population (only 10 % of the whole population of Latvia); whereas half of the population lives in the Riga and Pieriga regions (see Table 6). Hence, all retail store types are widespread in these regions, and they have the largest number of hypermarkets and supermarkets.

Table 6. Number of inhabitants by statistical region

	2011	2012	2013
LATVIA	2074605	2044813	2023825
Riga region	659418	649853	643615
Pieriga region	371952	370128	369987
Vidzeme region	211995	208728	205949
Kurzeme region	271143	266433	262755
Zemgale region	255111	251495	248845
Latgale region	304986	298176	292674

Source: Statistical data, 2014

On the other hand, if the population is viewed in terms of its generations, it is seen that around 60 % of people living in regions are working-age. This means that mostly they are people from the "X" and "Y" generations. If we look at the Silver generation, the size of this generation is increasing every year, and this is especially evident in regions.

Table 7. Population by sex and by main group by statistical region at the beginning of the year, %

	2012			2013		
	Under working age	Of working age	Over working age	Under working age	Of working age	Over working age
LATVIA	14,3	63,6	22,1	14,4	63,2	22,4
Riga region	13,2	64,1	22,7	13,6	63,4	23
Pierīga region	16,1	63,8	20,1	16,2	63,4	20,4
Vidzeme region	14,1	63	22,9	14	62,8	23,2
Kurzeme region	15,1	62,5	22,4	15,1	62,1	22,8
Zemgale region	14,9	64	21,1	14,9	63,7	21,4
Latgale region	13,3	63,4	23,3	13,3	63,1	23,6

Source: Statistical data, 2014

Looking at people's incomes in regions, it is seen that the lowest average salary is in the Vidzeme region.

Table 8. Avarage monthly wages and salaries by statistical region of Latvia (in Euro)

		2010	2011	2012	2013
Bruto	LATVIA	633	660	685	716
	Riga region	724	757	778	815
	Pieriga region	603	622	649	677
	Vidzeme region	485	518	528	560
	Kurzeme region	544	559	598	608

		2010	2011	2012	2013
	Zemgale region	508	547	571	597
	Latgale region	440	468	475	490
Neto	LATVIA	450	470	488	516
	Riga region	511	534	551	583
	Pieriga region	429	447	466	491
	Vidzeme region	351	376	384	410
	Kurzeme region	392	404	430	441
	Zemgale region	367	395	413	436
	Latgale region	320	340	345	358

Source: Statistical data, 2014

Taking the size of the population and people's incomes into account (see Table 8), the Vidzeme region is not attractive to the large retail chains Rimi and Maxima because there are relatively few of these stores in this region. On the other hand, Aibe, *top!* and LaTS convenience stores are more popular.

Conclusions

After analysing the study results, the authors conclude that the Latvian consumers pay attention to shop assistant work, they analyse and observe them. Depending on the shop assistant's behaviour, the buyer forms an opinion about the company and shop, hence shaping the overall image of the company. During in-depth interviews, people pointed out that it is difficult to change the negative experience, and often this negative experience is disseminated in the buyer's social layer through word of mouth.

The authors conclude that the shop arrangements, advertising of the goods at the point of sale, and shop assistant behaviour have a great impact during the purchasing process. It must be noted that the shop assistant's behaviour can decisively affect customer decision making during the purchasing process in particular age groups.

Looking at the main entrepreneurship indicators in trade, population size and people's incomes it can be concluded that retailers pay attention to economic and demographic parameters by choosing the store types which they open in each region.

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MAŽMENINĖS PREKYBOS PARDUOTUVIŲ PLĖTRA VARTOTOJŲ ELGSENOS IR REGIONO KONTEKSTE

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Santrauka

Šio straipsnio tikslas – išanalizuoti mažmeninės prekybos parduotuvių paplitimą Latvijos regionuose ir Latvijos vartotojų elgseną. Remdamiesi prieinamais statistiniais duomenimis ir savo tyrimo rezultatais, autoriai išanalizavo didžiausių mažmeninės prekybos parduotuvių pasiskirstymą Latvijos regionuose ir vartotojų elgseną mažmeninėje prekyboje. Tyrimo metu apibrėžtas parduotuvių konsultantų vaidmuo pirkimo procese, tyrimo rezultatai įvertinti kartų požiūriu. Šie rezultatai gali padėti mažmeninės prekybos bendrovėms dirbti efektyviau, pasirinkus tinkamą mažmeninės prekybos parduotuvės tipą.

PAGRINDINIAI ŽODŽIAI: *vartotojų elgsena, mažmeninė prekyba, mažmeninės prekybos parduotuvių rūšys, kartos.*

JEL KLASIFIKACIJA: M11, M31, F1

COMMUTING PATTERNS IN RIGA AGGLOMERATION: EVIDENCE FROM A SURVEY ANALYSIS OF YOUTH

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ABSTRACT
In the last ten years the evident changes of settlement patterns through suburban growth near to capital city of Latvia occurred. Increase of distance between home and routine activity places as well as changes of public transport and rapid increase of car ownership initiated significant changes in commuting patterns of inhabitants living outside of Riga. Although the commuting from suburban area to Riga is recently broadly studied, however these researches focused primarily on able-bodied population leaving behind school-age children and young people. The aim of this study is to analyse commuting patterns of young people aged 12 to 17 moving from outskirts of Riga to school located in Riga. This study reveal commuting patterns in Riga agglomeration through wide analysis of spatial patterns of youth commuting, examination of motives and factors affecting transportation mode choice for school trips and commuting times. Findings of the research show existing correlation between location of young people's place of residence in terms of distance from core city and proportion of them commuting to Riga. Likewise several socio-demographic and socio-economic characteristics of young people have influence on school trip transportation mode choice.
KEY WORDS: *youth, geographic mobility, commuting, transportation modes, Riga agglomeration.*

JEL CODES: R32, J690, J130
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Introduction

The society of 21st century are characterised by increased mobility and ability to cover larger areas easier through highly developed transport infrastructure and availability of advanced and faster vehicles. The studies of the everyday movement of local residents, not only reflects the level of economic advantages and the development of social and transport infrastructure, but also links which exist among everyday activity places and help through diversity, intensity and nature of these links, demonstrate the extent to which local residents seek opportunities of work, education, health care, social and cultural amenities (Krišjāne, Bērziņš, 2009). In previous studies the commuting to work was used as an indicator to describe the people movement within Riga metropolitan area (Pierīga), process of suburbanization as well as development and changes of Riga agglomeration (Krišjāne et al., 2007; Krišjāne, Bērziņš, 2011; Krišjāne, Bērziņš, 2009, Krišjāne et al., 2012).

Although these studies show various aspects of commuting patterns such as profile of commuters, time and directions of commuting, these studies mostly ignore young people's everyday mobility. Therefore the commuting patterns within Riga agglomerations are not studied sufficiently losing experience of social group with high demands for mobility, but restricted by immaturity and dependency on adults as well as indirect effects of on-going urban transformation and socio-demographic processes including change of the place of residence due to on-going suburbanization, cut off public transport trips, automobilization and optimization of school network.

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The aim of the present paper is to analyse commuting patterns of young people aged 12 to 17 moving from outskirts of Riga to school located in Riga. This study has three main tasks. First, to reveal spatial patterns of youth commuting from Riga agglomeration towards Riga. Second, to consider motives and factors affecting youth transportation mode choice for school trips. Finally, to examine variations in commuting time by location of the place of residence and transportation mode used for school trip.

In order to gather the data for this study the author organized and managed survey of young people in eleven schools located and distributed in six residential neighbourhoods of Riga, Latvia.

1. Suburbanisation, optimization of school network and changes in transportation behaviour

1.1. Suburbanisation and development of Riga agglomeration

The process of suburbanization similarly as in other Baltic countries (Tammaru, 2001) started in late 1960s and was based on simultaneous process of urbanization initiated by industrialisation and immigration mainly of Russian-speakers from the other Soviet Republics. In Soviet era the migration to suburban areas of major cities were determined by 1) the increasing food shortages throughout most of the socialist world; 2) soviet planning implications restraining spatial development in larger centres with more than 200000 inhabitants and restricting on in-migration to most large cities (Kule, 2009; Tammaru, 2007). Hence the part of the workers concentrated in rural areas near to large cities and in satellite towns. In period of two decades as in other East and Central Europe countries, a series of collective and state farms with high-quality residences and summer home villages emerged in areas around Riga, which provided workers with better homes and complementary agricultural products (Krišjane, Bērziņš, 2009). Along with changes in settlement patterns the number of people living in Riga and the adjacent areas increased by 17 % from 1045,000 in 1970 to 1227,000 by year 1989 (Filimonenko, 1991).

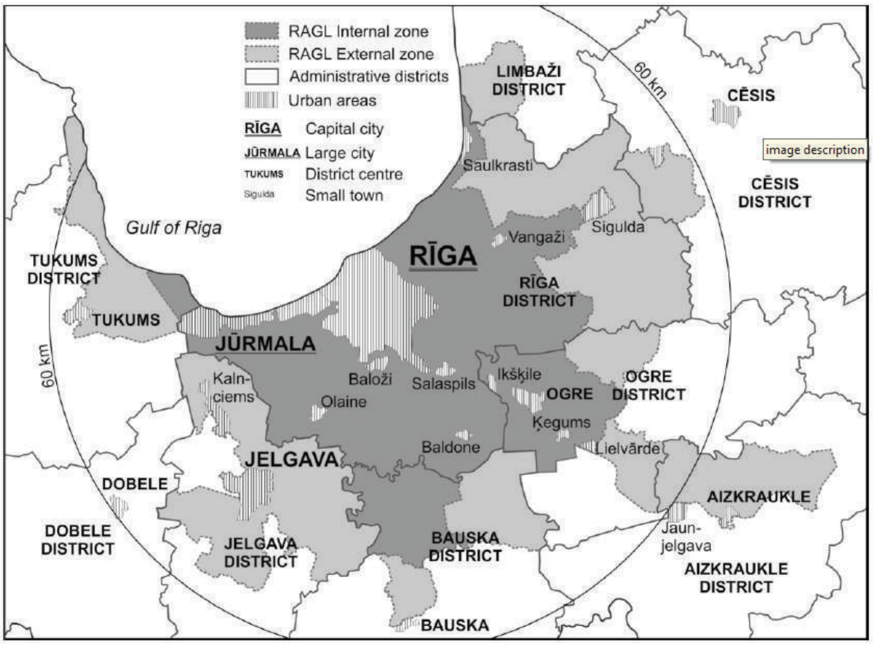

Figure 1. Spatial structure of Riga agglomeration

Source: Department of Human geography, University of Latvia, 2004

Rapid changes of settlement patterns and population growth near to Riga also encouraged necessity to identify the spatial structure and possible borders of this area for planning and research. In 1966 the Riga Suburban Zone Plan and later in 1980s a regional planning project defined Riga agglomeration as unit for further planning (Kūle, 2009; Krišjāne, Bērziņš, 2009). The Rīga agglomeration was defined as "the area which is adjacent" to Rīga city (see Figure 1). Criteria for the delimitation of the boundaries of the Rīga agglomeration particularly focused on the intensity of labour migration at a radius of 60 to 70 kilometres with travel times of up to 1.5 hours and includes both urban and rural areas (Krišjāne, Bērziņš, 2009).

After the restoration of Latvia's independence in 1990s the suburbanization evolved under conditions of market economy including privatization, free price system and establishment of land and housing market. Such dramatic changes encouraged people of lower socio-economic status to leave the cities in order to find cheaper housing elsewhere, other people left the cities because the restitution policy enabled them to become landowners elsewhere (Markausa, 1997) as well as others returned to the suburban homes from which they had once departed in order to find jobs in the cities, especially when they became unemployed in the course of transition (Krišjāne, Bērziņš, 2011).

The process of suburbanisation started to develop more rapidly in the 2000s after joining the EU in 2004 along with the increase in individual wealth, supply of new housing and availability of mortgages (Bērziņš, Krišjāne, Krūzmētra, 2010). People who lived in Soviet-era apartment buildings were increasingly able to improve their living conditions by moving from these old or high priced apartments in city centre to cheaper or new-built dwellings in suburban areas. Upper- and middle-class households moved to suburban areas in search of a higher quality life and environment purchasing dwelling corresponding to their financial resources (Bērziņš, Krišjāne, 2008).

However new suburbanites often faced absence of appropriate social, cultural and recreational infrastructure within areas where new residences were located. This encouraged them to use the opportunities of education, medicine and recreation within towns and cities of agglomerations. For example these changes of settlement system within Riga and in Pierīga and displacement of residences outside of the city as well as lack of appropriate infrastructure stimulated rapid increase of distance between routined activity sites and commuting towards Rīga from suburban areas (Krišjāne, Bērziņš, 2009). Most of the former inhabitants of Riga from their residences on the outskirts for daily commuting to work frequently use private cars (Bērziņš, Krišjāne, Krūzmētra, 2010) without which it would be difficult to cover distances varying between few kilometres to more than 70.

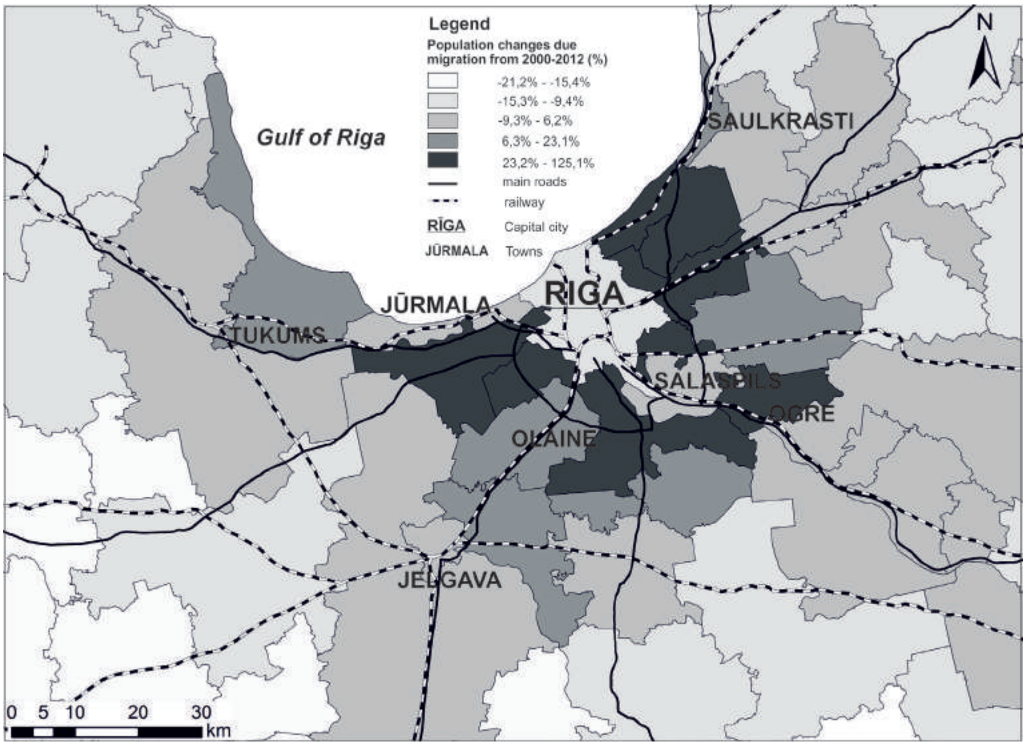

Figure 2. Population changes in municipalities of Riga agglomeration 2000–2012

Source: made by author according to data from CSB of Latvia

Although in the last twenty years starting from 1991 the Riga agglomeration as Latvia experienced population decline due the return migration of Russians to Russia, emigration to the Western countries and negative natural population growth (Eglīte, Krišjāne, 2009), however the population of the Riga agglomeration has not decreased substantially since positive internal net migration has counterbalanced emigration losses. Net migration became positive in all municipalities around Riga (40 per cent population growth in the 2000s) in the 2000s as a result of suburbanisation (see Figure 2) and in 2007 the total population of the Riga agglomeration was 1 151 112, including 429 000 suburban residents (Krišjāne et al., 2007; Krišjāne, Bērziņš, 2011; Krišjāne et al., 2012). After administrative territorial reform in 2012 Riga agglomeration consists of 22 municipalities and 16 towns. The territorial structure of this area includes capital Riga as the central city and the internal and external zone of the agglomeration (Bērziņš, Krišjāne, 2008). The two zones differ from one another by the nature of interaction between the zones and the capital city through intensity of daily commuting and density of population.

1.2. Automobility and public transport system changes

The economic and social changes experienced in Latvia in 1990s directly changed the conditions which previously guided the development of settlements. Critical changes took place in transport system significantly changing travel behaviour of inhabitants through excessive increase of private car ownership (see in Table 1). Such transformations had a several significant causes. The end of subsidized public transportation and growth of technical maintenance expenses determined dramatic increase of public transport prices in early 1990s in Latvia. The high public transport ticket prices along with relatively low petrol prices stimulated decline of public transport users and explosive car ownership and use. Privatisation of public transport sector determined that private enterprises were guided by interests of profit and decrease of passengers (also due negative population growth) was perceived as emergency to cut off public transport trips restricting commuters to easily access the work place or educational institution. Decline in public transport services made existing system of public transport deficient and encouraged acquiring and using a car for commuting. The high use of private car for commuting mainly characterizes Riga agglomeration (Krišjāne et al., 2007).

Table 1. The number of registered passenger cars per 1000 residents

	Latvia	**Riga agglomeration**	**Riga**	**Lithuania**	**Vilnius**	**Estonia**	**Tallinn**
1985	70		83	96	73	114	116
1990	136		109	158	107	207	164
1995	133	147	145	198	226	265	311
2000	234	269	243	335	367	338	398
2005	330	376	339	426	497	366	426
2009	418	460	406	508	588	407	412
2012	302	328	296	565	613	428	350
Increase from 1990 (%)	**222%**	**222%**	**272%**	**358%**	**573%**	**207%**	**213%**

Source: own elaboration using data from various national transport agencies, The World Bank database (http://data.worldbank.org/indicator) and European Commission – Eurostat database (http://epp.eurostat.ec.europa.eu)

Emergence of market economics also resolved shortage of cars (Grava, 2007) and cost of car maintenance which previously was very expensive because for regular car usage the owner had to buy both petrol, and spare parts in black market (French, 1995). For example Riga, a city of close to a million people, had only ten places selling legally fuel in t 1980s (Grava, 2007). Hence it is also undeniable that in the late 1990s and in 2000s before economic crisis in 2008 the financial resources of households significantly raised and people become more prosperous which made private car purchase more affordable than in the Socialist era.

Although the number of private cars increased more than two decades in the last four years (from 2009) it started to decrease. Such decline of private car ownership is only partly associated with the economic crisis in 2008. Main cause for such changes was initiated by Road Traffic Safety Directorate of Latvia maintaining register of vehicles. The vehicles which were registered in other countries or were without roadworthiness test for last five years were excluded from register of vehicles.

1.3. Population decline and optimization of school network

After the regaining of independence in 1990 Latvia experienced continuous population decline due to negative natural population growth. Since 1991 the number of population decreased by 11000 people per year on average. Such demographic trends lead to significant decrease of the number of children and young people in school-age. For example, the number of school-age children in Riga and Riga agglomeration decreased by more than 35 % from 2000 to 2012 (see in Figure 3).

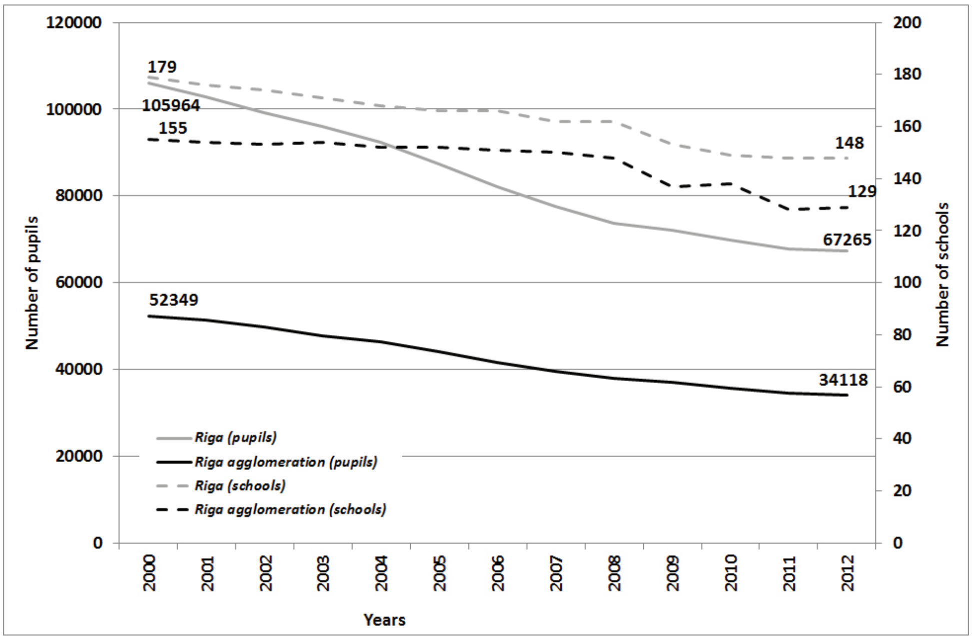

Figure 3. The number of pupils and schools in Riga and Riga agglomeration 2000–2012

Source: own elaboration according to data from CSB of Latvia

Such changes in the number of school-age children also have negative socio-economic effects. The existing model of school network maintained by the Ministry of Education and Science as well as local municipalities becomes ineffective and economically non-affordable. Therefore the revision and optimization of school network were initiated leading to closing and restructuration of prospectless schools. Immediate optimization of school network was forced by economic crisis in 2008. 150 schools (16 %) all over the country were closed in four years from 2008 to 2012. The vast majority of schools were closed in rural areas of Latvia forcing the school-age children to choose the schools located in cities or regional centres to precede their education.

Although the most of the schools were closed in rural areas similar trend was observable also in Riga and Riga agglomeration. Figure 3.shows that the number of schools both in Riga and Riga agglomeration decreased by 18 % in period of twelve years (2000–2012).

Hence considering decline in number of schools and restricted accessibility of qualitative education in local areas parents and young people was forced to choose and attend the schools located further from home.

This leads to observable changes in travel behaviour for school trips as well as to increase of flows of school-age children from rural areas towards to cities and towns.

2. Commuting patterns in Riga agglomeration

Previous studies shows that in comparison to 1980s and 1990s daily commuting from the urban centres to rural areas decreased due to disappearance of job opportunities in suburban zone and in modern days the suburbanization is one of the main factors influencing increase of commuting flows from the suburbs to Riga (Krišjāne, Bērziņš, 2009). A total of 42 % of those who migrated to the suburbs from Riga in last ten years became commuters because they continued working in the city (Krišjāne et al., 2012). The concentration of workforce towards Riga acknowledges that agglomeration is functionally monocentric where core is significant centre for industry, finance, education, entrepreneurship and transport.

In 2000s the largest share of commuters – more than 40 % come from local municipalities adjacent to Rīga city as well as from towns and cities such as Baloži, Saulkrasti, Jūrmala, and Ogre located in agglomeration zone (Krišjāne, Bērziņš, 2009). Hence the percentage of commuters who travel from internal zone of Riga agglomeration to capital city are higher than proportion of commuters in external zone.

Although most of the commuters use public transport for travelling to work, however the increase of residents in municipalities near to Riga in last ten years also significantly extended traffic flows of private cars towards Riga. Approximately 60 % of commuters use public transport as their main mode of transportation between home and work in Riga (Krišjāne et al., 2012) and 40 % drive a car to get to work (Krišjāne et al., 2007). According to some studies the use of public transport is more pronounced for commuters without migration experience, but use of private car for commuters who migrated to suburbs (Krišjāne et al., 2012). Several studies examining young people travel behaviour and transportation mode choice in Riga agglomeration showed that the strongest effect on transportation mode choice for young people have only two factors – the family driving habits and travel distance (Burgmanis, 2012).

Previous studies on commuting times within Riga agglomerations shows that commuters who use public transport spend 13 minutes more travelling to work in Riga than other commuters (Krišjāne et al., 2012). However the commuting time depends also on location of the place of residence within agglomeration. Commuters who live in internal rural zone of Riga agglomeration spend 43 minutes in average for work trip. For other commuters who live in towns within internal zone (58 minutes) and in rural areas (70 minutes) and towns (62 minutes) of external zone the commuting times are even higher (Krišjāne, Bauls, 2011).

Largest socio-demographic groups of commuters from both internal and external zone of agglomeration are residents aged 20 to 44, Latvians, men, workers who earn average or high incomes (LVL 150−500; 200−700 EUR) and suburban inhabitants who hold university degrees (Krišjāne, Bērziņš, 2009; Krišjāne et al., 2012).

3. Youth’s commuting behaviour and transportation mode choice

Travelling by personal transport, public transport, and bicycle or on foot to the activity sites is the most significant activity daily performed by youths. A contemporary increase of the distance between activity spaces, growing prosperity and changes of intensity of urban life mostly in developed countries significantly increased the rates of car ownership and usage. The non-active and car oriented mode of mobility of families as ‘consequences of complexity of modern life resulting in shortage of time’ (Mackett, 2002) which directly affects children and young people’s travel patterns through immaturity and dependency on adults. Parents chauffeuring their siblings to the activity sites reduce the opportunity for young people to travel independently and intervene in active interactions with environment indirectly restricting development of their social and spatial skills (Prezza et al., 2001; Rissotto, Tonucci, 2002; Rissotto, Giuliani, 2006). Passive transportation due to restrictedopportunity to access the most ordinary physical activity for human being – walking may also favour obesity (Cooper et al., 2003; Timperio et al., 2004).

Some researchers have argued that distance between home and school is a critical factor which promotes children to walk or choose other transportation modes (McDonald, 2008, Nelson et al., 2009). Several studies emphasize that the choice of transportation mode for reaching a particular activity site is directly associated with youth's sex, age, family driving habits and previous experience of physical safety within the residential neighbourhood (Valentine, McKendrick, 1997; O'Brien et al., 2000; McDonald, 2008; 2010). Previous studies show that trips to and from school was used for analysing youth travel behaviour. This approach to represent youth commuting behaviour and patterns in Riga agglomeration is also used in this paper.

4. Research Data and Methods

4.1. Data collection and questionnaire

The data for this study was acquired from the survey, called "The Study of Children's Activities and Perception of Urban Environment" which was conducted from March 2010 to February 2012. The survey was performed in eleven schools located and distributed in six residential neighbourhoods of Riga, Latvia. The selection of eleven schools for surveying was made considering their location and the language of instruction and communication (i.e., six Latvian-language and five Russian-language schools were chosen). One teacher delivered and collected the questionnaires, which were designed to be completed within 40 minutes (length of lesson).

The questionnaire consisted of several parts and was designed to extensively study the commuting patterns of youth living in Riga agglomeration and attending the school in Riga. First part of questionnaire elicited general socio-demographic information about respondent and his/her household characteristics. There were questions asking respondents age, gender, current level of education, type of dwelling, duration of living in place of residence, location of place of residence. The second part of questionnaire examined travel behaviour of young people to most important daily activity sites such as to school, out-of-school formal activities, city centre and the consumed time for trip from home to school. The last set of questions dealt with family driving habits. This part of survey enquired how frequently parents use car weekly, does family have car and how often weekly parents chauffer children to school and other activity sites.

4.2. Participants

The questionnaires were distributed among pupils from primary school grades 6 to 9 and secondary school grades 10 to 11. In total, 2975 students from 12 to 17 years were surveyed and filled the questionnaires. 2707 (91 %) questionnaires were accurately filled. Further to develop the study sample the students who completed the questionnaire but stated that they lived in Riga were eliminated from the analysis, which meant that only 339 (50 %) of the questionnaires were initially included; however, 324 (96 %) of these were accurately completed by the respondents and considered valid. Hence the total sample of study (n) was 324 respondents between the ages of 12 to 17 years.

4.3. Data analysis

Travel mode to school in spring and autumn was used as a dependent variable and consisted of two categories: car and public transport. Traveling time from home to school was also used as a dependent variable to analyse youth's commuting times. To study the transportation mode choice of youth for school trips the nine independent variables were used: sex, age, language of education, current education level, type of dwelling, parent's driving habits, duration of living in a place of residence, the location of place of residence, distance from home to school. For estimating travel distance from home to school the Google maps were used. The choices of independent variables were based on previous studies on young people travel behaviour and commuting patterns in Riga agglomeration.

The Pearson chi square criteria test was used and calculated to convey whether there is a significant difference between the effect of two categorical independent variables (for example, sex) on a categorical dependent variable (transportation mode for school trips). The SPSS 18.0 for Windows software was used for the statistical data analysis. The cartographic software Arc Gis 9.3 was used to determine and describe the spatial commuting patterns of youth living in Riga agglomeration.

5. Results and Discussion

5.1. Spatial Patterns of Youth Commuting

Analysing spatial patterns of youth commuting in Riga agglomeration locations of young peoples' place of residence were used. The results show obvious connection between proportion of respondents attending school in Riga and location of their residential municipality within Riga agglomeration. Figure 4.confirms that most of the commuters (proportion of respondents is higher than 7 %) are going to Riga from adjacent municipalities (Babītes, Mārupes, Ķekavas, Stopiņu, Garkalnes, Ādažu, Carnikvas) of Riga and Jūrmala (19 %).

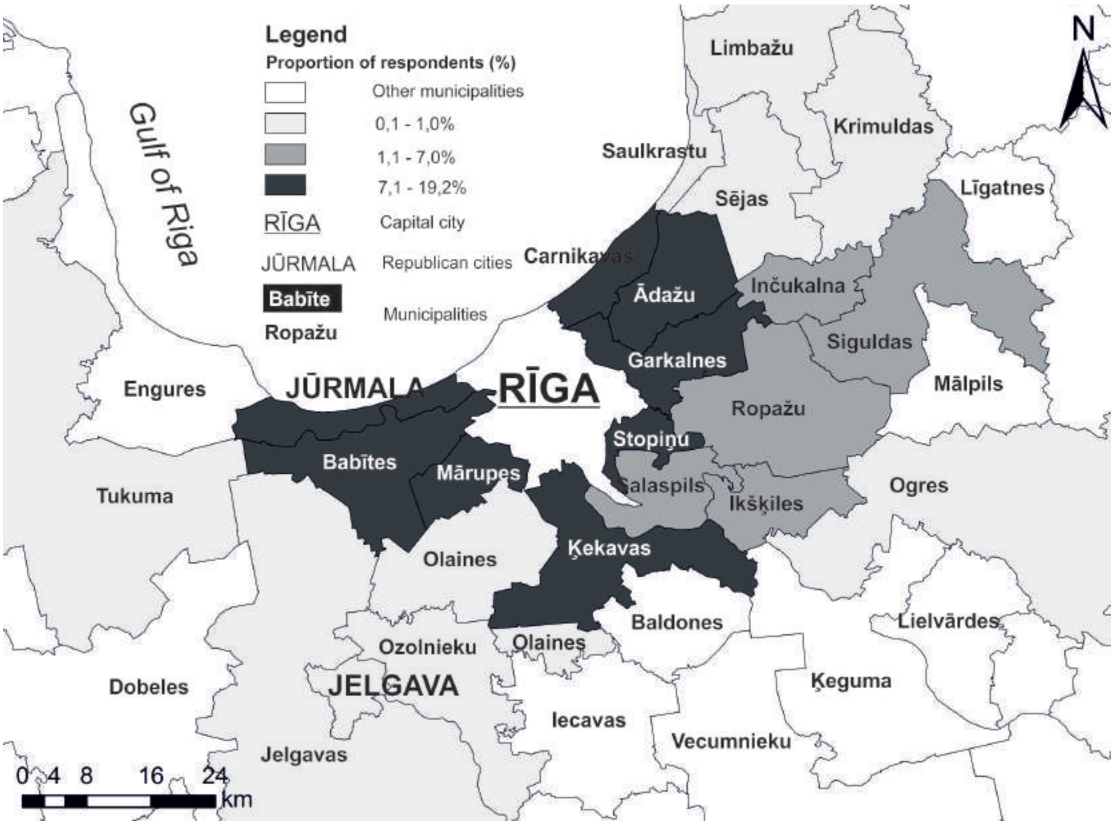

Figure 4. School trips from Riga agglomeration to Riga ($n = 324$)

Source: made by author

Previous studies on spatial patterns of commuting in Riga agglomeration shows similar findings (Krišjane, Bērziņš, 2009) emphasizing that most of the commuters travel from internal zone of Riga agglomeration to Riga. Such findings have several obvious explanations. First, highly developed transport system including road network, public bus and train services mostly developed in the Socialist era and improved in Post-socialist era directly link Riga agglomeration internal zone with core city. Second, the frontier municipalities of Riga comparing to others are directly exposed to urban transformations and suburbanization. More frequently people desiring to change the place of residence and move from core city to suburban zone chose the place of residence which is located in more quiet and clean area but not far away from their workplace. Another reason to migrate to these municipalities is possibility to access appropriate social infrastructure (kindergarten, gym, swimming pool, etc.) comparing to municipalities located further from core city. Such behaviour leads to high growth of population in adjacent municipalities of Riga and is confirmed by previously discussed data from CSB of Latvia on domestic migration (see also Figure 2). Therefore it is logical that the commuting flows from municipalities like Babītes, Mārupes and etc. also are higher and the majority of young people from the sample of this study live in these municipalities.

The number of schools as component of social infrastructure within municipality without reference on its location may constrain also the flows of youth commuting. The Figure 4. shows that although several municipalities (proportion of respondents: Salaspils – 4.4 %, Olaines – 0.9 %) share border and has direct public transport connections both bus and train with Riga the number of commuters from these areas are less than from previously described. Within both municipalities there are average size towns – centres of municipalities – Salaspils with 18 000 inhabitants and Olaine with 12 000 inhabitants. In both towns there are two secondary schools, there for e young people living in these municipalities can access appropriate education and opportunities to enable them to develop their knowledge and skills near their homes and there is no need for them to travel longer distances to Riga.

5.2. Commuting and Seasonality

Examining transportation mode choice for school trips and effect of seasonality on such choice data in figure 5 shows that mostly young people are chauffeured to school by their parents. The private care for school trips is used nearly three times more frequently than public transport. These finding are not supported by previous studies on commuting from suburban areas of Riga to core city (Krišjāne, et al., 2012). In these studies where able-bodied population was sampled authors found that commuters use public transport as their main mode of transport for travelling between home and work. Results also show that seasonal changes do not encourage young people to change their transportation mode for school trips. Figure 5 shows that only small increase of car usage and decrease in public transport (3.6 %) are observable. Previous studies on youth's travel behaviour in Riga agglomeration shows similar findings (Burgmanis, 2012).

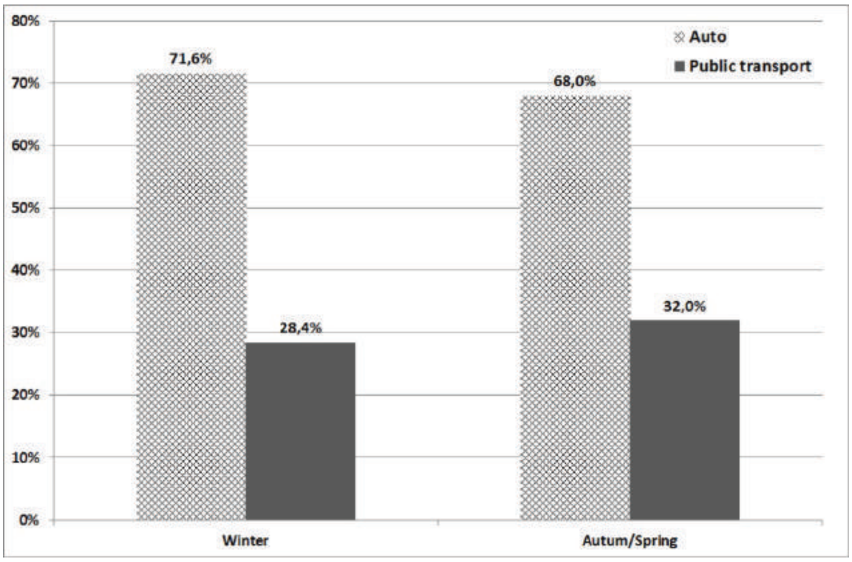

Figure 5. Transportation mode for school trips in spring/autumn and winter (n = 324)

Source: made by author

The unweighted changes of transportation mode by various seasons could be explained with high usage of private cars by parents who are tended to choose the less time consuming and most comfortable transportation mode to reach their work place without reference on season of the year. Similarly young people also choose the most comfortable way for the school trip if direction to parents' work place and school matches.

5.3. Transportation Mode for School Trips

To analyse factors influencing young people's choice of transportation mode for school trip to Riga categories of nine independent variables were compared (see Table 2). The Pearson chi-square test shows that the gender does not affect transportation mode choice. Both proportions of girls (69.3 %) and boys (66.7 %) who are chauffeured by parents or use public transport (respectively 30.7 % and 33.3 %) for school trips are similar. Table 2 also shows that there are no differences between categories of two other independent variables. There are no statistically significant differences for transportation mode choice between young people learning in schools with Latvian and Russian as language of education as well as young people whose place of residence is located in rural areas of Riga agglomeration and in agglomeration cities or towns.

Results show that six of independent variables included in analysis affect transportation mode choice for school trips. There is evidence that older children more frequently choose to use public transport for commuting than younger children. These findings are consistent with previous researches focusing on independent mobility and emphasizing that spatial autonomy increases when children grow older and parents consider them competent enough for negotiating with danger in public space and public transport (O'Brien, 2000).

Table 2. Factors affecting transportation mode choice for school trips

Factors		**Auto**	**Public transport**	X^2	*df*	*p*	
Sex	Boys	66,7%	33,3%	0,259	1	0,611	
	Girls	69,3%	30,7%				
Age	12–14	75,6%	24,4%	9,098	1	0,003	**
	15–16	60,1%	39,9%				
Language of education	Latvian	69,3%	30,7%	0,496	1	0,481	
	Russian	65,5%	34,5%				
Education level	Primary school	72,9%	27,1%	10,729	1	0,001	**
	Secondary school	53,6%	46,4%				
Type of dwelling	Apartament	44,6%	55,4%	20,276	1	0,000	**
	Private house	73,7%	26,3%				
Parent's driving habits	< 4 times per week	5,9%	94,1%	32,066	1	0,000	**
	> 3 times per week	71,6%	28,4%				
Duration of living in a place of residence	< 5 years	75,2%	24,8%	7,634	1	0,006	**
	>5 years	60,9%	39,1%				
Place of residence	Agglomeration rural areas	70,2%	29,8%	2,17	1	0,141	
	Agglomeration cities/towns	61,4%	38,6%				
Distance	<25 km	76,4%	23,6%	3,904	1	0,048	*
	>25 km	85,8%	14,2%				

*Notes: Significance **p<0.01, *p<0.05*

Source: made by author

Another factor which affects transportation mode choice is education level. Young people who attend secondary school more frequently choose the public transport for school trips. Although this factor is partly associated with children's age, however there can be also other explanation. In Latvia the largest movement between schools occur when young people graduate primary schools and choose the secondary schools where to continue their education. Furthermore in several municipalities that are included in Riga agglomeration only primary schools are situated. Alongside with other problems such as questionable quality of education and low accessibility of existing schools these circumstances encourage most of the young people after leaving primary school to exploit the educational opportunities provided by Riga. Hence it could be a free choice of young people or choice under pressure to choose school which can be located out of his/her local municipality or within other Riga neighbourhood. In particular cases the location of school may not coincide with direction to parents' workplace and such inconveniences stimulate to choose public transport for school trips.

At the residence level Table 2 shows that the children living in a private house more likely will use a car than walk to school. For example, young people living in private houses are chauffeured by parents to school nearly two times more frequently than children living in apartments. These findings imply that spatial patterns of youth commuting have significant effect on transportation mode choice. As found in previous studies private house as outcome of suburbanization is dominant building type in the nearest areas of Riga. Therefore author can make assumption that most of these young commuters who live in private houses come from municipalities located adjacent to Riga.

Family driving habits or frequency of car usage have the strong effect on car usage for daily commuting. 71 % of young people whose parent use cars more than 3 times per week choose opportunity to go to school by car. Only 28 % use public transport. Such results are not surprising because parents who work in Riga combine their trip to work with child›s chauffeuring to school. Young people who have changed their place of residence in last 5 five years are more likely to use car as transportation mode for school trips. These findings are partly consistent with results from previous studies on commuting of able-bodied people from suburban areas to Riga and indicate that private car use are more pronounced for commuters who migrated to suburbs (Krišjāne et al., 2012).

It is clear that distance from the place of residence to school also affect choice of transportation mode. Young people who live less than 25 kilometres from Riga choose car for school trips more frequently (76 %). These findings are not surprising because previous studies (Burgmanis, 2012) showed similar logic, i.e., that with increase of distance increases also proportion of car users and decrease the proportion of public transport users.

5.4. Commuting Time

The analysis of mean commuting times of young people shows that the majority (25 %) of them consume 35 minutes on average for school trips (see in Figure 6). The commuting times slightly changes and depends on used transportation mode. Young people who are chauffeured by parent to school by private car spend less time than those who travel to school by public transport. The highest proportions of private car users (27 %) spend 30 to 39 minutes for school trip. The largest proportion of public transport users lies between 20–49 minutes (42 %) and 60–69 minutes (17 %). Results showed in Figure 6 can be explained again by location of place of residence within Riga agglomeration and distance from home to school. Most of the young people come from adjacent municipalities of Riga and as mentioned in previous section are car users, therefore it is clear that their commuting times are significantly less than those who use public transport for school trip and live further from core city.

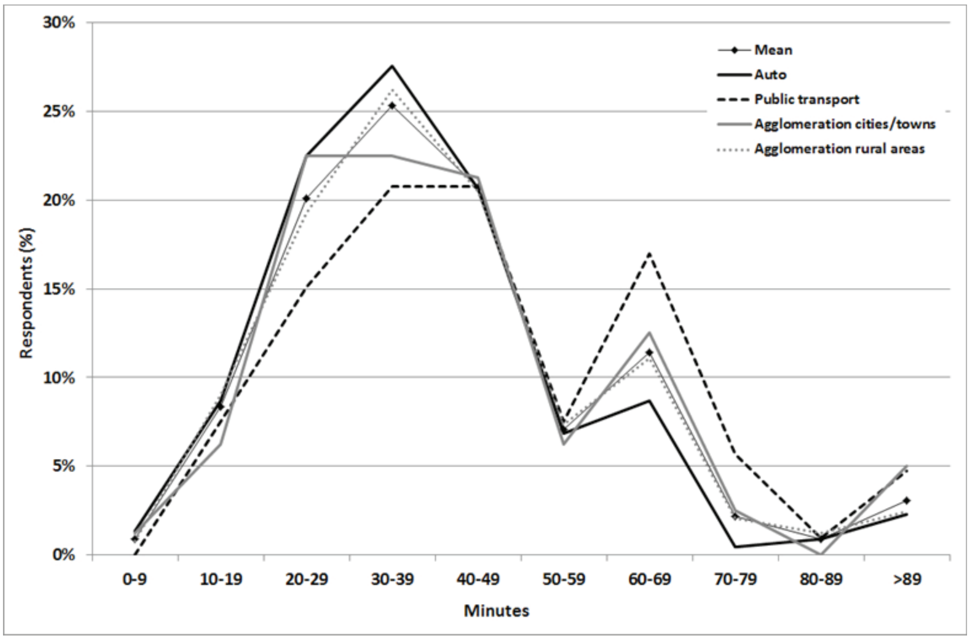

Figure 6. Time spent (minutes) commuting to Riga

Source: made by author

To examine the effect of location of place of residence from another viewpoint author compared the commuting times of young people who live in Riga agglomeration rural areas and cities or towns. Like the young people who live in suburban rural areas (67 %) the residents of cities and towns (65 %) mostly spend from 20 to 49 minutes for school trips (see in Figure 6). Figure 7 confirms that mean times without reference on location of the place of residence in terms of type of settlement are similar. These findings are contrary to previous studies providing evidences that there are commuting time differences between commuters from rural areas and those who live in cities and towns (Krišjāne, Bauls, 2011).

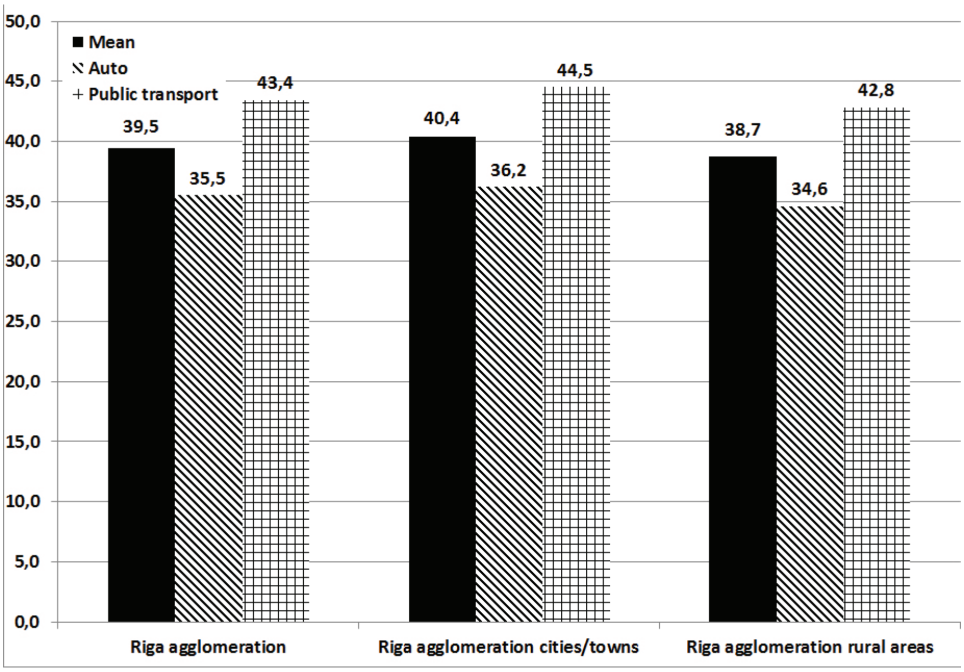

Figure 7. Mean commuting time to school

Source: made by author

Figure 7 shows that mean commuting time for young people is 39 minutes. Comparing differences of mean commuting time between car and public transport users was found that young people who use car for school trips reach the destination about 8 minutes faster than public transport users. These findings are partly different with previous studies on commuting times of labour in Riga agglomeration. Firstly, the findings of Krišjāne and Bauls (2011) shows that mean time for commuters from home to Riga is nearly 51 minute. Secondly, difference between mean times of car and public transport users is somewhat higher – 13 minutes (Krišjāne et al., 2012) than shown in this study. Although such differences is difficult to explain, however author's assumptions considering that most of respondents use car for school trip is following: 1) previous studies concentrated on adults which more frequently used public transport; 2) the school mostly is situated in different place within Riga than parent's workplace; 3) the school is always the stop before parent's workplace. Therefore it is logical that the mean times of young commuters are less than adult's.

Conclusions

The results of this study are threefold. First, the spatial pattern of young commuters match with zoning model of Riga agglomeration developed by Department of Human geography (see in Figure 1) and depends on accessibility to transport infrastructure, distance from the place of residence to core city and positive population growth in last ten years in municipalities adjacent to Riga. Major flows of young commuters can be observed from municipalities which are located alongside the city Riga and matches with internal zone of Riga agglomeration. Second, socio-demographic characteristics of youth as well as on-going urban transformations can influence their choice of transportation mode. Results show that young people are more frequently chauffeured by parents to school if they are aged 12−14, attend primary school, and live in private house, migrated to suburbs less than five years ago and whose parents use care more than 3 days per week. Youth who live further than 25 kilometres from Riga more frequently use public transport for school trips. Third, this study strongly suggest that if the number of pupils still decline and optimization of school network in Riga agglomeration will continue the number of young public transport users commuting towards Riga will increase. Especially it is associated with optimization of secondary school network.

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VAŽINĖJIMO RYGOS AGLOMERACIJOJE MODELIAI: JAUNIMO ANKETINĖS APKLAUSOS REZULTATAI

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Santrauka

Per pastaruosius dešimt metų išryškėjo įsikūrimo modelio pokyčiai, lemiantys priemiesčių augimą aplink Latvijos sostinę. Padidėjęs atstumas tarp namų ir kasdienės veiklos vietų, pokyčiai viešojo transporto sistemoje ir didelis nuosavų automobilių skaičiaus nulėmė aplink Rygą gyvenančių žmonių važinėjimo pokyčius. Nors ši tema pastaruoju metu išsamiai nagrinėta, vis dėlto mažai dėmesio skirta mokyklinio amžiaus vaikams ir jaunimui. Šio tyrimo tikslas – išanalizuoti jaunų žmonių (nuo 12 iki 17 metų), važiuojančių iš Rygos priemiesčių į mokyklas miesto centre, važinėjimo modelius. Atlikus tyrimą nustatyti važinėjimo Rygos aglomeracijoje modeliai, važiavimo trukmė, motyvai ir veiksniai, lemiantys transporto rūšies pasirinkimą. Tyrimo rezultatai atskleidė koreliaciją tarp jaunų žmonių gyvenamosios vietos atstumo nuo Rygos centro ir dalies jų važinėjimo į Rygą. Nustatyta ir tam tikrų sociodemografinių bei socioekonominių jaunų žmonių charakteristikų įtaka transporto priemonių pasirinkimui.

PAGRINDINIAI ŽODŽIAI: *jaunimas, mobilumas, važinėjimas, transporto priemonės, Rygos aglomeracija.*

JEL KLASIFIKACIJA: R32, J690, J130

ECONOMIC GAINS FROM SOCIAL ENTREPRENEURSHIP DEVELOPMENT IN LATVIA

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ABSTRACT
Social enterprises are crucial for Europe and its economy. These enterprises significantly contribute to job creation (especially for socially sensitive groups) and accounts for about 6 % of GDP across the European Union. In Latvia the role of social entrepreneurship is underestimated. The research aim is: based on the international experiences regarding social entrepreneurship, to determine economic gains of social businesses in Latvia. During the first year of developing social enterprises (2015) in Latvia, it is envisaged to establish 250 social enterprises, in which in total 1250 people will be employed, of which 50 % will be individuals from socially sensitive groups. Thus, the social benefit burden in municipalities will decrease by EUR 61 thousand, while almost EUR 222 thousand will be collected by the national government. The total gain from social entrepreneurship will amount to EUR 1.5 million over a six year period (2015–2020).
KEY WORDS: *social entrepreneurship, social business, government.*

JEL CODES: A10, H70, O12
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Introduction

The European Commission has placed the social economy and social innovation at the heart of its concerns under the Europe 2020 strategy. In 2011, the European Commission launched the Social Business Initiative as part of the Single Market Act within which social enterprise is one of 12 priority areas. Social enterprise accounts for about 6 % of GDP across the European Union (EU) and the European Commission's 'Europe 2020' Strategy sets a target for this contribution to grow to 9 % of GDP over the decade to 2020. The importance of social entrepreneurship is based on its social and economic functions in economy. It has a great potential in reduction of poverty (Yunus, 2003: 15; Yunus, 2007: 20; Defourny, 2004: 3) and promotion of employment (especially for socially sensitive groups of people). Social enterprises employ socially sensitive groups of people with a relatively low employment rate, thereby contributing to the reintegration of socially excluded employees into the labour market (Emmerich, 1997: 100; Barraket, 2008: 4; Yunus, 2010: 35). However, there is lack of scientific researches where economic gains from social entrepreneurship development are explored.

Social entrepreneurship has gained recognition in EU and national policies, scientific research, education, and the commercial sector. More and more social enterprises of various kinds emerge in the world. In

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the European countries, the experiences are different regarding social enterprises. In United Kingdom, the sector of social enterprise is significantly developed. Approximately 70,000 social enterprises exist in the country, contributing an estimated EUR 30 billion to the national economy. In Lithuania, the legislative process of social entrepreneurship is much ahead of other European countries. The Law on Social Enterprises which was passed in 2004 details the process of receiving the social enterprise status, defines target groups of the persons employed in a social enterprise, and sets the rights and duties of a social enterprise. In addition, it defines the boundaries between "social enterprise" and "social enterprises of the disabled" which also exists in Lithuania and is also described by this Law. In Ireland it is extremely difficult to estimate the potential employment for the social enterprise sector, as it is not certain the degree to which funding or services might be provided by the sector overall, but it is estimated that there could be at least 1400 social enterprises.

An opinion exists that social enterprises is the future of any economy, yet, there are a few social entrepreneurs in Latvia, besides, the concept of social entrepreneurship is a new one. There are no legal and institutional frameworks, no support instruments for fostering its development in Latvia. Furthermore, there is no single understanding regarding defining the concept of social entrepreneurship. Within the present research, *social entrepreneurship* is defined as a kind of entrepreneurship, the priority of which is to create social values and form economic protection for socially sensitive groups (Dobele, 2013: 70). To foster social entrepreneurship in Latvia it is important to examine the economic gains of social entrepreneurship to show its significance in national and municipal level.

The research object is economic gains of social entrepreneurship. The purpose of the research paper: based on the international experiences regarding social entrepreneurship, to determine economic gains of social businesses in Latvia.

To achieve the purpose, the following tasks were set:

- to examine the economic contribution of social enterprises in European countries;
- to examine the economic gains of social entrepreneurship at the national and municipal levels in Latvia.

The following research methods were employed to achieve the aim and fulfil the tasks: the *descriptive method* was employed to shape the theoretical discussion and interpret the research results based on the scientific findings on social entrepreneurship; *analysis and synthesis* were employed to examine individual problem elements and identify connections among them; *descriptive statistics and time series analysis* – were employed to analyse the social enterprise contribution to the national and local budget.

1. The social enterprise contribution to the economy in European countries

According to the European Commission data, the EU has more than 2 million social enterprises, which employ 6 % of the working population. In the EU Member States, social entrepreneurship consists of 4–7 % of GDP and employs more than 5 million people. Countries that recognise and value social enterprise as part of the 'real' economy have achieved significant growth in employment and output in the sector while addressing genuine social and environmental needs (Adding Value Delivering (…), 2013: 3). Given the fact that in Latvia is lack of information about social enterprises and its contribution to the economy, it is important to explore the international experiences. However, it should be mentioned, that assessing the scale of social enterprises is hampered by varying definitions of the social enterprises in the countries, and also by the nature of their role, which is driven by political and social ideologies of different countries.

The economic indicators of social enterprises in European countries are presented in Table 1.

Table 1. The economic indicators of social enterprises in European countries

Country	**Number of social enterprises**	**Number of employees**		**Annual turnover for social enterprise, EUR**	**Social entrepreneurship in GDP structure, %**	**Contribution to the state budget, EUR**
		All employees	Special target groups			
United Kingdom (2013)	70 000	1 million	…	232 000	5	30 billion
Ireland (2011)	1400	2500 –33000	…	1.4 billion	3	1.9 billion
Finland (2011)	158	1200	750	…	…	…
Lithuania (2012)	137	5400	3900	…	…	…

Source: Social Enterprise UK (…), 2013: 10; The Economic and (…), 2011: 15; Ščerbickaite, Moskvina, 2013: 5; Lindberg, 2011: 12.

United Kingdom. The social enterprise sector is growing rapidly in the United Kingdom. Recent government estimates suggest there are 70,000 social enterprises in the United Kingdom, employing around a million people in 2013. The sector's contribution to the economy has been valued at over EUR 30billion (Social Enterprise UK (…), 2013: 10). The United Kingdom is a pioneer when it comes to social enterprise and the social investment that helps finance it, attracting the interest of international practitioners and policymakers alike.

An average annual turnover of social enterprises were EUR 300 000 in 2011. However, social enterprises are not immune to the economic headwinds affecting equivalent SMEs. The turnover of social enterprises has decreased by 29 % (2011–2013) (Social Enterprise UK (…), 2013: 15; Social Enterprise UK (…), 2011: 10).The combined turnover of the top 100 United Kingdom social enterprises grew by 85 % (2012–2013) to EUR 400 million in an economy that is shrinking. Two-thirds of British social enterprises are making a profit, and a further 16 percent are breaking even.

According to the Social Enterprise UK survey (2013) mostly these are micro or small enterprises employing less than 10 people. 84 % of small businesses employ 1–9 people, 14 % 10–49 people and only 2.5 % more than 50. This suggests that social enterprises employ more people relative to turnover than mainstream small business. In the survey authors assume that this is not simply based on socialenterprises employing people on low wages. It can be explained by the fact that many small economic units produces high added value (Social Enterprise UK (…), 2013: 49). The majority (52 %) of social enterprises actively employ people who are disadvantaged in the labour market (for example: the long-term unemployed, ex-offenders, people with disabilities). It should be mentioned that social enterprises are very heavily concentrated in the United Kingdom's most deprived communities.

Ireland. Social business expert Michael Pyner (2012) believes that social enterprises are suitable type of business for Latvia. "Latvia is a small country, which in this case can be considered as an advantage because it can be easier and quicker to respond to changes comparing with a great country." As successful examples of social entrepreneurship promotion, he points out Ireland. Social enterprise has a strong and growing presence in Ireland, building on deep roots of community organisation, self-help and a native enthusiasm for enterprise. Within this, the social enterprise sector employs between 25,000 and 33,000 people in over 1,400 social enterprises (The Economic and (…), 2011: 15), with a total income of around EUR 1.4 billion representing 3 % of GDP. Social enterprise is a small but growing part of the enterprise base and ecosystem that has potential to bring further job gains and deliver economic potential (Social enterprise in (…), 2013: 2). Besides, if Ireland's social enterprise sector were to approach mean EU levels of output (6 % of GDP), it is estimated that there would be approximately 65,000 jobs in social enterprises; this figure could grow to as much as 100,000 jobs if Ireland achieved the 9 % goal set by the EU under the 'Europe 2020' Strategy (Clarke, Eustace, 2009: 63). In order to reach the average level of employment in social business, is expected to create an average of 5,000 jobs in the next five years (200 new jobs in the first year, 450, and 850 in the second year – the third year, a total of 1,500 jobs). However, to achieve the following, social entrepreneurship requires a proper regulatory framework and support tools.

It should be mentioned that in Ireland credit unions are excluded from the statistics of social enterprises, although they are considered to be social enterprises. It is because the credit union movement alone has almost 3 million members, over 500 local organisations, employs some 3,000 people, has combined assets of EUR 15.1 billion and combined savings of EUR 11.9 billion (Adding Value Delivering (…), 2013: 5).

The nature of social enterprises In Ireland is such that goods and services tend to be provided locally and so the jobs are created in local communities. They can provide jobs across a range of skill-sets also, some with the specific objective of providing employment to those most marginalised. Among the benefits of social enterprises are that they can provide jobs to those most distant from the labour market, both spatially and socially. As well as multiplier effects from the direct jobs in the sector, further indirect jobs are created either by enabling the development of other enterprises, for example by social enterprises that assist economic and community development, or by providing services that bring people to a community such as local festivals or community-run hostels.

Lithuania. The government has created an adequate legal framework for regulating social entrepreneurship and has introduced support instruments for fostering its development. Law on Social Enterprises launched in 2004 and it provides the following definition of social enterprise: Social enterprise is a legal entity of any form (individual enterprise, joint stock company, public institution) that satisfies the following conditions:

- the workers belonging to the target groups constitute no less than 40 percent of total staff and the number of such employees is not less than 4;
- the activities for development of professional and social skills and social integration are implemented;
- the incomes from unfunded activities of social enterprises comprise no more than 20 percent.

The Law on Social Enterprises also provides the definition of social enterprise for disabled, where the share of disabled target group consists of at least 50 percent of the annual average number of employees with special stress on support for severely disabled people.

In 2004 26 companies got the status of social enterprises. Since 2004 the number of social enterprises extended to 137 in 2012 (Disabled Social firms – 78; Social firms – 59 (people excluded from the workforce i.e. lonely parents, imprisoned etc.). Despite the fast growth of the number of social enterprises during the last years they constitute only 0.002 % of all economic entities operating in the country (Ščerbickaite, Moskvina, 2013: 5).

The key objective of social enterprises in Lithuania is employment of vulnerable groups. Since the Law on Social firms was put in place in 2004 the number of employed disabled people increased 4.5 times. In 2012 137 social firms employed 5,400 employees in total out of which 3,900 are in the target groups (i.e. disabled people, long – term unemployed, imprisoned people, lonely parents etc.). However people with disabilities employed in social enterprises represent 0.08 % of all employed disabled people. It should be mentioned, that the share of the employed people with severe disabilities is higher in social enterprises than in the open labour market. Unfortunately, Lithuanian social enterprises fail to employ vulnerable target groups of unemployed other than disabled (other vulnerable groups constitute only 0.2 %) (Ščerbickaite, Moskvina, 2013: 5).

Social enterprises and employees in Lithuania in the period 2004–2012 are presented in Fig. 1.

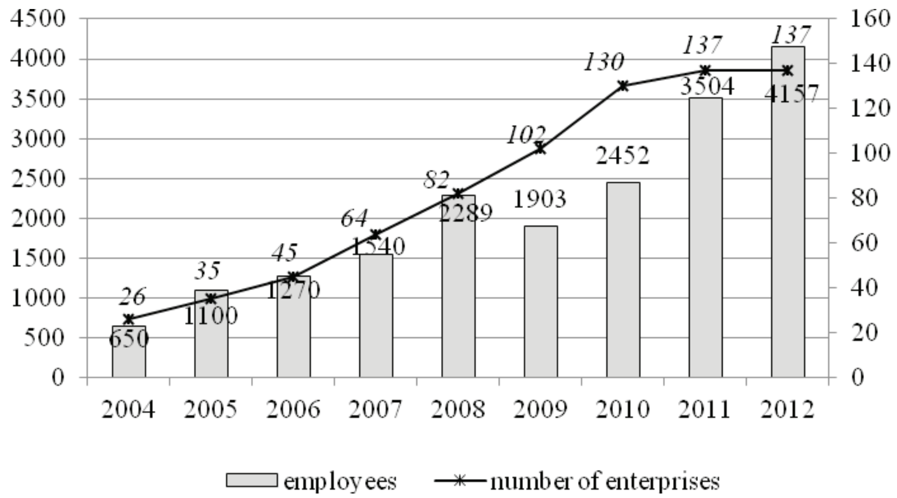

Figure 1. Social enterprises and employees in Lithuania in the period 2004–2012

Source: Ščerbickaite, Moskvina, 2013: 5.

Social firms are entitled to corporate tax relief (15 %) and various subsidies (including payroll, social insurance relief, transportations, employment, etc.). Most of social enterprises are micro, small and medium size private companies. More than half of them belong to the sector of manufacturing (Moskvina, 2013: 52).

Finland. Act on Social Enterprises (1351/2003, revised 924/2012), actually “social firms” or “work integration social enterprises”, provide employment opportunities particularly for persons with disabilities and the long-term unemployed. In the definition of the law, having fulfilled the criteria, the social enterprise (or “firm”) is a registered trader which is entered in the register of social enterprises. There are 158 work integration social firms (Seppelin, Kostilainen, 2013: 2). These enterprises employ 1,200 people, of which 750are-ofspecialtarget groups (people with disabilities and long-term unemployed) (Lindberg 2011: 12). Number of persons employed in crease slowly, mainly be cause social enterprises are micro or small enterprises.

2. Economic gains at municipal and national level from social entrepreneurship in Latvia

To identify the gains from social entrepreneurship in Latvia in quantitative terms, it is important to estimate financial gains of the central and local governments from social entrepreneurship. Given the fact that statistical data on social entrepreneurship are not collected in Latvia, the calculations were performed based on international experiences (mainly in Ireland and Lithuania).

The year 2015 is set as the first year of operation of social enterprises in Latvia, as, according to the Communication from the European Commission (2011) “Social Business Initiative Creating a favourable climate for social enterprises, key stakeholders in the social economy and innovation”, it is envisaged to allocate funding for social enterprises from the EU Structural Funds in 2014, which can foster the development of social entrepreneurship in Latvia. It means that the first considerable estimates regarding the operation of social enterprises may be performed for the period starting with 2015.

Number of social enterprises. It is envisaged that 250 social enterprises might be established in Latvia in 2015. Based on the experience in Ireland, it is important to increase the number of social enterprises from year to year to increase employment in social entrepreneurship. It is assumed that on average the number of social enterprises will annually increase by 50 units.

Size of social enterprises and their number of employees. According to the experiences of European countries, most social enterprises employ on average less than 9 employees. The social enterprise mostly corresponds to a micro- or a small enterprise, and during the first years of operation it employs on average 5 employees. Based on the international experiences, one can assume that if developing social entrepreneurship, during the first year in Latvia, approximately 1250 new jobs will be created, of which 50 %

are occupied by individuals from socially sensitive groups (according to the experience of Lithuania, they are mainly the disabled). Over a period of six years (until 2020), it is envisaged to create on average 4000 jobs.

Economic indicators of social enterprises. Investment in social enterprise consists of around EUR 5,700 (Dobele, 2013: 106) which means that total investment for new social enterprises in the 2015 will build EUR 1.4 million (including subsidies for new social enterprises). To determine the net turnover of social enterprises, there were used multiplier 1.32 proposed of DKM Economic Consultants (The economic and (…), 2011: 24). This means that for every euro injected into the economy by a social business, the economy benefits to the tune of an additional 32 cent. It means that every euro invested into the social enterprises constitutes revenue of EUR 1.32. Profit is reinvested in the social business and it is calculated using the average profitability of micro firms – 10 %. Given the fact that profit is reinvested into the company, there will be rise in investment and business scope, which indicates on the need for additional staff. The calculation of economic indicators for social enterprises are presented in Table 2.

Table 2. The forecast of social enterprise economic indicators in Latvia in the period 2015–2020, EUR

Year	**Number of social enterprises**	**The average number of persons employed in social enterprises**		**Investment, EUR**		**Net sales, EUR *(6.x1.32)***	**Profit for reinvestment, EUR *(7.x0.1)***
		In one social enterprise	**In Latvia in total**	**In one social enterprise**	**In Latvia in total *(2.x5.)***		
1.	*2.*	*3.*	*4.*	*5.*	*6.*	*7.*	*8.*
2015.	250	5	1250	4000	1 000000	1 320 000	132 000
2016.	300	5	1500	4500	1 357000	1 791 240	179 124
2017.	350	7	2450	5000	1 786124	2 357 684	235 768
2018.	400	7	2800	5500	2 296892	3 031 898	303 190
2019.	450	8	3600	6000	2 900082	3 828 108	382 811
2020.	500	8	4000	6500	3 607893	4 762 419	476 242
2020./ 2015.,%	*100*	*60*	*220*	*1.6*	*300*	*260.8*	*260.8*

Source: authors' calculations

By developing social entrepreneurship in Latvia, considerable gains may be expected at the municipal and national levels. National economic gains result from the state mandatory social insurance contributions (SMSIC), the personal income tax (PIT), and the business risk state fee. Municipal economic gains result from the reduction of the burden of social benefits (guaranteed minimal income (GMI) benefits and housing benefits) if social enterprises employ individuals from socially sensitive groups. The social enterprise created economic contribution to the national and municipal budget in the period 2015–2020 are summarizes in the Table 3.

Table 3. The projected social enterprise contribution to the national and local budget in the period 2015–2020, EUR

Year	**Salaries**	**Number of employees**	**Government revenue and expenditure, EUR**				**Municipal gains, EUR**	
			SMSIC	PIT	Business risk state fee	Subsidies	GMI benefit	Housing benefit
2015.	320	1250	+136363	+85 925	+450	-711 250	+31 125	+29 606
2016.	390	1500	+199425	+125655	+540	-142 250	+37350	+35 528
2017.	460	2450	+384185	+242085	+882	-142 250	+61005	+58 028
2018.	530	2800	+505904	+318752	+1008	-142 250	+69 720	+66318
2019.	600	3600	+736 344	+463968	+1296	-142 250	+89 640	+85266
2020.	670	4000	+913600	+575680	+1440	-142 250	+99 600	+94 740
2020./2015., %	*109.4*	*220.0*	*570.0*	*570.0*	*220.0*	*-80.0*	*220.0*	*220.0*

Source: author's calculations and construction

SMSIC estimates. The estimates of revenues from the SMSIC, the PIT, and the business risk state fee were based on the minimal (gross) average monthly wage in Latvia, which is EUR 320 in 2014. It is assumed that the average wage at social enterprises is increased every year. The rate of SMSIC paid by employers is 23.59 %, while the employee SMSI Crate is10.5 % in 2014. To estimate the national gains from the SMSIC paid by social enterprises, the following formula was used:

$$G_{t\_SMSIC} = G_{SMSIC} * N, \tag{1.1.}$$

where: G_{t_SMSIC} – total SMSIC; G_{SMSIC} – SMSIC per employee; N – number of employees per social enterprise.

During the first year, employing on average 1250 employees at social enterprises, the revenue from the SMSIC amounts to on average EUR 136 thousand (on average EUR 109 per employee). Assuming that wages increase every year, the revenue from theSMSIC paid to the national government will increase7 times until 2020.

PIT estimates. The estimate is based on the PIT rate of 24% (in 2014). To calculate the total PIT revenue received by the Treasury from employees of social enterprises, the following formula was used:

$$G_{t\_PIT} = G_{PIT} * N, \tag{1.2.}$$

where: G_{t_PIT} – PIT revenue collected from all employees; G_{PIT} – PIT revenue per employee; N – number of employees.

If employing on average 1250 employees at social enterprises, in the first year, on average EUR86 thousand will be paid to the Treasury (on average EUR 70 per employee). Assuming that wages increase every year, the revenue from the PIT paid to the national government will increase almost 7 times until 2020.

Business risk state fee estimates. Assuming that the kind of contract made by employees of social enterprises is a labour contract, a business risk state fee of EUR 0.36 has to be paid. If employing on average 1250 employees at social enterprises, the Treasury will receive EUR 450 (EUR0.36 per employee). To estimate the total revenue from the business risk state fee paid by employees of social enterprises, the following formula was used:

$$G_{t\_fee} = G_{fee} * N, \tag{1.3.}$$

where: G_{t_fee} – total revenue from the business risk state fee collected from social enterprises; G_{fee} – business risk state fee per employee; N – number of employees.

The total tax revenuecollected from employees of social enterprises and paid to the Treasury in 2015 will amount to EUR 223 thousand, while in 2020 – almost EUR 1.5 million.

Municipal economic gains involve the reduction of the burden of social benefits (guaranteed minimal income (GMI) benefits and housing benefits) if social enterprises employ individuals from socially sensitive groups.

GMI benefit estimates. The target group of social entrepreneurship is the individuals from socially sensitive groups whose income is very low, therefore, such persons are often granted GMI benefits. Since 1 January 2013, an equal GMI benefit of EUR 49.80 has been set for all low-income individuals (in 2012 it was EUR56.91 for adults and EUR 64.03 for children), and the national government does not allocate funding for these benefits. It causes a considerable tax burden on local authorities, given the large number of low-income individuals in the country. Assuming that 50 % of the employees of social enterprises are low-income persons who very often receive GMI benefits, by promoting their employment, the income level of such people will increase, while the tax burden on local authorities during the first year of operation of social enterprises will decline by almost EUR 31 thousand, and in 2020 it will reach almost EUR 100 thousand.

Housing benefit estimates. The Social Service and Social Assistance Law stipulates that the size of housing benefits, the procedure of paying the benefits, and individuals who are eligible for the benefits are regulated by the binding municipal regulations. Most often, individuals from socially sensitive groups, whose income is very low, apply for housing benefits. The size of housing benefits is differentiated in municipalities. The average size of housing benefits per person in Latvia in 2013 was equal to EUR 47.37. Assuming that individuals from socially sensitive groups are employed at social enterprises and their income increase, in 2015 municipalities could save on housing benefits almost EUR 30 thousand, while in 2020 – EUR95 thousand.

The economic gains from developing social entrepreneurship at the national and municipal levels are shown in Fig. 2.

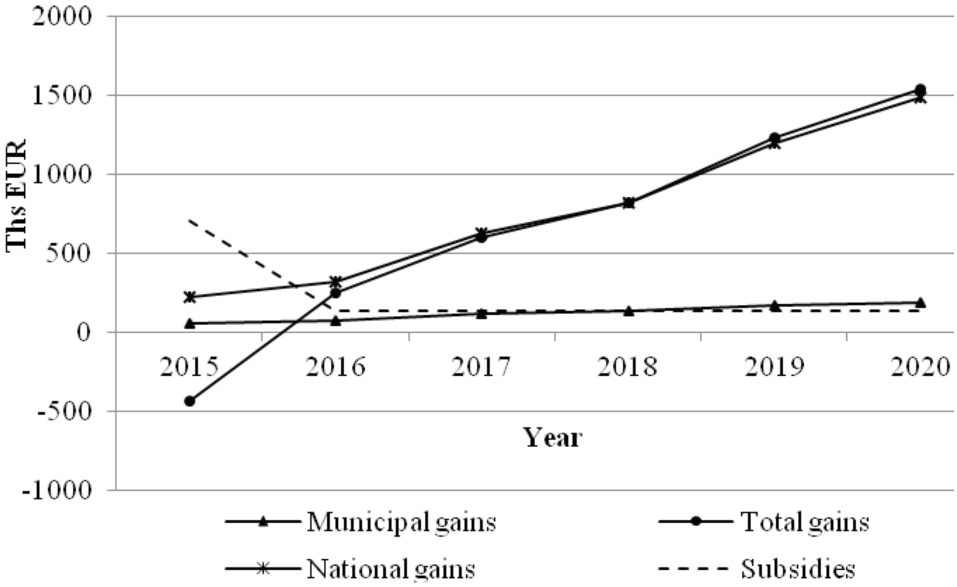

Figure 2. Economic gains from developing social entrepreneurship in Latvia in the period 2015–2020, ths EUR

Source: author's calculations and construction

The calculations reveal that by employing individuals from socially sensitive groups at social enterprises, the national and municipal financial gains will be equal to approximately EUR 283 thousand during the first year of the operation of social enterprises. Yet, given the fact that it is important to provide financial aid for establishing social enterprises, a subsidy of EUR 2845 to purchase capital assets has to be granted to new social enterprises. It implies that during the first year of the operation of social enterprises, the government will suffer a loss of EUR 428 thousand. Since the subsidies are granted only to new social enterprises, according to the forecast, the tax revenue from their operation will increase, reaching EUR 1.5 million in 2020.

Conclusions

Social entrepreneurship is a kind of entrepreneurship, the priority of which is to create social values and form economic protection for socially sensitive groups. Internationally, social enterprise is considered to be vital part of the country's economy. In the United Kingdom recognises it as a distinct sector, in Lithuania law has been introduced over the past 10 years to support and encourage the development of social enterprises. It is proved that social enterprises can play an important role in economy. The social enterprise sector has the potential to represent at least 5 % of GDP and promote the job creation, especially for socially sensitive groups of people.

In Latvia the social entrepreneurship is seriously underdeveloped and underestimated. There are no legal and institutional frameworks for it. However, social entrepreneurship can give significant economic benefit to the national and municipal budget. Base on international experiences, there were made calculations on potential economic gain from social entrepreneurship in Latvia. During the first year of developing social enterprises (2015), it is envisaged to establish 250 social enterprises in Latvia, in which in total 1250 people will be employed, of which 50 % will be individuals from socially sensitive groups. Thus, the social benefit burden in municipalities will decrease by EUR 61 thousand, while almost EUR 222 thousand will be collected by the national government during the first years of operation of social enterprises. The total gain from social entrepreneurship will amount to EUR 1.5 million over a six year period (2015–2020).

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SOCIALINĖS ENTREPRENERYSTĖS PLĖTROS LATVIJOJE EKONOMINĖ NAUDA

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Santrauka

Socialinės įmonės yra svarbios Europai ir jos ekonomikai. Šios organizacijos prisideda prie darbo vietų kūrimo (ypač socialiai jautrioms grupėms) ir sukuria apie 6 % Europos Sąjungos BVP. Tuo tarpu Latvijoje socialinės entreprenerystės vaidmuo nepakankamai įvertintas. Šio tyrimo tikslas – remiantis tarptautine patirtimi socialinės entreprenerystės srityje, nustatyti jų teikiamą ekonominę naudą Latvijoje. 2015 metais Latvijoje numatyta įsteigti 250 socialinių įmonių, kuriose būtų įdarbinta 1250 žmonių, 50 % iš jų sudarys žmonės iš socialiai jautrių grupių. Taigi savivaldybių išlaidos socialinei paramai sumažės 61 000 eurų, 222 000 eurų bus papildomai surinkta į valstybės biudžetą. Bendra ekonominė nauda sudarys 1 500 000 eurų per šešerių metų laikotarpį.

PAGRINDINIAI ŽODŽIAI: *socialinė entreprenerystė, socialinis verslas, vyriausybė*.

JEL KLASIFIKACIJA: A10, H70, O12

MUNICIPAL CLIMATE CHANGE ADAPTATION GOVERNANCE IN LATVIA: APPROACHING CROSS-SECTORIAL AND MULTI–INSTRUMENTAL UNDERSTANDING

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ABSTRACT
Climate change adaptation being one of today's main challenges on global agenda do affect people worldwide, but even though most decisions regarding climate change governance are made at the international or national level, the implementation of these decisions in most cases takes place at the local level. Municipal climate change adaptation research project in Latvia was carried out with special emphases on main stakeholder understanding, preparedness and communication factors using several complementary research methods – case study research in Salacgriva coastal municipality, sociological surveys with both Salacgriva town households / inhabitants (home visits / questionnaires) and also nation-wide municipal planners/ specialists survey (web based) in Latvia, as well as complementary interviews with various national agencies governance level experts. The comprehention and level of understanding of all sectors and necessary elements of complex municipal climate change governance development in Latvia is not sufficiently high neither for municipal planners/specialists nor for municipal (flood endangered) households, according to the needs of both those groups. There is in Latvia diverse and wide list of separately developed and already available instrument groups for municipal climate change governance (MCCG), especially, complementary communication instruments, as well as suffient enough number of insturments are in possession of the any particular municipality, but usage of them is quite limited by their type and range, and not complementary. Necessary is to change municipal project type thinking-working towards comprehensive planning / programming municipal development / support and pro-active communication and collaboration.

KEY WORDS: *climate change adaptation, governance, integration and disciplinarisation, climate communication, municipal planning, household understanding.*

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Introduction

Impacts of climate change to a greater or lesser extent, are observed in all latitudes and in all sectors of the economy – there is a concern about loss of biodiversity, threats to human health, new pests in agriculture, unpredictable and drastic changes in weather conditions, natural disasters, and many other manifestations of climate change may lead to a large scaled economic and environmental damage with long-lasting and even irreversible consequences (IPCC, 2007; BACC, 2008; Hales, 2014; Aall, 2007 etc). There are numerous research institutions and programs in the world dealing with climate change and its governance, also communication issues. This scientific knowledge have been widely and successfully translated into climate change mitigation and adaptation policies at all governance levels from global to local, particularly in EU and USA, as well as further on have been developed diverse implementation projects to change situation and also to study from. Researchers and practitioniers from different regions and countries are producing guidelines and recommendations also for local municipalities (e.g. Hales, 2014; Shaw, 2011; Haq, 2013).

Assessment of climate change for the Baltic Sea basin (as regional climate studies), done by BACC project author team, consisting of more than 80 scientists from 13 countries, offers also verdict conclusions, that the Baltic region climate has already started to change and region will become considerably warmer and wetter in some parts, but dryer in others (BACC, 2008) – this way also socio-economic and culture dimentions of sustainability will be facing serious changes. Also nature science researchers in Latvia are actively giving their contribution to this growing field of research both within national and international research programs (Klavins, 2010; Menzel, 2006 etc), and subsequently supporting related communication/dissemination and, particularly, the development of National climate change policy and related implementation and management programs/projects, being established within governmental sector for Environmental protection and regional development, but developing also more links to other governance sectors.

Climate change and alternative energy development issues are those ones of priority areas for next EU programming period in Latvia. In the same time, other branches of science in Latvia, besides nature science, and especially those of social sciences, have been definitely less involved into both climate change research and related policies development, what is unfortunately very much limiting cross-stakeholder's, cross-sectorial and cross-level governance understanding of climate issues. During last 4–5 years this situation has been somewhat improved especially also at the municipal governance level, having various national/local top-down and bottom-up initiatives and international partnership impacts taking place, but MCCG steps are still mainly based on project development instruments and very limited range and type of other governance instruments employed (Ernsteins, 2010; 2012a,b).

Climate change adaptation aspects do affect people and in very diverse way in whatever local territory and municipality, but, particularly at the coastal ones. Climate change and sea level rise will not only increase the frequency and strength of flooding and erosion cases, but also influences different socio-economic changes, resulting particularly also into the significant increase in the size of endangered house property/belongings and the land property of the population in every particular coastal municipality (Bubeck, 2013; Ernsteins, 2014). Even main decisions regarding climate change governance are made at the international and/or national level, the implementation of these decisions more and more takes place and has to be taken at the local level, and also in Latvia.

The issue of this report is oriented towards still continuing start-up situation of municipal climate change governance (MCCG) development in Latvia, even real climate change aspects has been recognized here and numerous international experience is available around the nearby Nordic countries and further afield. The lack of related MCCG research and information (if not communication as best), from research institutions/government side, and lack of interest and understanding, from municipal governance side, forms the basic background (Ernsteins, 2012a, b) context of this research and development (R&D) project described. Research problem studied in Latvia could be characterized around yet generally missing MCCG process, structures and products – neither inter-sectorial target oriented and disciplinary ones nor cross-sectorially integrated ones, both being necessary complementary and supported by whole range of implementation instruments in order to manage successful adaptive and collaborative MCCG (Ernsteins, 2012a; 2013).

For example, there could be discussed the gains received and eventually further decision making process planned and organized by the municipalities (also related to their utilities, but private companies are not included for this accountancy), when summarizing results of just one, the National Climate Change Financial instrument (CCFI), contribution to MCCG. During recent years CCFI framework has funded a number of programs targeted at the increase of energy efficiency and the use of renewable energy resources in municipal institutions – the total ex-ante CCFI support is about 100 mill EUR. It was expected that implementation of program projects would result into CO_2 savings of about 50 thousand tons per year, what is a quite a result for Latvia situation. Unfortunately, accordingly to former studies (Ernsteins, 2012b; 2008; 2010) climate change policy at the local level still is often seen only as a tool to obtain additional financial resources and also as best as international co-operation building tool.

However, the next step for municipal governance development (not only for MCCG) is to understand the climate change policy, first, as the need, and second, as the tool for the complex and integrated municipal development. Then next decisions waiting are to be on setting ambitious municipal development goals within climate change framework and mobilizing all type internal resources to achieve them, as well as to use effectively the existing opportunities and instruments, and, further on, to search for the development of the new forms of climate governance and very importantly also communication at the municipal level for all stakeholders and households particularly (Ernsteins, 2012a; 2013; 2008). Accordingly, the R&D project goal was to clarify the current period understanding of MCCG at both governance levels/components of municipality – municipal planners/administrators and local (coastal and real climate change effects influenced) population – as well as to elaborate suggestions for general municipal guidelines.

The main tasks for this R&D project subsequently were designed as follows: 1) Introductory summary on MCCG development in Latvia with emphasis on only municipal climate change adaptation strategy case in Salacgriva municipality; 2) Sociological survey with Salacgriva town households/inhabitants; 3) Nationwide municipal planners/ specialists survey (web based) in Latvia; 4) Municipal indicators set for adaptation to climate change; 5) General recommendations for approaching MCCG in Latvia. This municipal climate change adaptation research project in Latvia was carried out with special emphases on main stakeholder understanding, preparedness and communication factors and using several complementary research methods – case study research, sociological surveys as well as complementary interviews with various national agencies' governance level experts.

Department of Environmental management (DEM) at the Faculty of Economics and management University of Latvia (UL) has been organized in 1992 based on interdisciplinary understanding of environmental science, relatedly multidisciplinary staffed and developing environmental governance interdisciplinary research (e.g. governance of socio-ecological interaction systems), also working in the areas of climate change adaptation governance and communication research and integrated coastal and risk governance and communication research, esp. municipal/coastal environmental governance. This report is based on DEM municipal research and development projects (Ernsteins, 2006) realized during 2013 and being a complementary component of Climate change adaptation and coastal risk governance and communication R&D program started at DEM at 2009/2010 (Ernsteins, 2010; 2012a; 2014; Kalnina, 2013). Report results discussed here have been acquired realizing collaboration R&D projects between DEM and particular coastal municipalities and also supported by THESEUS and FOODWEB projects, being co-financed by European Union 7 RTD and INTERREG IV A 2007–2013 Programs, subsequently, but, the contents of this publication represent the views of the authors and the authorities are not responsible for the contents of this work.

Research methodology was based on the combined complementary set of methods and comprises qualitative and quantitative research, using:

1. Integrated case study research method in Salacgriva coastal municipality, incl. document analysis (analysis of planning and legislative documents, reports and other studies), interviews (in-depth interviews on MCCG at local level, e.g. implementation instruments, integration and stakeholder

group co-operation), questionnaires (express questionnaires with inhabitants and representatives of main stakeholders), observation in practice. Results were used also for designing and discussion of the complementary set of indicators prepared as per project task.

2. Sociological survey with Salacgriva town households (inhabitants) being realized as home visits and first with introduction and spreading questionnaires, and, second, with collecting answer on the next evening. As target audience were choosen households (private home owners) located nearby coastal sea and Salaca river delta of Salacgrīva town, especially from town areas being split into eventual flood zones according to the different likelihood of the risk of flooding there (Ernšteins, 2014). Flood risk probability planning map was taken from the project BaltCICA "Climate Change: Impact, costs and adaptation in the Baltic Sea Region" published in 2012. Number of questionnaires spread was 200 – received from 130 households (respondents).
3. Nation-wide municipal planners/specialists survey (web based) in Latvia municipalities, as well as complementary interviews with various national agencies governance level experts. As target audience for survey were choosen employees of municipalities facing climate change issues as their office duties. Information/invitation e-mails were sent to all 110 local municipalities (except main towns) and respondents from 47 municipalities filled the web survey questionnairy.

1. Planning approaches applied for municipal climate change adaptation research

One of particularly important and affected interest areas for authors of the 3rd national assessment of climate change impacts in the United States were particularly rural communities (Hales, 2014). Authors do emphasize that climate changes in the timing of seasons, temperatures, precipitation etc. will severely impact rural communities since many of them are less diverse than urban areas in their economic sector zoning and also social sector planning, and, community stability will be under serious stress. There were proposed main key messages to be taken into account (in short) when planning for climate issues:

- rural communities are highly dependent upon natural resources for their livelihoods and social structures and progressing climate change related impacts will shift the locations where rural economic activities (like agriculture, forestry, and recreation) can thrive;
- rural communities face particular geographic and demographic obstacles in responding to and preparing for climate change risks;
- responding to additional challenges from climate change impacts will require significant adaptation within rural transportation and infrastructure systems, as well as health and emergency response systems;
- governments in rural communities have limited institutional capacity to respond to, plan for, and anticipate climate change impacts.

Next example to be taken into account comes from K. Waagsaether and G. Ziervogel, who were exploring science–management interface in South Africa, and especially in terms of the communication of climate change-related data from climate scientists to one particular stakeholder group as water resource managers (though could be also many several other groups mentioned quite similarly), revealing how continuous communication is necessary in order to help narrow the gap between such two groups. This is also necessary for offering guidance for planning and adaptation strategies and establishing a new form of management based on "learning to manage by managing to learn". Authors do recomend also so called Climate change forum as a medium for communication necessary for the production of comprehensible, relevant and applicable climate data (Waagsaether, 2012).

Another piece of research related to MCCG developments has been done in UK (Shawn, 2011) and was aiming to critically review the concept of resilience and to assess how it might be used both to understand and to evaluate local government responses to climate change. Authors are emphasising the transformational view of resilience as "bouncing forward" and there are proposed ten particular features being a genuine opportunities for resilient local government approach to mitigation and adaption to climate change: ambitious use of existing powers; responsivness and flexibility; creativity and innovation; the learning organization; futurity planning; a strategic approach to risk; strong and visionary leadership; collaboration and coordination; empovering citizens to devise their own solutions and promoting environemtal justice.

Other UK researchers (Haq, 2013) in their article on targeted social marketing approach for community pro-environmental behavioural change are reporting on the case of recruiting community teams from the municipal neighbourhoods and providing them with information, advice and mentoring on how to reduce their carbon footprint over a six-month period. As the result each participant achieved a mean reduction in their carbon footprint of 2.0 tonnes of CO_2e/year, particularly successfull change was achieved in the areas of shopping and home energy. Authors propose then also cost-effective model of community engagement: go beyond carbon; have a clear target; establish a baseline; get participants to pledge; use mentors and local champions; provide "foundation information"; outline a programme of activities; provide incentive; hold milestone events; provide feedback; reward success; follow-up. There is recomended to assess the "rebound effect" e.g. where economic savings achieved from reduced energy, car use and food has led to increased consumption in other aspects of life.

There are two more approaches/models to be mentioned, when preparing for MCCG research, even, generally speaking, they could be used for any other non-traditional and non-sectoral municipal governance development cases. During R&D projects in Latvia there has been realized main sustainable development (SD) principle applying both sectorial-dimentional analysis and especially very purposely also their integration attempt with each of the three pillars of SD – i.e., natural environment, social environment (incl. culture environment etc) and economic environment. Our research approach priority always do include also the forth pillar – an additional and complementary research and planning/management area, being almost not recognized in planning processes in Latvia still and not sufficiently studied. This is governance environment (*parvaldibas vide* – in Latvian), which is to be considered the unifying horizontal element encircling all the three vertical SD sectors and intentionally is to be the called "integrating medium" as well (Ernšteins, 2012a). Importantly is to recall, that this governance environment is to be managed in both complementary ways – directly as disciplinary (dimention) and integrative as obviously interlinked and deciding on to other three sustainability dimensions. This fourth dimention is crusial particularly for any cross- and inter-disciplinary municipal issues, eg. climate, risk etc, studied and decisions taken as this dimention do include such decision making components as the local administration structure and content, all interaction process for decision making preparation and taking, within particular administrative/working environment, and, as the result of all this mentioned, also all related municipal products and services being developed (Lontone, 2012; Ernšteins, 2012a).

Besides governance environment and collaboration communication model (communication as complementary use of instruments' set as starting from information and education, and, concluding with participation and environmentally-friendly behaviour [Ernsteins, 2012a]) practice based concepts mandatory applied for R&D projects, there shall be emphasized also, so called, collaborative governance model (Ernšteins, 2008) being offered as a climate change adaptation governance framework model. The model is based on the concept that any sector or cross-sector governance must be implemented through integrative collaboration of all major its governance cycle components. This model as the minimum of necessary governance cycle components has been composed based on various known principles and approaches, and, consists of 5 main complementary and subordinate components: internal and external governance stakeholder groups mutual collaborative development; vertical and horizontal integrative thematic collaborative development; governance tools collaborative development; governance assessment (indicator top-down and bottom-up assessment) collaborative development; governance communication collaborative development.

2. Latvian municipalities and climate change mitigation/adaptation developments

Approaching general developments of MCCG in Latvia we shall look shortly into today's situation and future challenges for Latvian municipalities in the frame of climate change mitigation/adaptation. Today awareness of the importance of climate policy and its cross-border and international character is increasing among the municipal political leadership. E.g. 19 Latvian municipalities have signed the international Covenant of Mayors, however only 6 have developed requested/recommended Sustainable Energy Action Programmes (SEAP). Latvian Environmental Investment Fund has initiated project for methodological assistance of SEAP elaboration in 6 municipalities of the Latgale region (least developed region status). Climate change actions so far have often been carried out as isolated projects. To a large extent it was defined by the current national climate policy support system, which has been focused on particular project, not on comprehensive program support. Climate change policy is often seen as a tool to obtain additional financial resources as well as international co-operation building tool (Ernsteins, 2013. At national level, the financial support by National Climate Change Financial Instrument (CCFI) is provided for the CO_2 emission reduction projects and also for educational programs (also via EEA Grant Programmes).

As the first for future challenges shall be mentioned SEAP further development – process acceleration and increase in quality. Ambitiousness of CO_2 limitation in target setting is not to be stoped at the Covenant defined minimum of 20 % vs. 1990, what in Latvian conditions, in fact, is met automatically. Next is establishing of SEAP methodically advisory centre on the national scale. Also establishing support for the implementation of complex municipal climate action programmes is to be mentioned. International donors are interested in CO_2 rather than adaptation and finding of financial instruments for the implementation of the adaptation measures. Questionable is the sustainability of the future financial support under the conditions of decreasing the CCFI funding capacity. Also very important shall be the effective use of the existing opportunities and search for the development of the new forms of climate communication at the municipal level (Ernsteins, 2013).

Empirical part of the research has been realized in Salacgriva municipality based on DEM municipal research and development project realized during 2013, being a complementary part of Climate change adaptation and coastal risk governance and communication R&D program started at DEM at 2009/2010. This is also one the most successful university-municipality collaboration cases on MCCG to be mentioned separately and it was started in 2010 as Salacgriva coastal municipality climate change adaptation research project. After initial fieldwoks compleated there, one of our project first spin-off recommendations for Salacgriva municipality was also to consider employment of the still new for Latvia, but eventually influential municipal environmental management instrument – environmental (green) declaration as formal municipal green work pledging as well as green public relations introduction. Thanks direct interest and dedication of municipality leadership in August 2010 the Council of the municipality has approved the Declaration of the Green Municipality – nationwide first guideline manifest for public and target groups' and, as particularly stressed, for individual inhabitant's involvement towards environmentally friendly municipal governance and management, also encountering all main MCCG sectors and instruments.

Collaboration project between the DEM and Salacgriva municipality in 2010–2011 concluded with elaboration of the climate change adaptation policy planning guidelines for Salacgriva coastal municipality. The main work directions recognized were within the following sectors: Nature environment/dimention sector – biodiversity; water resources and waste management; coastal protection and development; Economic environment sector – energy management and entrepreneurship development; agriculture, forestry, fishery management and tourism development as well as, transport and infrastructure; Social environment sector – inhabitant's life quality; human resource adaptive capacity; Municipal governance and communication sector – governance system and process adaptation; environmental and climate change adaptation communication development (Ernsteins, 2010; 2012a). Municipality leaders strong commitment assigned further work to be done and municipality planners/specialists in partnership with main stakeholders, and within the project BaltCICA "Climate Change: Impact, costs and adaptation in the Baltic Sea Region" have been finalizing guidelines up to formal municipal planning document.

Nowadays Salacgrīva municipality could be recognized even as MCCG development model territory in Latvia since this is still the only municipality that has not only adopted the Green Municipality Declaration (2010) and implemented a range of alternative energy and other projects, but has also adopted this mentioned

Salacgrīva Municipality Climate Change Adaptation Strategy (2011), and has been successfully working on also on MCCG integrated planning approaches, while developing now newly mandatory in Latvia so called Sustainable development strategy (collaboration project with DEM during 2013/2014).

3. Sociological survey on flood risk with Salacgriva town households

The particular flood risk situation assessment in the Salacgriva municipality was carried out in each of the four pillars of sustainable development – i.e., natural environment, social environment and economic environment, and mandatory as described before, governance environment. Within the governance environment, both internal administrative and external stakeholders oriented communication is particularly essential, definitely including environmental and climate change communication. In both assessment proceses – the risk governance environment and household risk understanding – collaboration communication model (Ernsteins, 2012b) was applied, which contains four key components – risk information and education, participation and risk friendly public behavior – and embraces all key actor groups being also interviewed – local inhabitants, municipal and state institutions, business sector as well as all main mediators as NGOs and the media, educators and experts.

In the interests of this MCCG project particular target audience were involved and questionieres spread – households located in coastal sea and river areas in Salacgrīva town. Areas were chosen due to likelihood of the risk of flooding according to the Flood risk probability planning map taken from the project BaltCICA "Climate Change: Impact, costs and adaptation in the Baltic Sea Region" (2012). Number of households selected was 200, but in return we received back filled and accepted 130 questinonaires. Key issues studied – flood risk background and personal experiences, flood risk communication in general and understanding, as well as the local municipality management and communication performance in the case of flood risks. Main results received could be shortly characterized:

- Most of inhabitants do recognize climate change impacts in their surrounding territory and they do observe more / wider spring river flooding, heavy rain falls, storm surge and sea level raise, as well as last two have been considered by them as main risks to their household.
- Most of inhabitants have not seen/heard any information-activities on flood risks – 50 %, but 29 % at least have heard something related in the national TV and radio and only 21 % have ever recognized related info in local area, particularly in local media and as civil protection info, planning documents, seminars.
- Almost non of inhabitants have ever participated in any training/learning activities on flood risks, except 11 persons / households did participated, but as happened to be they do work at municipal or port administration and so knew of such quite various training options.
- Only 10 % of inhabitants surveyed have ever took part at any local public hearing/participation activity, even 32 % have heard of such possibility, but 58 % never heard of citizen participation options.

4. Nation-wide municipal planners web based survey in Latvia

Target audience chosen for web-based survey – planners/experts as employees of municipalities facing climate change issues as their office duties. Information / invitation email was sent to all municipalities in Latvia (not including 9 towns, altogether 110) and 47 respondents filled the questioniere. Key issues studied – recognition of the climate change existence, the driving forces and threats /potential positive effects, awareness of adaptation, the role of local municipalities in the context of climate change governance, use of climate change governance tools, efficiency and capacity constraints, communication and co-operation of municipality with the stakeholders. Main results acquired could be shortly characterized like this:

- Dominant majority respondents (96 %) are aware that climate change indeed takes place and significant majority (72 %) recognizes the anthropogenic influences on the development of climate change.

- Climate change is seen as a major threat in the fields like economics, agriculture, biodiversity and human health. Besides the half of the respondents consider that climate change has also positive impacts like longer growing period and the possibility of tourism development, but then there is a question on these possibilities in the long-term perspective and how they are understood by the respondents.
- About half of the respondents (53 %) are not familiar with climate change adaptation as climate change management practices. This is an important finding, and the question arises here: what do we generally know about the adaptation in Latvia? Respondent's as a specialist awareness is significantly higher than the overall awareness of the local municipality.
- There is a discrepancy between respondents' attitudes towards the role of municipalities in combating climate change and how the local municipality understands the need of MCCG and there is no consensus among respondents if the municipality should develop its own climate change governance document as there is the equal number of *yes / no* answers.
- For climate change impacts municipalities use infrastructure development and communication instruments. Other types of instruments are used relatively little, what could be understandable, because the infrastructure is supported by the public money, communication – if there is a good staff member, but other instruments are not really developed also at the national level. On the average, the most important limiting factors are the lack of financial resources and the motivation to use the instruments.
- Colaboration of local municipalities with different target groups is inactive. Only a small number of respondents rated it as successful. As limiting factors are mentioned the financial resources and the lack of interest/motivation to colaborate on the side of the relevant target groups. At the same time the importance of the target group information/education is seen by ~40 % of the respondents.

The discussion basically focuses on the content and sectors of municipality policies and measures to realize MCCG elements and it may be concluded, that already today Latvia municipalities do have enough instruments to start proactive governance / management as the integrative policy of municipality and there is no necessity to wait while the perfect set of related governance instruments will be established at national level. On the other hand, the data of empirical research reveals important critical points and very important one is none or non-effective communication between municipality and stakeholders. In general, it is important for municipality to understand the necessity for development of MCCG as the new challenge and new possibilities for municipality development, not to be seen as the burden.

5. Adapting to climate change: municipal policies and indicators

In order to complete municipal climate change governance cycle development in the framework of R&D project in Salacgriva municipality and, subsequently, to be able to observe and monitor climate change adaptation strategies progress, the performance indicators system was developed (Table 1) that provides information to the public and decision makers about both the climate change and the related actions. The indicator system is developed in accordance with the selection methodology, based on the sustainable development governance indicator definition and indicator system development algorithm (Kauliņš, 2011).

For to be developed the whole Salacgrīva municipality development planning document package this set of indicators may be an element of supervision particularly on the climate change adaptation strategy, or to be included/integrated into the mandatory medium and long-term planning document development process and monitoring system itself. The latter approach may be more rational, since it is expected that a number of indicators will be shared between the climate change adaptation governance and general governance of the municipality, noting also that important place of environmental issues having in the current local governance approach of the Salacgrīva municipality.

Table 1. Municipal adaptation to climate change indicators system

	Policy	**Indicators**
		Nature dimension
Climate change adaptation programmes for:	water management	Bathing water quality, guided and mandatory value exceeding
		Water treatment and supply and wastewater treatment energy capacity
	waste management	Share of general population/ enterprises involved in waste management system
	coastal management	Air temperature, rainfall, nebulosity and average wind speed in Ainaži
		Number of stormy days in Salacgrīva and Ainaži. Water level at the Salaca estuary[3]
		Number of tree-cutting permissions for non-forest lands and their spatial distribution
	biodiversity management	Forest clearcut and reforestation, area and per cent from total forest area
		Salmon *Salmo salar*: amount of smolts in the Salaca river
		Economic dimension
Climate change adaptation policy action programme for:	energy and production management	Renewable energy share in the heat supply in Salacgrīva municipality
		Number and volume of implemented energy efficiency projects per year
	business and tourism management	Share of forest areas managed meeting FSC and PEFC standards
		Share of biologically and non-biologically managed agricultural land
		Number of tourist lodging sites with different types of ecological certificates in Salacgrīva district
	transport and infrastructure management	Salacgrīva district public transport operation, number of passengers per year, number and total length of local bus lines
		Bicycle infrastructure development: length of built-up and marked bicycle roads, number of parkings.
		Buried supply network electrical cable length and share of them in overall length of supply network
		Social dimension
Climate change adaptation policy action programme for:	social management	Share of population living in areas at climatic risk
		Number ant total duration of electricity supply interruptions
		Households number and share, owning a second home
		Insurance cases number and volume of natural disasters
		Governance and communication dimension
Climate change adaptation policy action programme for:	governance management	Environment and climate change adaptation friendly action share in the population daily routine
		Population ecological footprint, overall for municipality and separately for local communities
	Communication management	Number and frequency of publications about environment and climate change in local media
		Number and frequency of published opinions and information level about climate change

The selection of indicators was hampered by the fact that the locally available range of sources of information and acquired data reliability is limited. But thematically system is sufficiently presentable as it reflects in a balanced way all identified action policy areas and its main role could be also as a prototype for both municipal and higher levels risk governance indicator system development and implementation. System of 24 indicators has been structured along the four sustainability environments or dimensions (Ernsteins, 2012a). They, in turn, comprise up to four action policies, each of which affects a certain area of adaptation and each of these policies are described by 2–3 indicators or, in some cases, parameters. According to the definition, the management indicator can only be the parameter that can be directly or indirectly affected by the same level management decisions. Obviously, the parameters like climate parameters cannot be influenced by the local-level management decisions, but it is important to know them for the same decision-making needs.

For nine of these indicators the methodology for their calculation has been developed and, by testing them in practice, the calculation has been carried out. Indicators show that the risk of adaptation measures in the Salacgrīva municipality so far have been generally successful, until they were considerably affected by the 2008–2009 economic crisis.

Another very similar Latvian coastal municipality – Saulkrasti municipality has developed the risk communication strategy (Ernšteins, 2012). It tested several indicators that characterize risk communication and are associated both with the specific coastal risks and climate variability in general. Salacgrīva municipality sustainable development strategy for 25 years (from 2013 being the mandatory document at all levels of governance in Latvia) as the first municipality in Latvia do includes now also monitoring indicator system (Kauliņš, 2011; Ernsteins, 2012a). Also contains several risk and risk adaptation indicators, but in the overall context of the strategy currently to this topic is not given special attention.

6. Discussion and recommendations

Climate change in Latvian municipalities is now slowly identified/assessed not only as an environmental, but also as socio-economic problem that affects local communities and territory. Consequently, the management basis is equally and purposefully designed and developed for both - the climate change mitigation and adaptation measures, from planning to implementation stages at the local level.

Since climate change is not only environmental but also socio-economic problem, and, in order to achieve the motivation to develop sustainable governance of climate change, it is first necessary to achieve a complete and comprehensive understanding of the climate change threats in short and long term. Besides, to achieve the fullest and most comprehensive understanding, the responsible professionals of local municipalities should be provided with necessary information / education on both climate change mitigation and adaptation to climate change. Intermediate integration of sectors and levels is one of the basic conditions for sustainable management of climate change. Only the integration of climate change in local planning documents and elaboration, adoption and implementation of related decisions, can provide a comprehensive reflection of climate change management in the practice. Providing a clear targeting of planning documents, each target group and every governance level may be able to identify their role in managing climate change. Only in this way each player would be best informed of the best available climate change management intellectual, technological and methodological solutions, and the best available instrument combinations.

It is critically important to ensure the use of all MCCG instruments potential in the existing capacity of local municipalities, as well as continually look for opportunities to increase the capacity of local municipalities. MCCG instrumental section also shall consist of al main instrument groups – political / legislative, planning, economic / financial, administrative / institutional, infrastructure and communication – the most comprehensive climate change planning implementation into practice requires a multi-instrumental approach, assessing the unexploited opportunities of each instrument in the current capacity context and with a view to increase the capacity at the same time constantly looking for new opportunities.

The pro-active participation of all target groups involved in the climate change management is a key to the successful and mutually supportive/complementary colaboration in practice. Uninterested/unmotivated target group might have an allergic effects on the climate policy process – it can become a climate change management chain bottleneck and undermine the proper functioning of other parts of the chain, and, also that can lead to a sort of "domino effect" affecting other players and resulting into avoiding financial, legal and even moral obligations being as important part of MCCG system. That is why it is necessary to promote the target group interest on climate change rather than a burden of daily operations, but as a shared responsibility and at the same time an unprecedented collaboration opportunity in which the players can be involved in the mutually fruitful interplay and thus each make their own points, while also achieving the common goal of the team.

MCCG requires a systematic and co-ordinated approach. As the study showed, the climate change causes complex and multi-sectoral nature problems and their management requires a complex and multi-sectoral approach, too. This approach involves a large number of interrelated elements where a chaotic or incomplete use will lead municipalities to chaotic or incomplete results. That is why it is necessary to systematize and co-ordinate the governance process. Using the above analogy, the municipality would be in the team captains position, and each player on the field knows the game rules, roles and tasks.

Flood risk management in Latvian municipalities as the complementary part of MCCG can be successfully implemented and can be working also in the long term when adaptably and innovatively applying the basic governance conditions known (Ernsteins, 2013; 2012a). First of al, the flood risk assessment, planning and further management is based on the local areas (municipalities) sustainable development complementary four dimensions approach, taking into account both the natural, engineering and spatial environment and the social, cultural and economic environment, in their interaction with the local municipal governance and communication environment, creating the inter-dimentional foundations for the coastal areas and the society development resilience. Secondly, the flood risk (pro-active) management is to be integrated in to the local environmental management and development management process, by complementary application of all instruments of governance – institutional, planning, legal and administrative, economic, infrastructure and communication, thus ensuring the municipalities readyness to flood danger as well as flood events and flood abatement of flood consequences. And finally, the local support system, collaborative communication to all involved stakeholder groups, public authorities and scientists/experts, population, entrepreneurs and mediators (trainers, NGOs, mass media) is to be established to provide information and education, and ensure the involvement and adequate action of all parties in the flood risk management process.

Conclusions

Municipal climate change (mitigation and adaptation) governance (MCCG) development in Latvian municipalities is limited by: lack of information and awareness both about the threats caused by the climate change as well as adaptation to them; insufficient/missing integration of climate change issues into both decision-making and local planning documents; underestimated role of municipality administration as a pro-active stakeholder both at local and also national levels as well as the unsuccessful co-operation with related target groups; not employed whole potential of existing whole range of climate change management tools and, of course, lack of financial resources.

Most of Salacgriva coastal municipality (and this is MCCG leading municipality) households / inhabitants living in the floods endangered areas and surveyed now do know of climate change induced more flood risks (FR), but even 81 % agreed that FR preparations are necessary, in the same time, heavy majority of households are not knowing and/or actively involved/doing any preparation steps – 2/3 never heard any local info on FR , not a single person (except those happened to be municipal employees) took part at any training on FR, as well as 90 % neither heard nor have interest to be involved in any participatory steps related to FR. There is diverse and wide list of separately developed but complementary communication instruments around in Latvia or even already available at particular municipality in order to successfully approach households towards necessary preparedness for FR already / eventually affecting local area.

The MCCG cross-level (vertical) and cross-sectorial (horizontal) integration is to be implemented in both the planning documents and in the process of preparing, making and carrying out decisions. The use of all types of MCCG instruments is to be effectively applied in comprehensive development of all climate policy dimensions applying multi-instrumental approach – political and planning, legal, economic and financial, institutional, infrastructure and communication insturments to be used necessary complementary. A pro-active communication and colaboration between the stakeholder groups involved in the MCCG process is to be taking place to ensure that a particular sector/level/group does not become a weak link in the chain of MCCG (Ernsteins, 2013).

MCCG do require vertically and horizontally coordinated system, including collaboration communication principle to be implemented by all eventual stakeholders from national to household levels and, particularly, changing project type thinking-working towards comprehensive planning / programming development / support and pro-active communicated use of the whole range of instruments to be applied.

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KLIMATO KAITOS VALDYMAS LATVIJOJE, SIEKIANT MULTIINSTRUMENTINIO SUPRATIMO IR SUPRATIMO TARP SEKTORIŲ

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Santrauka

Prisitaikymas prie klimato kaitos yra vienas pagrindinių iššūkių, kylančių žmonėms visame pasaulyje. Nors didžioji dalis sprendimų, susijusių su klimato kaita, priimamai tarptautiniu arba nacionaliniu lygmenimis, šie sprendimai įgyvendinami ir kaitos poveikis jaučiamas vietiniu lygmeniu. Latvijoje atliktas prisitaikymo prie klimato kaitos savivaldos lygiu tyrimas, atsižvelgiant į visų suinteresuotųjų šalių supratimą, pasirengimą ir komunikacinius veiksnius, taikyti vienas kitą papildantys tyrimo metodai: atvejo analizė (Salacgrivos savivaldybėje), Salacgrivos gyventojų anketinė apklausa, nacionalinio lygmens savivaldos planavimo specialistų apklausa, interviu su nacionalinio lygmens valdymo ekspertais. Nustatyta, kad tiek savivaldos specialistų, tiek rizikos zonose gyvenančių gyventojų supratimo apie klimato kaitos valdymą lygis yra nepakankamas. Latvijoje gana platus įvairių klimato kaitos valdymo municipaliniame lygmenyje priemonių spektras, tačiau jų panaudojimas yra ribotas ir dažniausiai viena kitos nepapildo. Būtina savivaldybės lygmenyje vyraujantį projektinį mąstymą keisti proaktyviu komunikavimu ir bendradarbiavimu.

PAGRINDINIAI ŽODŽIAI: *prisitaikymas prie klimato kaitos, valdymas, integracija, komunikacija, municipalinis planavimas, namų ūkių supratimas.*

JEL KLASIFIKACIJA: Q, Q5, Q56, Q58

EXPRESSION OF BUSINESS ENVIRONMENT CHANGES IN TRADING COMPANY: RESEARCH OF USERS' OPINION

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ABSTRACT
Expression of business environment in trading company is being analysed in this article. Theoretically it was determined, that by supervising own business environment the companies must accordingly react to its changes and envisage what influence one or another factor of business environment have on them as insufficient attention to this area may determine inability to adapt to changing business environment. Therefore it may be baneful for trading companies and this topic must be analysed as much as possible. After quantitative research was made and 65 users of trading company were interviewed (customers of services or production), it was determined that alternation of supplies, employees and financial institutions as well as changes in legal, political and technological environment have the greatest influence on the environment of trading company. Obtained results of the research showed practical significance when solving management tasks of changes in business environment under development conditions. In accordance with this information, more rapid and better reaction of trading company into satisfaction of needs of the users is possible. The most important aspects, which must be considered, and which are necessary for managers of trading companies in order to make effective decisions are having of such information, accuracy of information, effectiveness of existing measures to receive and transfer information.
KEY WORDS: *management of changes, changes in business environment, elements of business environment, trading company.*

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Introduction

Needs and expectations of users in Lithuania shall vary, products, services, methods of their creation shall change and improve as well as requirements raised for business shall increase. Rapidly changeable conditions of business environment shall determine transformations of the system of users' values, needs and interests. All efforts of the company are made for satisfaction of users' needs and services. Such efforts shall be implemented with reference to appropriate decisions and actions, related to product, its price, distribution and support of the offered product.

All this shall affect management of companies and change role of their managers. Managers of trading companies must understand the importance of existing and prospective changes of business environment, influence on business development and management, to learn to implement strategy of the company under permanently volatile conditions of business environment. Abilities of the manager to analyse strategic perspectives of the company, project and reorganise company, highlight and govern internal powers and competencies of the company, on purpose to qualitative changes of activity as well as to avail of influence of external forces, shall become essential on purpose to seek changes in the business oriented to the user. Management of changes shall include preparation of trading company to accept challenges of the environ-

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ment, management of qualitative changes in all areas and selection of the most suitable versions of activity in order to reach vision of organisation.

In accordance with Z. Grineitienė (2005), business environment has direct influence on the development of business activity. It can stimulate the business to originate or, on the contrary, to aggravate its establishment and further activity. Recently struggle for such global distribution channels as large global retail systems shall become relevant. Retail amounts in Lithuania shall be assessed more than 23 billion LTL and shall grow steadily. No new supermarkets were opened within five last years and there are no plans to open them. There are intentions only. Nets of supermarkets have fear that the sector will experience hard period. They concern, that in the nearest future price war will reach such extent, that some supermarkets will be forced to terminate their activity or will be taken over by their competitors cheaply. Such changes in business environment as often as not are experienced with difficulty and it may become a fatal challenge to improvement of the company's activity or even its survival on the market especially when appropriate and systematic preparation is not made.

Many authors (Zakarevičius, Kvedaravičius, Augustauskas, 2004; Campbell, Luchs, 2004; Švelienė, 2004; Christensen, 2004; Stripeikis, Žukauskas, 2004; Žvirblis, 2005; Stoškus, Beržinskienė, 2005) shall emphasize, that changes of business environment for the companies are inevitable. But at the same moment, authors shall often stress that they are unpredictable and hardly predictive. J. Barsėnaitė and others (2006) are of the same opinion. It is stated, that one of the reasons of companies' successful activity is favourably accepted changes. In case to understand possible business risk and possibilities, business representatives shall reach for more accurate information about market of their area as well as about potential users and competitors (Martinkienė etc., 2009). According to V. Zinkevičiūtė (2007), changes of business environment are a challenge for business, solicitous of competitive advantage, but also a possibility to use tendencies of environment changes, by developing these business abilities and by accepting these strategic decisions, which would allow gain competitive supremacy in the context of new tendencies. Changes shall take place when the company shall change as a whole in integrated way. R. Korsakienė (2012) shall state, that current companies confront with changes of various nature, which are inevitable because of variable business environment. It is noticeable, that new technologies and variable needs of the clients stimulate the companies to renew so that they would remain innovative and competitive. V. Venckutė (2005) confirmed, that variable process is constant and anticipation of changes or their consequences would allow managers of organisations correct their strategies and prepare for tomorrow. It would ensure competitive supremacy and successful activity of organisations. Mostly occurring reaction to changes is stand against them, as one could not understand how to react to them (Lodienė, 2005). "One of companies' bankruptcy reasons is inability to react to global or event local changes, which shall take place constantly", state J. Kvedaravičius and D. Lodienė (2002).

Therefore understanding of these problems and aim to solve them shall require adequate scientific researches, intended for determination of assumptions that would allow increase effectiveness of activity of business subjects using measures of management improvement.

Problem: insufficient attention in scientific publications and practice is being paid for determination of expression of changes in trading company.

The subject of research – changes of business environment in trading company.

Aim of research: to determine influence of changes in business environment on trading company Maxima XX.

Tasks raised in order to reach the goal: to motivate influence of changes in business environment on goals of trading companies in theoretical aspect and to determine opinion of users about influence of changes in business environment on the goals of trading company Maxima.

Methods used: comparative analysis of scientific literature; quantitative research and data processing methods were applied in the research; obtained data of quantitative research were processed in accordance with SPSS 15.

An interview took place on 17 March 2014 at Maxima supermarket Maxima XX, in Plungė.

1. Theoretic reasoning of influence of changes on goals of trading company in business environment

The companies shall differ in size, structure, activity processes and results, existing resources, influence on society and community as well as other indexes. The amount of risk and structure, occurred during procedural management, changes and reforms of processes will greatly depend on these factors (Klimas, Ruževičius, 2009). Trading companies shall be attributable to service area. Their specifics shall distinguish by the fact, that they do not remake or in any other way process acquired goods before selling to the users and that they sell their products together with its specific services. Such companies may be retail, wholesale and public catering. Trading company is a private investment into human wellness, change of which shall depend on the success by satisfying human expectations. Success of trading company shall directly depend on that how rapidly it is able to react to changes in business environment and how these changes affect its condition.

In scientific literature authors shall differently emphasize the importance of analysis of business environment. Companies operating to the international extent shall understand business environment as business environments of different countries, but nowadays international business environment itself shall exist in regional and global business environment, which consists of supranational institutions, geopolitical factors and such measures of state politics as bilateral (multilateral) agreements, trade obstacles etc. (Sethi and others, 2002). According to A. Vasiliauskas (2004), pragmatism to business environment as to the whole of external objects, powers and factors shall dominate, which sensibly affects the company (its activity and its results). Usually changes in the company shall be implemented on purpose to improve or even to change substantially one or other elements of the company, having significant influence on activity of the company, which consists of components and factors of business environment (Žvirblis, 2005). Changes for the company (or individual) are necessary so that it would stay in competitive environment and would be able to reach tasks.

Therefore significance of changes in business environment on company's activity is great. As D. Klimas and J. Ruževičius (2009) state, management of companies (irrespective of one speaks about strategic or operational management) will have to refer to an assumption that background of management technology consists not of technology and end user. They only restrict it..The background must consist of client's values and client's decisions how to distribute disposable income. But it would be difficult to find "pure" changes, depending on one or another attitude in practise of companies. If companies wish to successfully compete on the market, they must constantly look for new reserves for improvement of activity, creation of new products and services, application of new technique and technologies as well as improvement of management methods (Mackevičius, 2005).

Business environment of trading company shall fully depend on business subject itself. Therefore we will not analyse it in detail in this article and concentrate our attention to the elements of business environment, that various authors mention mostly (Table 1): economic, technological, political, juridical, social, ecological changes of environments, change in clients, suppliers, competitors, employees and financial institutions.

As it could be seen from Table 1, authors shall differently classify environment elements affecting trading company. Regardless of appropriate differences, essential criteria shall remain the same. A threat to retain part of occupied market shall occur because of increased changes in business environment, i.e. increasing needs of users, occurrence of new competitors. Sophistication of the user shall be treated as a level of reception of user's information as well as familiarisation with alternative sellers and their prices on the market. Also it is possible to state that influence of all changes of business environment on trading companies is different. These changes may make favourable conditions for trading business to expand not only in the country, but in foreign countries as well, and on the contrary, impede its development or even destroy it. Changes of business environment are significant as competitive advantage may be acquired by using them and this topic must necessarily be analysed more and more.

In summarising a conclusion may be made, that changes in business environment of trading company are inevitable, sometimes even dependable on company's activity and endeavours to understand them and to control. Trading companies, in which analytic activity is well organised and managers of which always try to control factors related to business risk, may foreseen forthcoming crisis of activity earlier, to operatively react into it and reduce possibility of its occurrence. Therefore elements of changes in business environment must be assessed in integrated way; influence of one element to others must be determined and optimum version of adjustment of all aspects must be found when seeking innovation of trading company, competitive ability and attractiveness to users.

Table 1. Influence of changes in business environment on trading company

Row No.	Elements of changes in business environment	Influence of changes in business environment on trading company
1.	Changes in economical environment	Business environment is influenced by tax and money politics executed by state management bodies, capital flow, investment environment, credit supply and interest rate politics, demand, supply, competition, pricing and other economic factors (Gineitienė, Korsakaitė and others, 2003). Economic environment assessment factors: economic growth, inflation, employment, interest rates, fluctuation of interest rates, investment climate, prices of production factors and so on (Švelienė, 2004). It is very important to pay attention to tendencies, determining purchasing power, as it may have great influence on the business, especially if the companies offer goods to the users, having high income and oriented to price (Kotler, Keller, 2007)
2.	Changes in technological environment	V. Venckutė (2005) shall state, that the most obvious and dynamic change is new technologies. It is very important to pay respect to the following tendencies of technologies: rate of changes, opportunities of occurrence of innovation, variable budgets of scientific researches and development and increased control (Kotler, Keller, 2007). New industrial and information technologies not only shorten duration of product's moral limitation, its lifetime, but also create new usage needs (Snieškienė, 2009)
3.	Changes in social environment	Social environment changes are determined by various factors: demographic changes, growth and distribution of people's income, people's attitude to work and leisure, changes of lifestyle and cultural values etc. (Robbins, 2003). Business entities, which are able to react to changes of social environment, shall start to look for ways or methods, into which they could direct their resources and compete (Navickas, Kontautienė, 2011)
4.	Changes in ecological environment	International environment protection requirements, which must be observed by organisations, shall form (Gineitienė, Korsakaitė and others, 2003). Security of growing ecology normative requirements shall require accurate selection of technologies and is related to higher costs (Vasiliauskas, 2006)
5.	Changes in political environment	According to J. Mackevičius and A. Rakštelienė (2004), political environment shall affect business through: taxing system, regional politics and support for small and medium business. Companies in their practical activity must follow decisions and appropriate legal acts (laws, resolutions, regulations) made by political forces (parties), formed by power and management structures (parliament, government), operating in the country (Pranulis and others, 2008)
6.	Changes in juridical environment	Activity of all companies is directly and indirectly influenced by separate legal acts and entire legislation, regulating general conditions of company's activity, taxes, working conditions and so on (Vasiliauskas, 2006). Entrepreneur must know how it will act if one or other law will be adopted, how it will have influence on production of goods or supply of services, prices of goods etc. (Virvilaitė, 2007)
7.	Change of clients	Companies should always take an interest in if their users are satisfied, as satisfied user shall remain loyal for a longer time, purchase more and new goods of the company, have favourable appreciations about the company and its goods, have less interest in competitor's trademarks, less react to price, offer their ideas to company (Kotler, Keller,2007). Clients of the company shall directly affect finances of company by purchasing its goods (Černius, 2013)
8.	Change of competitors	Improvement of users' services shall linger a very long time and competitors must attempt to reach company's level (Jong and others, 2004). Presentation of required product or service in proper place on proper time may allow business entity acquire competitive ability (Navickas, Kontautienė, 2011)

Row No.	Elements of changes in business environment	Influence of changes in business environment on trading company
9.	Change of suppliers	Competitive supremacy of companies is often related to actions of suppliers and activity of distribution channels because of shortened lifetime of product, increasing quality requirements and variation of technologies (Stöttinger, 2001). First of all influence of suppliers on goals of company shall evidence through purchase cost price of goods on sale (Černius, 2013)
10.	Change of employees	Repeated change of employees may make great damage for trading company, as first of all they communicate directly with clients, so creating image of company and their often change does not ensure excellent training level (Čiutienė, Kumpikaitė, 2003). Many service companies cannot implement service quality management process. It is supposed, that the main reason of it is intense change of employees in services (Žostautienė, Čerkauskytė, 2007)
11.	Change of financial institutions	Business obstacles: instability of country's economic and political status, change of taxing and finance systems, ambiguity of legal acts, inflation (Mackevičius, Rakštelienė, 2005). Companies vitally need effective working relations with financial institutions. Rate of development may be determined by changes of conditions of company's borrowing (slowdown or revival). By lending/not lending money banks have influence on finances of company (Černius, 2013)

2. Organisation of research and discussion of results

Purpose of this research is to determine influence of changes in business environment on purposes of trading company Maxima XX, what would help manager of the company to react to and envisage what influence has one or other factor on competitive ability of company in existing situation.

Place of research. The research was made at Maxima system's trading company Maxima XX in Plungė. The trading company employs 103 employees. Today we could bravely name history of trading system Maxima establishment as a business success history, as after proclaim of Independence in Baltic states none of companies had such financial success, popularity in society and evaluation of buyers.

Type of research is *quantitative, descriptive.* Method of research is *questionnaire.* Anonymous questionnaire was applied by presenting private, open and mixed questions. Questions were made from demographic part and eleven blocks of questions, where respondents were asked to evaluate changes in business environment of trading company "Maxima" (table 1) from 1 – it has small influence,..., until 5 – has very great influence.

After statistical inspection of questionnaire was made, it was determined that Cronbach Alpha common value (indicating internal reliability of instrument with regard to its questions) is equal to 0,956.

Table 2. Cronbach's Alpha assessment results

Elements	Cronbach's Alpha	Elements	Cronbach's Alpha
Common value	**0.956**	6. Changes in juridical environment	0.897
1. Changes in economical environment	0.822	7. Change of clients	0.767
2. Changes in technological environment	0.833	8. Change of competitors	0.604
3. Changes in social environment	0.796	9. Change of suppliers	0.749
4. Changes in ecological environment	0.865	10. Change of employees	0.827
5. Changes in political environment	0.697	11. Change of financial institutions	**0.455**

Fluctuation of alpha value up to 1 shall indicate that reliability of data is valid and shall approach to ideal index. According to R. Gliem and J. Gliem (2003), when alpha index: >0.9 – ideal; >0.8 – strong; >0.7 – acceptable; >0.6 – doubtful; >0.5 – weak; <0.5 – unacceptable.

Alpha value 0,455 of change in financial institutions shall indicate that this block of questions have problems with internal compatibility of questions.

Extent of research. In consideration of purpose of research, *non-probabilistic* method of selection of investigative groups is provided – *purposive conclusion of groups* (Kardelis, 2007). Here researcher includes persons into the group, who, according to him, are typical from the point of view of feature under investigation, who are easy to find and who are nearby (Tydikis, 2003). In researches of small scope, investigative groups are often formed by not fully keeping to coincidence principle. Undoubtedly, in such way formed groups shall not fully reflect population. But results of such researches may be reliable enough if only researcher does not intend extrapolate them for all population that is transform outside investigative group. Most often groups are selected in such way by performing exploratory (preliminary) (Kardelis, 2007).

Respondents. 65 respondents participated in research. They are users: buyers of services or production. Importance of users is clear from the start of company's perception: they maintain company and capacitate to constantly renew activity.

It was tried to select respondents into group of research, income of which would distribute within all four groups:

- Group 1–12 % respondents (income below poverty level, up to 800 LTL).
- Group 2–22 % respondents (income beside poverty level, from 800 LTL to 1500 LTL).
- Group 3–17 % respondents (those, who receive average income, 1501–3000 LLT).
- Group 4–14 % respondents (those, who receive higher than average income, >3000 Lt).

Questionnaire took place on 17 March 2014. Administrative feature of performance of quantitative research shall be noticeable: respondents have the ability to explain them uncertain questions of questionnaire. Main difficulties with which were confronted during questionnaire, were reluctance or inability of users to participate in questionnaire because of subjective reasons.

Results of research. After Shapiro-Wilk test was applied, it was determined (Table 3), that all features are not distributed according to normal law (*p* meanings <0.05), consequently only non-parameter tests can be applied to more detail analysis and comparisons.

Table 3. Shapiro-Wilk test evaluation results

Elements of changes in business environment	**Shapiro-Wilk**		
	Statistic	***df***	***p* mean**
1. Changes in economical environment	0.926	65	0.001
2. Changes in technological environment	0.951	65	0.013
3. Changes in social environment	0.950	65	0.010
4. Changes in ecological environment	0.895	65	0.000
5. Changes in political environment	0.943	65	0.005
6. Changes in juridical environment	0.918	65	0.000
7. Change of clients	0.907	65	0.000
8. Change of competitors	0.939	65	0.003
9. Change of suppliers	0.915	65	0.000
10. Change of employees	0.904	65	0.000
11. Change of financial institutions	0.913	65	0.000

In order to determine which changes have the greatest influence on and if there are statistically significant differences during assessment of these changes, Kruskal-Wallis test was applied. Obtained results of research, presented in Table 4, indicate that all changes of environment are assessed sufficiently equally (i.e. there are no statistically significant differences).

Table 4. Assessment results of changes in business environment

Elements of changes in business environment	**Mean Rank**
1. Changes in economical environment	324.91
2. Changes in technological environment	385.26
3. Changes in social environment	368.78
4. Changes in ecological environment	359.40
5. Changes in political environment	362.50
6. Changes in juridical environment	322.15
7. Change of clients	341.34
8. Change of competitors	315.28
9. Change of suppliers	375.57
10. Change of employees	357.78
11. Change of financial institutions	425.03

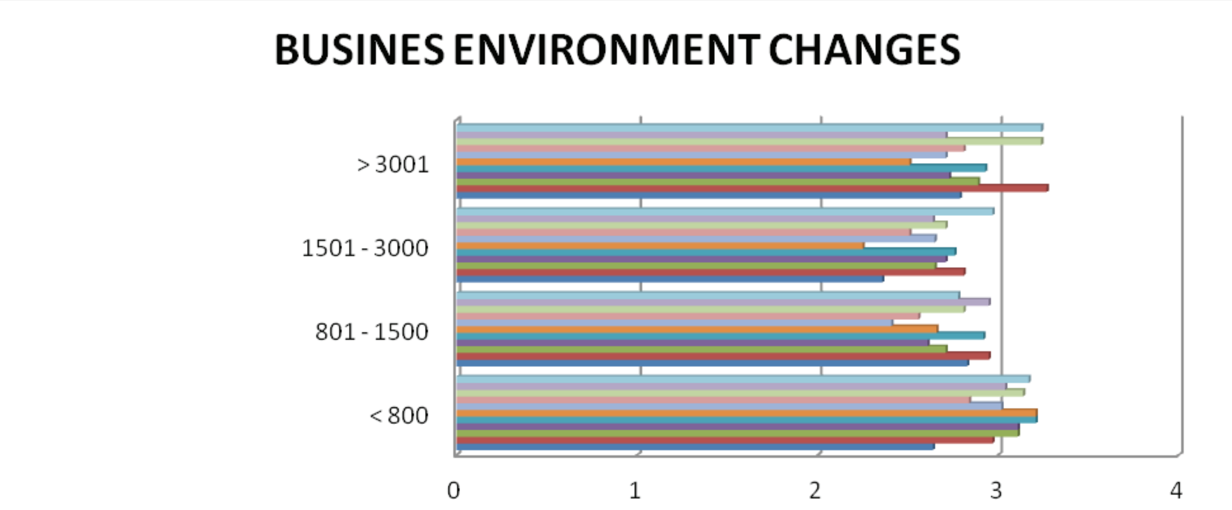
Table 5. Test Statistics results

Chi-Square	15.776
df	10
p	0.106

Attitude of clients (users) into quality of service in trading company shall depend on how: needs of particular client is being satisfied; possibilities of appliance of service to each client are being provided; supplier's behaviour, created by atmosphere of internecine confidence, and other circumstances. Therefore after performance of analysis of changes in business environment in trading company "Maxima", the greatest influence (>3.00) on business environment as main factors of success of service quality were such intangible factors as (Fig. 1):

- In group 1 (<800 LTL) – alternation of financial institutions (3.17), employees (3.04), suppliers (3.14) and clients (3.02), as well as changes of legal (3.21), political (3.21), ecological (3.11) and social (3.11) environments.
- In group 4 (>3000 LTL) – alternation of financial institutions (3.24) and suppliers (3.24) and changes of technological environment (3.27).

Results of research allow presume that behaviour of users is influenced by changes in business environment. Wishes and economic possibilities of user shall form demand of goods and services, which determine supply. It depends not only on the size of income of users but also on change of clients, suppliers, competitors, employees and financial institutions as well as on other legal, political, ecologic, social, technological and economic conditions.



	< 800	801 - 1500	1501 - 3000	> 3001
Change of financial institutions	3.17	2.78	2.97	3.24
Change of employees	3.04	2.95	2.64	2.71
Change of suppliers	3.14	2.81	2.71	3.24
Change of competitors	2.84	2.56	2.51	2.81
Change of clients	3.02	2.41	2.65	2.71
Changes in juridical environment	3.21	2.66	2.25	2.51
Changes in political environment	3.21	2.92	2.76	2.93
Changes in ecological environment	3.11	2.61	2.71	2.73
Changes in social environment	3.11	2.71	2.65	2.89
Changes in technological environment	2.97	2.95	2.81	3.27
Changes in economical environment	2.64	2.83	2.36	2.79

Fig. 1. Assessment results of changes in business environment from viewpoint of users

Interviewed participants of research (respondents), whose monthly income does not reach 800 LTL, indicated that changes of *legal* (3.21) and *political environment* (3.21) have the greatest influence on business environment. Respondents, monthly income of whom is from 800 LTL to 1500 LTL state that, business environment is mostly influenced by *change of employees* (2.95) and *changes of technological environment* (2.95). Respondents, monthly income of whose is from 1501 LTL to 3000 LTL state, that business environment is mostly influenced by *change of financial institutions* (2.97) and *change of technological environment* (2.81). Respondents, monthly income of whom is more than 3000 LTL also state, that business environment is mostly influenced by *change of financial institutions* (3.24), *change of suppliers* (3.24) and *changes of technological environment* (3.27).

In summarising it's possible to state, that obtained results of research indicated which changes of business environment have the greatest influence on this trading company. That is: *change of suppliers, employees and financial institutions* as well as *changes of legal, political and technological environment.* Obtained results of the research may guarantee the trading company ability to flexibly and effectively react into changes of business environment and educate collectives, that are able coherently participate in the process of constant increase of competition. According to this information more rapid and better reaction of trading company into satisfaction of needs of users is possible. Expenses of company related to search of users shall decrease by maintaining long-term relations with users, besides, expenses of finding new users are significantly higher than for maintaining of the old ones.

Conclusions

Theoretic analysis of scientific literature revealed that changes in business environment of trading company are inevitable. Sometimes irrespective of company's activity and endeavours to understand and control them. Business environment shall change constantly therefore if trading companies wish to persist and continue activity they must be flexible, dynamic and open. It is possible to state that by supervising their business environment, trading companies must accordingly react to its changes and envisage what influence one or other element of business environment will make for them as insufficient attention to this area may determine inability to adopt in variable business environment. The company may become insolvent and a threat of bankruptcy may occur because of adversely changed business environment, unforeseen and undesirable events. Therefore it may be disastrous for trading companies and this topic must be analysed in more detail.

During practical research it was determined that participants of research (65 users) indicated the most important elements of business environment, which have the greatest influence on business environment of trading company. That is alternation of suppliers, employees and financial institutions as well as changes in legal, political and technological environment. The most important aspects, which must be considered, and which are necessary for managers of trading companies in order to make effective decisions are having of such information, accuracy of information, effectiveness of existing measures to receive and transfer information. Therefore in trading companies in all management levels, at a stretch, it is necessary to seek that transfer of knowledge and information from users about business environment, reflection of acquired experience and discussion of activity perspectives would take place in order to seek for goals of the company by adjusting to volatile business environment...

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VERSLO APLINKOS POKYČIŲ RAIŠKA PREKYBOS ĮMONĖJE: VARTOTOJŲ NUOMONIŲ TYRIMAS

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Santrauka

Straipsnyje nagrinėjama verslo aplinkos raiška prekybos įmonėje. Teoriškai nustatyta, kad įmonės privalo stebėti savo verslo aplinką ir atitinkamai reaguoti į jos pokyčius, matyti, kokią įtaką joms daro vienas ar kitas verslo aplinkos elementas. Nepakankamas dėmesys šiai sričiai gali lemti negebėjimą prisitaikyti kintančioje verslo aplinkoje. Prekybos įmonėms tai gali būti pražūtinga, todėl šią temą būtina tyrinėti.

Atlikus kiekybinį tyrimą, t. y. apklausus 65 prekybos įmonės vartotojus (paslaugų ar produkcijos vartotojus), nustatyta, kad didžiausią įtaką prekybos įmonės verslo aplinkai daro: tiekėjų, darbuotojų ir finansinių institucijų kaita, teisinės, politinės ir technologinės aplinkos pokyčiai. Tyrimo rezultatai atskleidė praktinę verslo aplinkos pokyčių valdymo uždavinių sprendimo reikšmę plėtros sąlygomis. Remdamosi šia informacija, prekybos įmonės gali greičiau reaguoti į vartotojų poreikius. Tokios informacijos turėjimas, jos tikslumas, turimų priemonių efektyvumas gauti ir perduoti informaciją yra svarbiausi aspektai, į kuriuos reikia atsižvelgti ir kurie būtini prekybos įmonių vadovams, siekiant priimti veiksmingus sprendimus.

PAGRINDINIAI ŽODŽIAI: *pokyčiai įmonėse, pokyčių valdymas, verslo aplinkos elementai, prekybos įmonė.*

JEL KLASIFIKACIJA: M12, R11.

SATISFACTION AND LOYALTY OF LITHUANIAN RURAL TOURISTS: SEGMENTATION AND MANAGERIAL IMPLICATIONS

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ABSTRACT
Tourism is becoming a very important and fast growing industry, where rural tourism is a very important part. Tourist loyalty is a very important factor determining tourist's wish to revisit the destination; and main loyalty's antecedent is tourist satisfaction. Accordingly, the research was provided endeavouring to determine how to turn satisfied Lithuanian rural tourists into loyal ones. The aim of the research was to reveal core factors affecting Lithuanian rural tourist loyalty. The obtained results reveal that variables that have to be considered to turn already satisfied tourists into loyal are: 'natural features', 'destination marketing' and 'environmental preservation'. Considering that the variable 'natural features' remains at the constant level due to the requirement of large investments, 'environmental preservation' and 'destination marketing' are variables necessitating specific level of compatibility.
KEY WORDS: *Lithuanian tourism, Rural tourism, Tourist satisfaction, Tourist loyalty.*

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Introduction

In Lithuania as well as in many other fast developing countries, tourism is becoming a very important and fast growing industry. However, for Lithuanian tourists two core possibilities exist: 1) going abroad to other countries, and 2) visiting Lithuanian countryside as rural tourists. Considering rural tourism, it has many advantages. Rural tourism can be named as a valuable tool for the sustainable development of rural areas (Peña et al., 2012; Phillips et al., 2013), it can encourage an increase in cultural exchange between urban and rural areas (Randelli et al., 2014), and serves as a basis for sustainable and renewable energy promotion (Baležentis et al., 2012); it makes a significant contribution to the rural economy and to the wider tourism industry (Haven-Tang, Jones, 2012). Furthermore, growing tourism industry is seen as a potential solution to issue such as low employment rates (Rid et al., 2014). Hence, scientific research in the field of rural tourism development is extremely important and necessary.

According to D. Jurdana and D. Frleta (2012), there is increased competition for tourists; therefore, in order to be successful, a thorough analysis of tourist motivation, as well as of tourist satisfaction and

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loyalty is very important. So far, there is strong empirical evidence to suggest that customer satisfaction is an antecedent of customer loyalty, and that there is a positive link between these two constructs. It is well established in tourism literature that both: tourist's satisfaction and tourist's loyalty are partially determined by the assessment of the destination's different attributes (Alegre, Garau, 2010). Therefore, the problem solved in the article is: what are the factors affecting Lithuanian rural tourist loyalty? and how to transform satisfied tourists into loyal ones?

The object of the research is: factors affecting Lithuanian rural tourist loyalty.

The aim of the research is to reveal core factors affecting Lithuanian rural tourist loyalty.

To meet the aim of the article following tasks were set:

- To establish a prototype of Lithuanian rural tourist.
- To identify essential variables for converting satisfied Lithuanian rural tourist into the loyal one.
- To design the algorithm for turning satisfied Lithuanian rural tourist into loyal.

Research methods. Achieving to reach the aim of the article, theoretical analysis and synthesis are provided. Tourists' attitudes and evaluations towards rural tourism destinations in Lithuania are determined providing the questionnaire research. Structural equation modelling (SEM) using partial least squares (PLS) path modelling methodology, PLS regression and Classification Tree are applied for statistical analysis. Cluster analysis is provided to establish a prototype of Lithuanian rural tourist and a structure of Lithuanian rural tourism market. Scientific visualization is provided for multivariate data analysis.

1. Scientific substantiation

Rural tourism is seen as a valuable and growing sector of the overall tourism market, representing a significant source of income to rural economies (Lo et al., 2011; Marcu et al., 2013; Ghanian et al., 2014). Hence, developing rural tourism becomes very important managerial, as well as scientific issue. According to I. Pop and M. Ghereş (2013), satisfaction among tourists has always been one of the goals for those involved in the tourism industry. Moreover, tourists who experience greater satisfaction are likely exhibit greater loyalty to the destination (Sun et al., 2013). According to M. Lo et al. (2011), a major challenge for rural destination is to understand the perceptions of their customers and what do they expect from the tourism industry.

Tourists in rural areas have the main characteristics of any other tourists; moreover, the consumer of rural tourism must be regarded just like any other consumer, but this concept also derives researcher's attention to some new dimensions that have to be taken into consideration (Pop, Ghereş, 2013). Considering this, our previous researches enabled the elaboration of theoretical Lithuanian Tourist Satisfaction Index model (Pilelienė, Grigaliūnaitė, 2014) and the verification of Lithuanian Rural Tourist Satisfaction Index (LRTSI) model (see Grigaliūnaitė, Pilelienė, 2014). As the determinants of Lithuanian rural tourist satisfaction following factors were identified: 'accommodation and catering', 'destination aesthetics', 'environmental preservation', 'destination marketing' and 'perceived value'; moreover, perceived value is determined by 'natural features', 'destination aesthetics' and 'destination marketing'; 'destination marketing' is determined by 'accommodation and catering', 'activities in destination' and 'environmental preservation'.

F. I. Khalil et al. (2012) highlight that relationship between environmental preservation and rural tourism has a special significance. A. B. Radaca et al. (2012) and B. A. Radac et al. (2013) claim that communication and promotion, achieved through destination marketing, are the key of a successful rural tourism business and attracting new clients. I. Pop and M. Ghereş (2013) and A. Peña et al. (2013) argue that a satisfied tourist is likely to return to that particular place and, even more, to recommend it to others – tourist loyalty will be achieved. Satisfaction is a crucial factor to generate destination loyalty; however, a few studies assert that satisfied tourists may not return to the same destination (Shirazi, Mat Som, 2013). This indicates that the relations between determinants of satisfaction, satisfaction, and loyalty in tourist industry need to be studied more.

2. Research methodology

The research is based on the previously elaborated theoretical Lithuanian Tourist Satisfaction Index (LTSI) model (see Pilelienė, Grigaliūnaitė, 2014) and Lithuanian Rural Tourist Satisfaction Index (LRTSI) model (see Grigaliūnaitė, Pilelienė, 2014). Accordingly, the model used for this research could be represented with structural equations (1–4):

(1) Destination marketing = β60 + β61 Accommodation and catering + β62 Activities in destination + β65 Environmental preservation + ζ6;

(2) Perceived value = β70 + β73 Natural features + β74 Destination aesthetics + β76 Destination marketing + ζ7;

(3) Satisfaction = β80 + β81 Accommodation and catering + β84 Destination aesthetics + β85 Environmental preservation + β86 Destination marketing + β87 Perceived value + ζ8;

(4) Loyalty = β90 + β97 Perceived value + β98 Satisfaction + ζ9.

The results for the analysis are correspondingly obtained from the same respondents' evaluations of the questionnaire for the elaboration of the LRTSI model. The survey was conducted in January and February, 2014; 10-point evaluation scale was applied for the questionnaire; sample size was 200 respondents.

Structural equation modelling (SEM) using partial least squares (PLS) path modelling methodology was applied for determination of core variables and their impact on rural tourist satisfaction, as well as on loyalty. Cluster analysis was provided to establish a prototype of Lithuanian rural tourist and a structure of rural tourism market in Lithuanian. PLS regression was provided to specify the relation among dependent variable and set of predictor variables and Classification Tree was provided to predict membership of cases in clusters, as well as to identify measures for converting satisfied Lithuanian rural tourist into the loyal one. Scientific visualization was provided for multivariate data analysis.

3. Analysis of the research results

Based on the hierarchical cluster analysis regarding dendrogram and scree plot, the indicated number of segments was three. K-means Clustering analysis revealed that the first cluster contains 26 cases, the second cluster holds 93 cases, and the third cluster covers 81 cases. The Euclidean distances between the final clusters centres are great (see Table 1), corresponding to great dissimilarities between clusters.

Table 1. Distances between Final Cluster Centres

Cluster	1	2	3
1		7.733	13.348
2	7.733		5.824
3	13.348	5.824	

Variables, which contribute the most to the specified cluster solution, are 'satisfaction', 'loyalty', 'environmental preservation', and 'destination marketing' (see Table 2). On the other hand, variables 'destination aesthetics' and 'accommodation and catering' are least valuable in forming and differentiating clusters based on the lowest F-ratio and highest Mean Square error.

Table 2. ANOVA results

Variables	Cluster		Error		*F*	*Sig.*
	Mean Square	***df***	**Mean Square**	***df***		
Accommodation Catering	163.232	2	2.657	197	61.433	.000
Activities in destination	174.165	2	2.882	197	60.430	.000
Natural Features	202.290	2	1.831	197	110.480	.000
Environmental Preservation	202.818	2	1.254	197	161.697	.000
Destination Marketing	202.841	2	1.427	197	142.151	.000
Satisfaction	267.979	2	1.005	197	266.535	.000
Loyalty	332.604	2	1.360	197	244.593	.000
Perceived Value	239.423	2	1.759	197	136.118	.000
Destination Aesthetics	152.919	2	4.090	197	37.384	.000

Regarding the final cluster centres, the first cluster is assessed as 'frustrated' due to the low evaluations of manifest variables corresponding to the specific latent variables, while the second cluster is assessed as 'satisfied', and the third cluster is assessed as 'loyal' to the particular rural destination due to the average, high and very high evaluations. According to the determined tourist valuations towards the rural destination the core clusters of tourists' behaviour are formed. Consequently, index values of latent variables by the specified clusters (see Table 3) substantiate the designation of the clusters.

Table 3. Index values of latent variables by clusters

Variables	Frustrated	Satisfied	Loyal
Accommodation and Catering	42	70	85
Activities in destination	43	64	83
Destination Aesthetics	32	62	72
Destination marketing	51	73	93
Environmental preservation	52	71	94
Loyalty	37	73	94
Natural features	54	71	95
Perceived Value	41	71	89
Satisfaction	42	70	92

The R square values of variables 'satisfaction' and 'loyalty' are respectively 80 percent and 79 percent (see Figure 1), thus these values are substantial, and the regression lines approximate the real data points well enough.

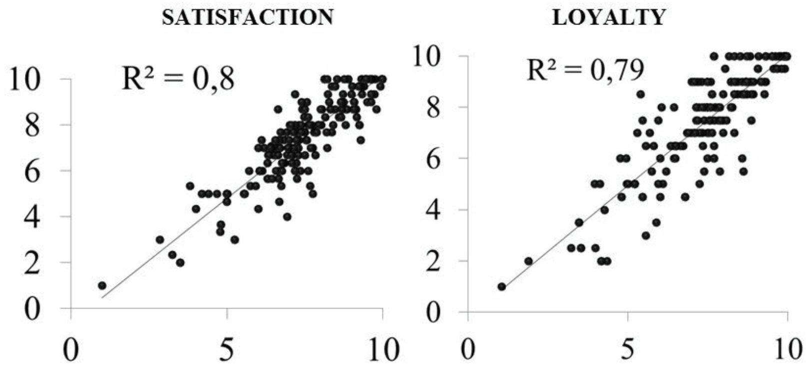

Figure 1. R^2 values of variables 'satisfaction' and 'loyalty'

The values of Variables Importance on partial least squares Projections (VIP) show that not all of the predictors' contributions to fit the model are sufficient (see Figure 2). Variable's 'satisfaction' explanatory variables that contribute the most to fit the model are 'perceived value', 'destination marketing', and 'environmental preservation', while variable's 'destination aesthetics' contribution to fit the model is too small. Consequently, variable 'destination aesthetics' is eliminated from the further analysis. On the other hand, both variable's 'loyalty' explanatory variables have the value of VIP above 0.95, thus are considered as important.

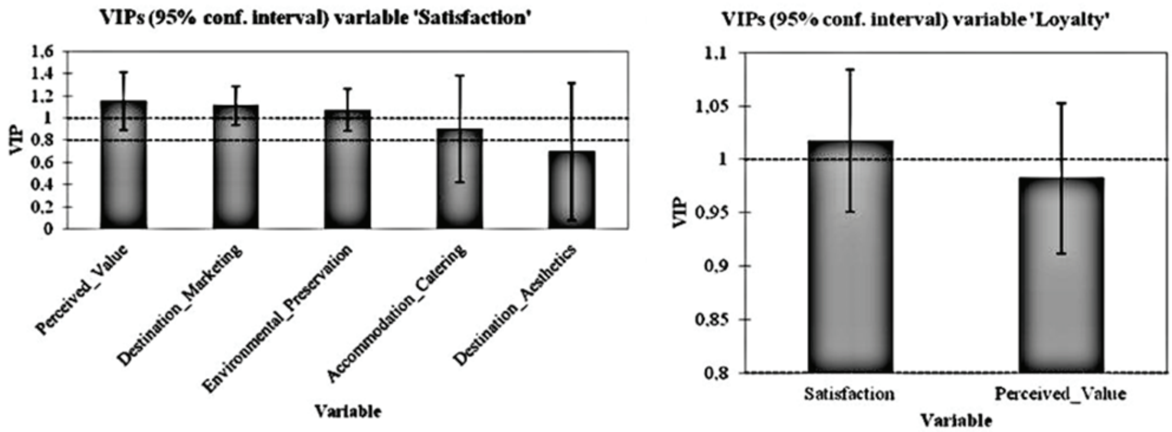

Figure 2. Variables Importance on Partial Least Squares projections

As it can be seen from the dissemination of the clusters (see Figure 3), the 'loyal' cluster is included in the cluster of satisfied tourists; and hence, only satisfied tourist could become loyal. Contrarily, low level of satisfaction indicates that tourist is frustrated with the destination; thus, return on the investments of turning such tourist into the loyal one would be highly questionable.

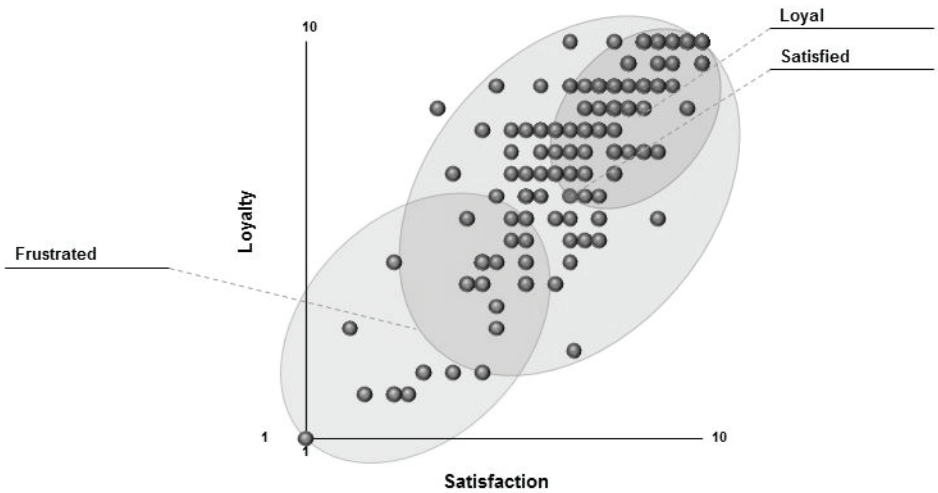

Figure 3. Dissemination of clusters

Perceived Value, Satisfaction, and Loyalty evaluations' model is provided in Figure 4. As tourist satisfaction is the most important determinant of tourist loyalty; it is required that satisfaction must exceed at least average level in order to turn satisfied tourist into the loyal one. On the other hand, analysis of the research results revealed that there is an interaction effect between variables 'satisfaction' and 'perceived value'. Consequently, this effect needs further investigation out of the topic of current research. Accordingly, recommendations regarding the variable 'perceived value' could not be provided and latter variable is eliminated from the further analysis.

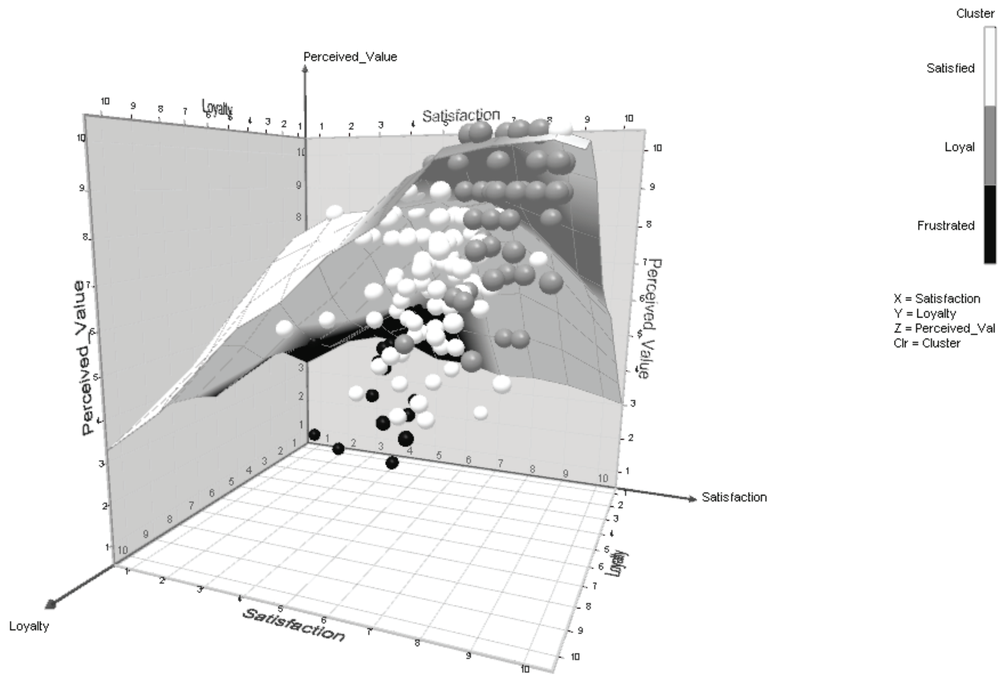

Figure 4. Perceived Value, Satisfaction, and Loyalty evaluations' model

Accommodation and Catering, Satisfaction, and Loyalty as well as Activities in Destination, Satisfaction and Loyalty evaluations' models are provided in Figure 5. VIP values revealed that variable 'accommodation and catering' had the second least contribution to fit the model, furthermore Accommodation and Catering, Satisfaction, and Loyalty evaluations' model supports the assumption that tourist might be loyal to the rural destination despite the low level of accommodation and catering. Moreover, with the highest evaluations of accommodation and catering, there are both satisfied as well as loyal tourists. Consequently, it could be stated that variable 'accommodation and catering' is not the essential variable which could help distinguishing satisfied tourist from the loyal ones.

Variable 'activities in destination' does not directly influence satisfaction as well as loyalty. The only one variable which is directly affected by variable 'activities in destination' is variable 'destination marketing'. Additionally, Activities in Destination, Satisfaction, and Loyalty evaluations' model reveals that with the low level of activities in destination or with the very high level of activities in destination, there are many loyal as well as satisfied tourists. Consequently, latter variable does not distinguish satisfied tourist from the loyal ones and this creates no need to invest in this variable when seeking to turn satisfied Lithuanian rural tourist into the loyal.

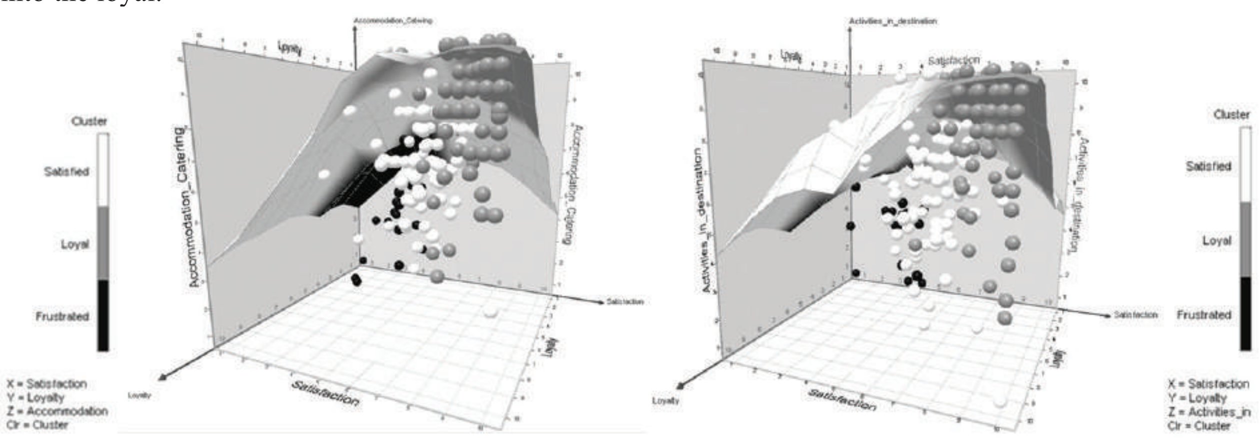

Figure 5. Accommodation and Catering, Satisfaction, and Loyalty and Activities in Destination, Satisfaction, and Loyalty evaluations' models

Environmental Preservation, Satisfaction, and Loyalty evaluations' model together with Destination Marketing, Satisfaction, and Loyalty evaluations' model are provided in Figure 6. With the highest evaluations of variable 'environmental preservation' as well as with variable 'destination marketing' there are only loyal clusters dispersed. Moreover, there are no loyal tourists when the evaluations of environmental preservation or destination marketing are below average level. Consequently, loyal tourists evaluate variables 'environmental preservation' and 'destination marketing' better than satisfied tourists do. Despite this, there are satisfied tourists even when the level of natural features is evaluated as high. This leads to the assumption that latter variables help distinguishing satisfied tourists from the loyal ones, but the specific combination of these variables must be found which could enable to turn satisfied Lithuanian rural tourist into the loyal one with the lowest costs.

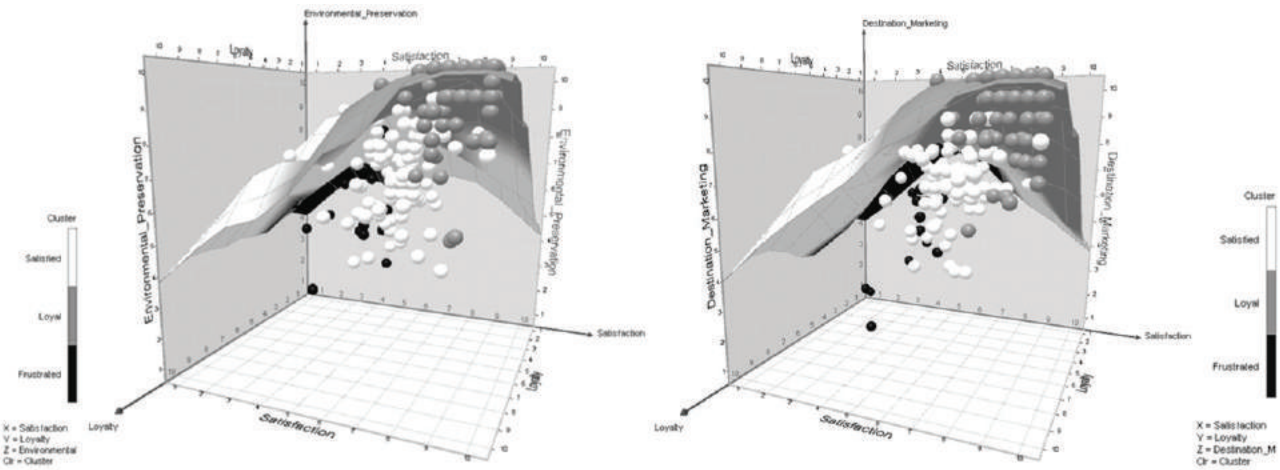

Figure 6. Environmental Preservation, Satisfaction, and Loyalty and Destination Marketing, Satisfaction, and Loyalty evaluations' models

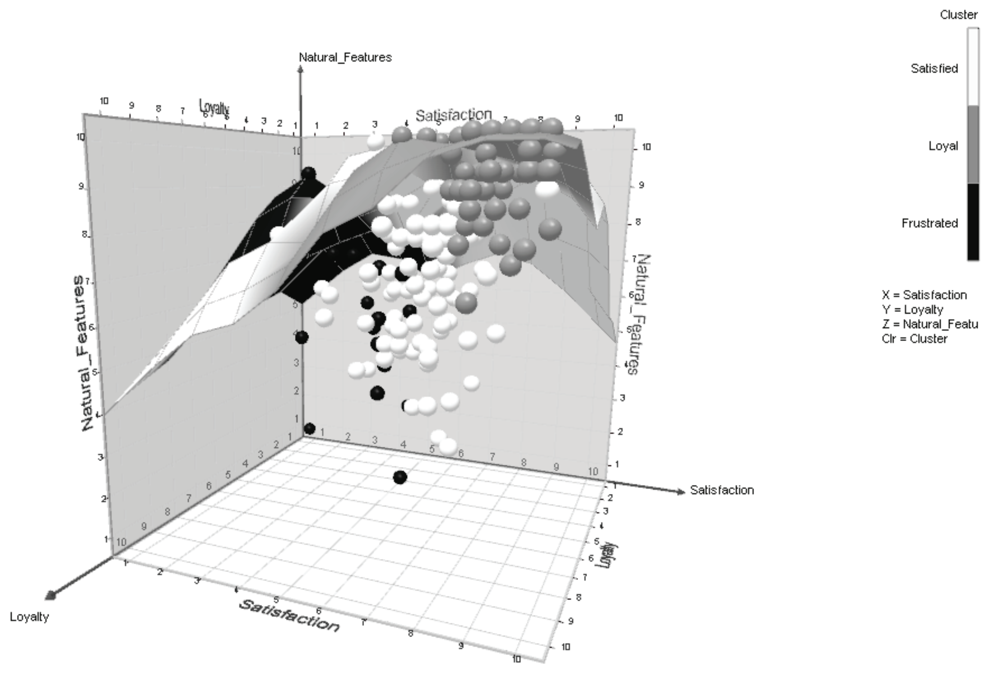

Figure 7. Natural Features, Satisfaction, and Loyalty evaluations' model

Natural Features, Satisfaction, and Loyalty evaluations' model is provided in Figure 7. It reveals that at least high level of natural features is required for the tourist to be loyal. On the other hand, there are satisfied as well as loyal tourists when the evaluation of natural features is high or very high. Consequently, this signifies about the specific combination among variables 'natural features', 'destination marketing', and 'environmental preservation', which distinguishes satisfied Lithuanian rural tourists from loyal. Despite this, level of natural features usually is a constant due to the requirement of very large investments from the government or businesses in order to change latter level. Consequently, because of the large costs variable 'natural features' is considered as a constant for the further analysis. Additionally, when the level of natural features remains as a constant, then such a balance of the variable 'environmental preservation' and variable 'destination marketing' should be found, that it would create a loyal tourist at the lowest costs.

In the framework of this situation, CHAID algorithm-based classification rules (which fulfilled three requirements: 1) contained together variables 'natural features', 'destination marketing', and 'environmental preservation'; 2) had hundred percent purity; 3) involved satisfied or loyal clusters) were distinguished (see Table 4). As a result, it is revealed that if level of natural features is low or average, then the tourist could only remain satisfied. On the other hand, if level of natural features is at the high level, then the factor, which distinguishes satisfied tourists from the loyal ones, is the level of environmental preservation. This substantiates the fact that when level of natural features is at the high level, the level of environmental preservation also must be improved to the high level in order to turn satisfied Lithuanian rural tourist into the loyal one. Moreover, if level of natural features reaches the very high level, then level of destination marketing must be enhanced to the very high level. If not, then tourists will remain satisfied instead of turning into loyal.

Table 4. The distinguished CHi-squared Automatic Interaction Detector algorithm-based Classification Rules

Purity	Rules
100 %	If Destination Marketing in [6; 6.5] and Natural Features in [9; 10] and Environmental Preservation in [5.5; 6.833] then Cluster = **Satisfied** in 100 % of cases
100 %	If Destination Marketing in [7; 8] and Natural Features in [3.333; 5.167] and Environmental Preservation in [5.5; 6.833] then Cluster = **Satisfied** in 100 % of cases
100 %	If Destination Marketing in [4.5; 5.5] and Natural Features in [6.5; 7.667] and Environmental Preservation in [5.5; 6.833] then Cluster = **Satisfied** in 100 % of cases
100 %	If Destination Marketing in [7.25; 9.5] and Natural Features in [6.5; 7.667] and Environmental Preservation in [5.5; 6.833] then Cluster = **Satisfied** in 100 % of cases
100 %	If Destination Marketing in [5.5; 8] and Natural Features in [7.667; 8.5] and Environmental Preservation in [5.5; 6.833] then Cluster = **Satisfied** in 100 % of cases
100 %	If Natural Features in [4.667; 5.167] and Destination Marketing in [3.75; 6.25] and Environmental Preservation in [6.833; 7.5] then Cluster = **Satisfied** in 100 % of cases
100 %	If Natural Features in [6.167; 8] and Destination Marketing in [3.75; 6.25] and Environmental Preservation in [6.833; 7.5] then Cluster = **Satisfied** in 100 % of cases
100 %	If Natural Features in [5.667; 6.167] and Destination Marketing in [6.25; 7.25] and Environmental Preservation in [6.833; 7.5] then Cluster = **Satisfied** in 100 % of cases
100 %	If Destination Marketing in [7; 7.5] and Natural Features in [9; 10] and Environmental Preservation in [8.167; 8.5] then Cluster = **Satisfied** in 100 % of cases
100 %	If Destination Marketing in [5.5; 6.25] and Natural Features in [8.5; 9] and Environmental Preservation in [8.167; 8.5] then Cluster = **Satisfied** in 100 % of cases
100 %	If Destination Marketing in [8; 8.5] and Natural Features in [6.167; 8.5] and Environmental Preservation in [8.5; 8.833] then Cluster = **Satisfied** in 100 % of cases
100 %	If Natural Features in [8; 9] and Destination Marketing in [3.75; 6.25] and Environmental Preservation in [6.833; 7.5] then Cluster = **Loyal** in 100 % of cases
100 %	If Destination Marketing in [7.5; 9.5] and Natural Features in [9; 10] and Environmental Preservation in [8.167; 8.5] then Cluster = **Loyal** in 100 % of cases

Regarding the extracted variables that distinguish satisfied Lithuanian rural tourists from the loyal ones, the algorithm for turning satisfied Lithuanian rural tourist into loyal was elaborated (see Figure 8). Following the algorithm, the first step is to evaluate the level of tourist's satisfaction regarding specific rural destination by applying the LRTSI model (see Grigaliūnaitė, Pilelienė, 2014). If the level is low, then tourists are frustrated and attempting to turn them into loyal would not be beneficial. On the other hand, if the level of satisfaction is average or high, then tourists are satisfied with the specific rural destination. In this case, the level of the constant variable in the model (natural features) must be assessed.

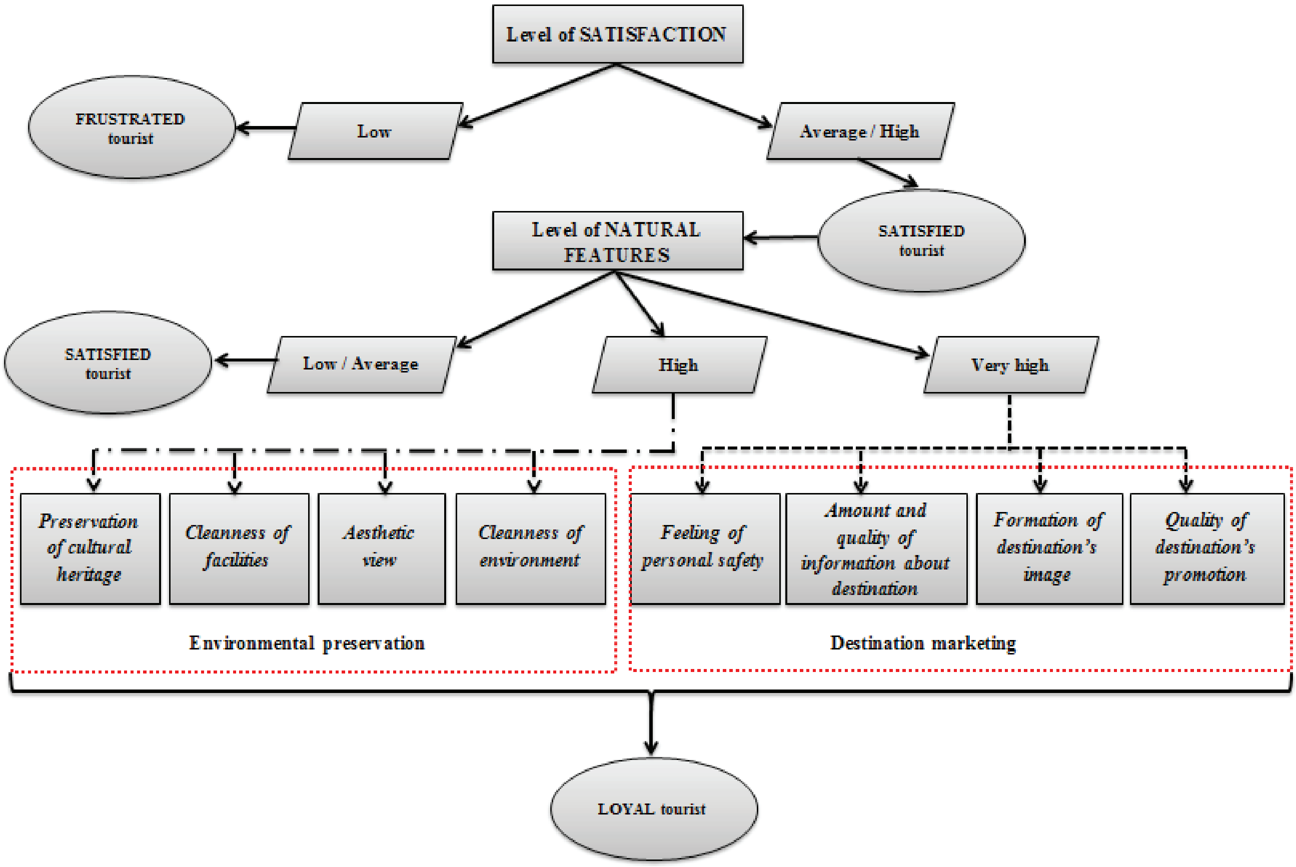

Figure 8. Algorithm for turning satisfied Lithuanian rural tourist into loyal

When level of natural features is assessed as low or average, then tourists will remain satisfied and attempting to turn them into loyal would again be non-beneficial. In contrast, if level of natural features is assessed as high, then level of environmental preservation must also reach the high level. This could be completed by the allocation of investments into the cleanness of environment, aesthetic view, cleanness of facilities, and preservation of cultural heritage.

When level of natural features is evaluated as very high, then the most important variable in order to turn satisfied tourist into the loyal becomes destination marketing, which must reach the very high level. Consequently, it could be accomplished by improving quality of destination's promotion as well as formation of destination's image. Furthermore, the amount and quality of information about destination must be enhanced and the feeling of personal safety must be guaranteed for the tourists.

All of these factors for the two latent variables were distinguished based on the outer loadings of the constructs regarding particular latent variables.

Consequently, it could be stated, that if the specific rural destination has the marvellous natural features, then strong marketing efforts become the essential factor, which attracts tourists and turns them into loyal ones. On the other hand, if specific rural destination in Lithuania does not have marvellous natural features, then there is no need for the very strong marketing efforts when seeking to turn them into loyal (average or high level is sufficient), but in this case high level of environmental preservation becomes the crucial factor that turns satisfied Lithuanian tourists into loyal.

This separation of the essential factors allows turning satisfied Lithuanian rural tourist into loyal at the lowest costs, without the investments in the whole range of factors directly affecting satisfaction and / or loyalty.

Conclusions

Rural tourism is a valuable tool for the sustainable development of rural areas and serves as a basis for sustainable and renewable energy promotion; it makes a significant contribution to the rural economy and to the wider tourism industry. Thus, rural tourism development is an important issue for many countries, including Lithuania.

With the increasing competition among rural tourism destinations, tourist satisfaction and loyalty became very important factors for the specific rural destinations in order to profitably operate in the market. The research results revealed that at least average level of rural tourist satisfaction is essential for the possibility to turn him / her into loyal tourist. As a result, satisfied tourist might be loyal or turned from satisfied into loyal with the managerial efforts. Consequently, this substantiates the assumption that positive relationship between Lithuanian rural tourists' satisfaction and loyalty exist.

The research revealed the existence of three core segments in Lithuanian rural tourism market: satisfied, loyal, and frustrated. The frustrated cluster has no probability of becoming loyal, while satisfied cluster has a high probability of turning into the loyal cluster.

The results of the research revealed that variable 'accommodation and catering' needs to be taken under consideration when trying to make tourists satisfied, but this variable would have no effect on tourist loyalty. Furthermore, variable 'activities in destination' might be taken under consideration when creating destination marketing, but activities in destination also would not make tourists loyal. Moreover, variable 'destination aesthetics' has insufficient effect on satisfaction as well as loyalty that it could influence the process of turning satisfied Lithuanian rural tourist into the loyal one.

Subsequently, variables that have to be considered to turn already satisfied tourists into loyal are: 'natural features', 'destination marketing' and 'environmental preservation'. Considering that the variable 'natural features' remains at the constant level due to the requirement of large investments, 'environmental preservation' and 'destination marketing' are variables necessitating specific level of compatibility.

Consequently, the specific rural destination, which has the spectacular natural features, needs strong marketing efforts to turn satisfied Lithuanian rural tourists into loyal ones. On the other hand, for the specific rural destination in Lithuania, which does not have spectacular natural features, high level of environmental preservation becomes the crucial factor that helps turning satisfied Lithuanian tourists into loyal.

This separation of the essential factors allows turning satisfied Lithuanian tourist into loyal at the lowest costs, without the investments in the whole range of factors directly affecting satisfaction and / or loyalty.

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LIETUVOS KAIMO TURISTŲ PASITENKINIMAS IR LOJALUMAS: SEGMENTAVIMAS IR VADYBINIAI SPRENDIMAI

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Santrauka

Lietuvoje, kaip ir daugelyje kitų greitai besivystančių šalių, turizmas tampa labai svarbia ir greitai augančia industrija. Kaimo turizmas – tai kaimiškųjų vietovių darnios plėtros priemonė (Peña ir kt., 2012), leidžianti skatinti darnų atsinaujinančios energijos vartojimą (Baležentis ir kt., 2012). Kita vertus, kaimo turizmas daro didelę įtaką kaimo ekonomikai ir bendrajai turizmo plėtrai (Haven-Tang, Jones, 2012). Straipsnyje sprendžiama problema keliama klausimu, kokie veiksniai lemia Lietuvos kaimo turistų lojalumą ir kaip padaryti, kad patenkinti turistai taptų lojaliais turistais? Straipsnio objektas – Lietuvos kaimo turistų lojalumą lemiantys veiksniai. Straipsnio tikslas – nustatyti pagrindinius veiksnius, kurie lemia Lietuvos kaimo turistų lojalumą. Tyrimo metodai: siekiant straipsnio tikslo, atlikta mokslinės literatūros analizė ir sintezė. Turistų nuostatos ir vertinimai dėl Lietuvos kaimo turistinių vietovių nustatyti anketinės apklausos metodu. Atliekant statistinę duomenų analizę, taikyti struktūrinio lygčių modeliavimo, pasitelkiant mažiausius dalinius kvadratus, regresijos ir klasifikavimo medžio metodai. Sudarant Lietuvos kaimo turisto prototipą ir nustatant Lietuvos kaimo turizmo rinkos struktūrą, taikyta klasterinė analizė.

Empirinio tyrimo rezultatai atskleidė, kad siekiant turisto lojalumo, būtinas bent vidutinis pasitenkinimo turistine kaimo vietove lygis. Esant minėtam pasitenkinimo lygiui, taikant tinkamas vadybines priemones, galima paskatinti turisto lojalumą. Tyrimo rezultatai pagrindė prielaidą, kad egzistuoja teigiamas ryšys tarp Lietuvos kaimo turistų pasitenkinimo ir lojalumo. Tyrimo rezultatai atskleidė, kad kintamasis „apgyvendinimas ir maitinimas" yra svarbūs, siekiant, kad turistas liktų patenkintas, tačiau turisto lojalumui šis kintamasis įtakos neturi. Tyrimu nustatyta, kad Lietuvos turistinei kaimo vietovei, kurioje įspūdinga gamtinė aplinka

(t. y. kintamasis „gamtinė aplinka“ vertinamas labai gerai), būtina taikyti rinkodaros priemones, siekiant, kad šia vietove patenkinti turistai taptų lojalūs. Kita vertus, jei Lietuvos turistinėje kaimo vietovėje gamtinė aplinka vertinama tik gerai, būtina palaikyti labai aukštą „vietovės autentiškumo“ lygį ir šis veiksnys tampa lemiamu, siekiant patenkintą turistą paversti lojaliu. Tyrimu nustatyta, kad nesant aukšto arba labai aukšto gamtinės aplinkos vertinimo jokie vadybiniai sprendimai negali paskatinti turistų lojalumo, net jei jie bus patenkinti.

PAGRINDINIAI ŽODŽIAI: *kaimo turizmas, Lietuvos turizmas, turistų lojalumas, turistų pasitenkinimas.*

JEL KLASIFIKACIJA: M310, M390.

BARTER TERMS OF TRADE IN LATVIAN TRADE IN AGRICULTURAL COMMODITIES AND PROCESSED FOOD PRODUCTS

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ABSTRACT
Since early nineties, Latvia has remained a net importer of agri-food products. At the same time, both exports and imports of agricultural commodities and processed food products has consistently grown, with total trade turnover increasing. The objective of the study is to determine the trends in development of barter terms of trade in Latvian agricultural commodities and food products. To reach the research objective, barter terms of trade indices were compiled with various levels of data aggregation over the period from 2002 to 2012. The research results in general show consistently higher terms of trade in agricultural commodities in comparison with terms of trade in processed food products. The differences exist between the terms of trade for the same products or product groups depending upon the level of aggregation. Trends in development of barter terms of trade indices for agricultural commodities and processed food products are different. In general, barter terms of trade for whole agri-food sector is not deteriorating.
KEY WORDS: *international trade, barter terms of trade, agricultural commodities, processed food products.*

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Introduction

Terms of trade (TOT) on international markets are the relative price of a country's exports compared to its imports. Barter terms (commodity terms) of trade along with the income terms of trade are the most common indicator used to evaluate this price ratio. Barter terms of trade can be viewed as the amount of imported products that can be bought by country per unit of exported products. Often the net barter terms of trade is called the commodity terms of trade, a definition proposed by Viner (Viner, 1937: 23). In the case of trade between two countries with only two products being exchanged, it is assumed that the imports of one country are the exports of the other country. Terms of trade is calculated as the ratio of country's export revenue received to the import revenue paid. When terms of trade ratio is falling the country is considered as having deteriorating terms of trade. When terms of trade ratio improves the country can benefit from the opportunity to import more for given level of exports. Terms of trade should not be considered a ratio associated with country's welfare as the terms of trade may be strongly influenced by the impact of current exchange rates on

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domestic prices and export prices. The main drawback of this concept is the loss of the importance of trade volumes. Occasional surges in prices for internationally traded commodities sometimes never become fully reversed. Thus, the long-term trend of rising prices can develop. This, in turn, might result in deterioration of country's terms of trade if the country is a major importer of this commodity. According to Reinsdorf, such deterioration has occurred in the USA with respect to oil imports (Reinsdorf, 2010: 177). He proposed to exclude oil from calculations of terms of trade. Reinsdorf coined a term of non-petroleum tradables.

Frequently, international trade is viewed as a production technology where the inputs are exports and the outputs are imports. Exports are believed to be transformed into imports at the rate expressed as the price of exports relative to the price of imports. Thus, the change in the terms of trade acts as a productivity shock. However, in a study by Kehoe and Ruhl, it is shown that changes in the terms of trade have no first-order effect on productivity when output is measured as chain-weighted real GDP (Kehoe, Ruhl, 2008: 804).

In a number of studies, terms of trade are corrected for the degree of trade openness of the economy to account for the effective impact of variations in the terms-of-trade on the real economy (Adler, Sosa, 2011: 14).

Atkin et.al regard the terms of trade as a key determinant of a nation's economic prosperity that dictates the real purchasing power of domestic output (Atkin et. al., 2014: 19). Their research suggests large movements in the terms of trade can have important macroeconomic implications as relative prices and incomes change. In their study, major terms of trade episodes in Australia are examined highlighting the differences in the duration and the nature of the shocks driving these episodes.

Kohlianalyzes the relationships between terms of trade and macroeconomic indicators, such as GDP and real domestic income (Kohli, 2004: 83). Earlier, Krueger and Sonnenschein attributed gains from trade to the price divergence (Krueger, Sonnenschein, 1976: 121). Hamada and Ivata suggest a connection between economic welfare with improved terms of trade (Hamada, Ivata, 1984: 760). The negative terms of trade effect can be adjusted either by cutting down consumption or by reducing savings. Thus, the deteriorating terms of trade damages the growth potential of the whole economy (Fatima, 2010: 14). An improvement in terms of trade, in turn, causes higher levels of investment and induces growth (Mendoza, 1997: 323). In developing countries, changes in the terms of trade can contribute for half of the output volatility (Mendoza, 1995: 101).

The terms of trade can be affected by exogenous shocks arising from global market trends, political unrest and climate disasters, such as drought. Recent global developments in terms of trade concerning the major exporters of commodities are influenced by industrialization and urbanization of developing countries, most markedly, China. Often improvement in terms of trade is simultaneous with the rise in country's GDP per capita.

Bhattacharyya and Williamson assess the relative magnitude and policy responses to Australian terms of trade volatility with respect to frequent and large commodity export price shocks (Bhattacharyya, Williamson, 2011: 150).

Easterly et. al. examine a large number of countries with respect to long-term growth (Easterly et. al., 1993: 459). They conclude that shocks to the terms of trade are greatly behind the variance in growth.

Similarly, large panel of countries was used by Becker and Mauro to determine the relationship of output drops to various external shocks (Becker, Mauro, 2005: 7). Their findings suggest that, especially for developing countries, terms of trade shocks prove to be costly.

In multilateral trade when multiple products are exchanged between a set of countries, terms of trade is usually calculated using a Laspeyres (fixed weights) index over the relevant range of exported and imported products. When calculations are done over the time series including trade data from a period of consecutive years, usually a base year is used for establishing a share of particular product in country's exports and imports. The World Bank (2014) provides net barter terms of trade indexes for all countries, measured relative to the base year 2000. Unit value indexes are based on country reports and previous year's trade values at the SITC Classification three-digit level are used as weights.

The estimation of Latvian net barter terms of trade in agricultural commodities and processed food products would allow for a better assessment of the situation in the whole agri-food sector. The purpose of the study is the calculation of net barter terms of trade at various levels of product classification along with the identification of possible terms of trade shock episodes. The object of the research is Latvian foreign trade. The main tasks in reaching the research objectives are compilation of net barter terms of trade indices and identification of possible trade boom episodes. To perform these tasks, widely accepted net barter terms of trade formulae are used based upon the price indices for exports and imports, as well as the cumulative and average trade shock calculation method.

1. Barter terms of trade

The barter terms of trade of country i in year t according to WTO (World Trade Organization, 2012: 33) recommendations is defined as:

$$BTT_t^i = \frac{P_t^{iX}}{P_t^{iM}} * 100, \qquad (1)$$

where: P_t^{iX} is the price index of country's i exports in year t, P_t^{iM} is the price index of country's i imports in year t.

The price indices for exports and imports are calculated as:

$$P_t^{iX} = \sum_{k \in N_X} s_{k0}^{iX} p_{kt}^{iX}, \qquad (2)$$

$$P_t^{iM} = \sum_{k \in N_M} s_{k0}^{iM} p_{kt}^{iM}, \qquad (3)$$

where: N_X is the range of exported products, N_M is the range of imported products, p_{lt}^{iX} is the export price index for product k in year t, p_{lt}^{iM} is the import price index for product k in year t, S_{k0}^{iX} is the share of product k in country's i exports in the base year, s_{k0}^{iX} is the share of product k in country's i imports in the base year.

Usually calculations are based on the individual product level data, with FOB values for export prices and CIF values for import prices. The values of calculated ratios depend much upon the trade classification systems used and the level of aggregation. A broader level of aggregation can provide rather distorted values as possible product quality differences are not controlled in this case. Another well-known caveat can arise from possible price shocks in the base year. This bias can be avoided by replacing base year values by the averages of three year period around the base year. Terms of trade can be either calculated for entire list of products traded getting the country's single ratio or at the industry or sector level. The statistical aggregation of trade information varies upon the availability of data and research objectives. Potelwa et.al. (Potelwa et. al., 2013: 3) use 4-digit HS code data in South African agricultural trade analysis. However, use of these classificators explicitly does not allow to provide a clear distinction between primary goods and processed products. Moreover, products from the same code group may have been processed by different industry sectors. Berge and Crowe (Berge, Crowe, 1997: 3) use the indices built from SITC 4-digit and 5-digit categories in their research on South Korean terms of trade. A combined approach, using PRODCOM classification with references to HS nomenclature provided in EUROSTAT guidelines allows for an acceptable distinction both between primary and processing and between industry sectors.

2. Terms-of-trade boom

According to Adler and Magud (Adler, Magud, 2013: 6) a terms of trade boom episode is an event for which the following conditions hold: the cumulative shock (an annual increase in terms of trade index) amounts to at least 15 %; the annual average terms of trade shock (an average annual increase in terms of trade index) is of at least 3 %. The episode can be viewed as a cycle with starting and ending years. The end of cycle takes place when at least one third of the shock is reverted. The terms of trade boom episode can be defined by the following conditions:

$$\frac{TT_P - TT_S}{TT_S} \geq 0.15, \tag{4}$$

$$\frac{\sum_{i=P}^{S}\left(TT_{i+1} - TT_i\right)}{P - S} \geq 0.03, \tag{5}$$

where: T_i is the barter terms of trade index for country in a year i, S is the starting year of the episode; P is the peak (local maximum) year of the episode. The last year of the whole period is denoted by N. The duration (spell) of the episode takes the value of $j+1$ if the following conditions are satisfied:

$$\frac{TT_{j+1}}{TT_j} - 1 < -0.33, \tag{6}$$

$$\frac{TT_j}{TT_{j-1}} - 1 > -0.33, \tag{7}$$

for every j, $j \in \{p, p+1, \ldots N\}$.

3. Latvian agri-food terms of trade

In total, trade data for 1020 products were available using 6-digit codes from HS-2002, HS-2007 and HS-2012 international trade nomenclatures. Data were retrieved from United Nations COMTRADE database (2014). There were 943 and 882 products in imports and exports, respectively, that were present in Latvian trade at least in one year from a period from 2002 to 2012. For these products, variables p_{kt}^{1X} for import CIF prices and variables p_{kt}^{1M} for export FOB prices were calculated by dividing the trade values to their respective weights. Prices were set to zero values if trade flows for particular product were missing in a year from a period. Similarly, zero values were assumed when trade weights were not reported. The shares of products with 6-digit codes in total values of import flows s_{k0}^{1M} and export flows s_{k0}^{1X} were calculated by dividing the average trade value of the product in three years from 2001 to 2003 to respective average total trade value. Given $N_X = 943$, price indices P_t^{1X} of Latvia's exports in year t were calculated for every t from 2002 to 2012 using formula (2). Similarly, given $N_M = 882$, price indices P_t^{1M} of Latvia's imports in year t were calculated for every t from 2002 to 2012 using formula (3).

For import and export flows, aggregate trade values and their respective weights were compiled for 54 product groups. The shares of product groups in total trade for import flows S_{k0}^{2M} and export flows S_{k0}^{2X} were calculated by dividing the average trade value of the product group in three years from 2001 to 2003 to respective average total trade value. Given $N_X = 943$, price indices P_t^{2X} of Latvia's exports in year t were calculated for every t from 2002 to 2012 using formula (2). Similarly, given $N_M = 882$, price indices P_t^{2M} of Latvia's imports in year t were calculated for every t from 2002 to 2012 using formula (3). Obtained values of terms of trade indices by both methods are provided in Table 1.

Table 1. Terms of trade indices of Latvian agri-food trade, 2002−2012

Level	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
HS-6 digit codes	84	100	90	78	88	84	92	103	94	92	93
Product groups	77	70	70	66	65	74	82	87	93	92	97

Source: research findings, UN Comtrade database

Research results show a certain bias depending upon a degree of aggregation. The terms of trade indices compiled at product group level in general tend to be lower. This happens when products within a group with relatively low value and relatively high weight are exported and/or when products within a group with relatively high value and relatively low weight are imported. Preferably, terms of trade indices compiled at HS-6 digit code level should be used.

*Table 2.*Barter terms of trade indices of Latvian trade in agricultural commodities, 2002−2012

Commodity		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Live animals	261	423	245	85	494	1042	368	230	194	189	33	
Live and chilled fish	52	55	49	51	49	58	57	43	37	47	44	
Eggs	20	26	21	43	n/a	52	63	63	71	76	87	
Honey	245	223	272	368	123	98	193	165	163	154	173	
Plants	75	74	69	46	20	143	148	246	149	79	114	
Vegetables	95	106	84	67	64	135	113	84	89	100	81	
Fruits and nuts	155	193	326	207	242	238	222	183	207	252	259	
Raw coffee and tea	634	508	247	708	764	532	250	379	233	192	191	
Spices	185	176	180	135	128	137	139	111	115	99	144	
Cereals	54	33	61	50	71	73	74	55	44	72	20	
Seeds	697	1121	1139	878	1423	501	947	727	407	324	985	
Crude fats and oils	194	156	152	150	189	178	154	180	131	296	175	
Ethyl alcohol	218	108	322	139	103	70	112	97	109	115	108	

Source: research findings, UN Comtrade database

To evaluate the terms of trade within the 54 product groups, shares of products with 6-digit codes in values of aggregate product groups s_{k0}^{3M} for import flows and s_{k0}^{3X} for export flows were calculated by dividing the average trade value of the product in three years from 2001 to 2003 to respective average product group trade value. The number of products within the product groups for exports N_X and imports N_M vary depending on trade structure in particular product group and year of the period. Price indices P_t^{3X} of Latvia's exports for product groups in year t were calculated for every t from 2002 to 2012 using formula (2). Similarly, price indices P_t^{3M} for Latvia's imports for product groups in year t were calculated for every t from

2002 to 2012 using formula (3). The obtained values of terms of trade for the most important agricultural commodities are provided in Table 2.

For several product groups, such as honey, live animals, seeds, fruits and nuts, rather high indices are associated with the trade structure when in trade of similar products items with higher price are exported and items with lower price are imported. This trend is especially pronounced in trade of vegetable seeds. For other product groups, such as eggs, vegetables and cereals rather low indices are associated with reverse trend when in trade of similar products items with lower price are exported and items with higher price are imported. Rather low indices for fish reflect simultaneous exports of low-priced varieties and imports of expensive salmon and trout. Relatively high indices for crude fats and oils are associated with the exports of crude food oil for refining and imports of cheaper oil used in biofuels.

The obtained values of terms of trade for the most important processed food products are provided in Table 3.

Table 3. Terms of trade indices of Latvian trade in processed foods, 2002–2012

Product	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Meat	244	182	227	295	281	337	206	210	199	207	212
Poultry meat	206	108	131	136	182	176	173	181	160	144	138
Meat products	113	85	81	80	85	72	77	100	120	116	121
Fish	35	64	74	57	37	26	33	42	43	35	25
Potatoes	140	136	141	137	154	154	133	158	155	171	197
Juices	44	46	55	57	51	44	41	48	40	39	47
Fruits and vegetables	173	179	174	181	200	164	172	161	172	180	181
Oils and fats	269	115	125	136	120	125	121	128	125	116	126
Margarine	153	134	113	122	210	138	130	210	139	161	129
Dairy	118	131	137	123	115	125	108	108	130	127	126
Ice cream	98	102	110	108	101	104	104	115	91	111	149
Milling products	58	57	68	62	74	70	77	80	76	81	83
Starches	94	95	83	79	86	96	83	74	76	92	82
Bread and pastry	143	96	82	68	72	62	64	78	72	82	83
Biscuits	88	64	46	46	52	56	65	58	63	76	70
Pasta	249	171	113	104	116	117	114	166	165	141	75
Sugar	73	56	85	70	65	78	89	164	89	96	84
Confectionery	94	86	85	99	94	95	87	93	78	96	99
Tea and coffee	64	67	85	82	79	78	71	71	65	64	85
Condiments	39	32	32	35	44	4	43	51	58	57	63
Prepared meals	129	127	132	95	120	99	88	94	81	73	73
Homogenized food	80	28	31	32	28	56	89	49	49	54	55
Feed	77	91	82	67	48	56	69	73	48	86	76
Pet foods	176	210	183	99	75	99	135	156	113	103	100
Strong beverages	43	40	45	57	56	47	84	88	89	71	82
Grape wine	113	82	56	73	101	221	268	207	266	391	345
Cider	92	78	n/a	119	81	60	76	85	81	83	85
Fermented beverages	160	n/a	40	103	100	129	124	104	149	159	168
Beer	96	95	92	93	93	100	93	79	79	81	102
Malt	94	117	111	89	77	37	n/a	88	173	132	118
Soft drinks and waters	98	122	102	123	116	98	102	133	123	131	150

Source: research findings, UN Comtrade database

For processed meat products of all types high values of indices are associated with the location of production facilities of multinational companies when cheaper soft-boiled sausages, frankfurters and wieners are imported while more expensive domestically produced hard sausages and smoked meats are exported. For dairy products, cheeses and butter with higher fat contents are predominantly exported while lower priced staple dairy produce is imported to meet local demand. Similar trends are seen in grape wine and fermented beverages segments. For strong beverages, cider, milling products, starches, bread, fresh and preserved bakery products situation is reverse. Premium brands of ice cream are exported while cheaper retailers' private label products are imported from neighboring countries.

To evaluate the terms of trade in agricultural commodities and processed products, shares of products with 6-digit codes in values of agricultural commodities or processed products s_{k0}^{4M} for import flows and s_{k0}^{4X} for export flows were calculated by dividing the average trade value of the product in three years from 2001 to 2003 to respective average total aggregated value of agricultural commodity or processed products. Given $N_X = 2$, price indices P_t^{4X} of Latvia's exports for two broad product groups in year t were calculated for every t from 2002 to 2012 using formula (2). Similarly, given $N_M = 2$, price indices P_t^{4M} for Latvia's imports for two broad product groups in year t were calculated for every t from 2002 to 2012 using formula (3). The obtained values of terms of trade in agricultural commodities and processed products along with the total agri-food terms of trade are provided in Table 4.

Table 4. Terms of trade indices of Latvian trade in agri-food products, 2002–2012

	2002	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Agri-food total	84	100	90	78	88	84	92	103	94	92	93
Agricultural commodities	267	433	316	181	430	215	208	265	127	107	178
Processed products	67	65	66	68	58	70	78	85	90	88	82

Source: research findings, UN Comtrade database

Total Latvian agri-food terms of trade indices over the period from 2002 to 2012 are not deteriorating. Nevertheless, the values of indices do not exceed 100 point threshold in general. The values of terms of trade indices for agricultural commodities are rather high, pointing towards relatively higher prices for exported commodities relative to respective imports.

To measure the performance of barter terms of trade indices for whole agri-food sector, indices are compared to net barter terms of total trade index (Figure 1).

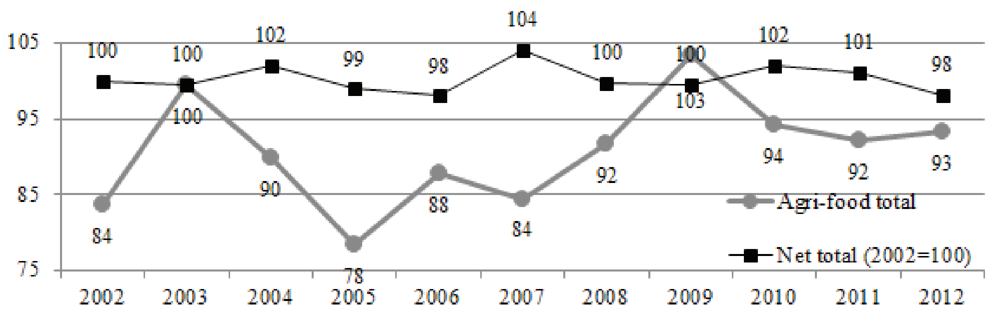

Figure 1. Latvian agri-food barter terms of trade index and total terms of trade index, 2002–2012

Source: research findings, The World Bank

The total barter terms of trade index is measured against the base year 2002 and the assumed value of 100 is relative. In general, total barter terms of trade are quite stable and fluctuate around the initial value. After reaching the lowest value in 2005, barter terms of trade in agri-food sector have improved. Nevertheless, the indices in the last three years of the period have values below 100.

4. Terms of trade shocks in Latvian agricultural commodities

Terms of trade shocks in Latvian trade in agricultural commodities for period from 2002 to 2012 do not show persistent patterns. For all four episodes, the upswing in terms of trade indices is reversed next year (Table 5).

Table 5. Terms of trade shock episodes in Latvian agricultural commodities, 2002–2012

Number	Starting year	Ending year	Episode length-Start-to-End (years)	Episode length-Upswing (years)
1	2002	2005	4	1
2	2005	2007	3	1
3	2008	2010	3	1
4	2011	2012	2	1

Source: research findings

Conclusions

The Latvian net barter terms of trade in agricultural commodities and processed food products are unfavorable over the period from 2002 to 2012. Nevertheless, the terms of trade are improving.

A more detailed level of aggregation of trade data allows for a better control of possible product quality differences, providing more reliable values of terms of trade indices.

There is an increase in Latvian net barter terms of trade indices in agricultural commodities and processed food products over the period from 2002 to 2012, while total net terms of trade are stagnating or even declining.

The Latvian net barter terms of trade in agricultural commodities are favorable, but there is an downward trend in development of terms of trade indices. On the contrary, the Latvian net barter terms of trade in processed food products are unfavorable, while the trend is positive.

The trends in development of net barter terms of trade indices are associated with the changes in domestic and export demand, increase in two-way trade, development of private retailing labels and structure of the processing industry.

There are four terms of trade shock episodes in Latvian agricultural commodities during the period from 2002 to 2012. The episodes are relatively short-lived. The length of upswing period in the episodes does not exceed one year.

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PREKYBOS ŽEMĖS ŪKIO IR MAISTO PRAMONĖS PRODUKCIJA LATVIJOJE SĄLYGOS

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Santrauka

Nuo devintojo dešimtmečio Latvija tapo daugiau maisto produktų importuojančia nei eksportuojančia šalimi, šiuo laikotarpiu maisto produkcijos importas ir eksportas nuolat augo. Šio straipsnio tikslas – nustatyti prekybos žemės ūkio ir maisto pramonės produkcija sąlygų vystymosi tendencijas Latvijoje. Šiam tikslui pasiekti nustatyti prekybos sąlygų indeksai, apimantys kelių lygmenų duomenis nuo 2002 iki 2012 metų. Tyrimo rezultatai atskleidė, kad prekybos žemės ūkio produkcija sąlygos, lyginant su prekybos maisto pramonės produkcija sąlygomis, yra geresnės. Nustatyti skirtumai tarp prekybos sąlygų tiems patiems produktams ar produktų grupėms, priklausantys nuo agregacijos lygio. Prekybos sąlygų žemės ūkio ir apdoroto maisto produkcijos indeksų vystymosi tendencijos skirtingos, tačiau vertinant žemės ūkio ir maisto pramonės sektorius kartu, pastebima, kad prekybos sąlygų rodikliai ne mažėja.

PAGRINDINIAI ŽODŽIAI: *tarptautinė prekyba, prekybos sąlygos, žemės ūkio produkcija, maisto pramonės produkcija.*

JEL KLASIFIKACIJA: F60, Q17

ICELAND AND LATVIA: THE ECONOMIC AND THE SOCIAL CRISIS

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ABSTRACT
The 2008 global economic and financial crisis hit hard in Iceland and Latvia. Economic developments prior to the crisis, as well as response to the crisis were, however, different in these two countries, yielding different results. Both countries received assistance from the International Monetary Fund (IMF) during the crisis and the IMF has labeled their reform programs as success stories. This article reviews and evaluates the post crisis situation in Iceland and Latvia, both in terms economic performance, as well as social progress. It also discusses how other countries, as well a multilateral institutions, may have influenced the reform programs in Iceland and Latvia.
KEY WORDS: *Small states, Latvia and Iceland, global crisis, economic policy, privatization.*

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Introduction

The 2008 global economic and financial crisis hit hard in Iceland and Latvia. Both countries responded, but in a different way. In terms of fiscal adjustment the governments of both countries implemented painful budget cuts although the front loaded fiscal austerity program in Latvia was more radical. When it comes to exchange rate policy the response was different. Latvia, an EU member state, maintained fixed exchange rate, the Lat pegged to the Euro. In contrast the Icelandic krona depreciated sharply and the government introduced a policy of capital controls[2]. Latvia received extensive external assistance during the crisis while Iceland was isolated and "friendly" nations hesitated to get involved and some were hostile[3].

When crisis of this magnitude hit small countries like Iceland and Latvia are challenged to respond to the immediate economic and social problems that follow and decide whom to work with to resolve them,

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[2] While Iceland is not a member of the European Union it is part of the Euorpean Economic Area where labor, goods, services and capital are to flow freely. Captial controls are inconsistent with this policy, but in the case of Iceland the international community thorugh the IMF, and thus the EU, accepted capital controls in Iceand. The questions remains how long this policy will be accepted and when the government of Iceland is prepared to remove these controls.

[3] Faroe Islands, Poland and Russia were the only countries that supported Iceland from the beginning. Scandinavian countries initally hesitated to get involved. The UK was very hostile. Iceland‘s dispute with the UK and the Netherlands, because of the so called ICESAVE accounts,may have influnenced the Scandinavian Countries. The government of Iceland probably overestimated potential support from the Scandinavian countries who were more likely to serve their own economic and political interests in the UK and in the Netherlands, than supporting Iceland during a period of crisis and uncertanty.

including the IMF, the EU and other countries. The objective of this article is to compare how these two small countries responded in terms of economic policy, which institutions and countries they cooperated with, and with what results in terms of economic growth and social progress.

After more than 5 years since the crisis erupted sufficient time has passed for observers to begin seeing the outcomes from the different policy responses, both in terms of economic performance and social progress, and it is maybe time to see what lessons can be learned, for Latvia and Iceland and perhaps also for the European Union and the Euro area. In addition to reviewing the economic performance of those two countries in terms of GDP growth and unemployment, among the tasks of this article is also to consider their post crisis performance based on newly developed indicators that also measure poverty and social exclusion. The purpose is to highlight that it is insufficient to only look at countries economic growth performance to measure the success of their reform programs. Social outcomes are also important and affect long term economic growth.

The methodology used in this article is the case study method. Compared to other research methods, a case study enables the researcher to examine the issues at hand in greater depth. According to Yin (Yin, 2009: 101−102) six sources of evidence are most commonly used in case studies. These are: documentation, archival records, interviews, direct observations, participant-observation, and physical artifacts. Each of these sources has advantages and disadvantages and according to Yin one should "note that no single source has a complete advantage over all the others. In fact, the various sources are highly complementary, and a good case study will therefore want to use as many sources as possible" (Yin, 2009: 101).

Among the sources of evidence used for the analysis in this article are documentation/secondary data, including reports and scholarly literature, articles and books. Direct observation also plays a role in this article as the author draws on his experience and observations while living in Iceland prior to and during the crisis and having worked for the World Bank in Latvia for four years. However, preference was given to using well-documented evidence that is publicly available and listed in the references. This case study does not present results that can be evaluated on the basis of statistical significance and one should be careful in generalizing the findings of one case study onto another case or situation. However, some lessons from the study could have wider relevance than for Iceland and Latvia only. This is especially true for small countries with a large banking sector, using their own currency, and with limited fiscal space to support the banks during a crisis.

1. Iceland and Latvia and the success of their reform programs

In 2011 the sitting prime minister of Latvia co-authored a book, "How Latvia Came through the Financial Crisis". This book presents Latvia's reform program as a success story, and an example of how crisis should be resolved (Åslund, Dombrovskis, 2011). The authors even suggested Latvia as a success story for the rest of the world to follow. This article will look at this "success story" both from the viewpoint to economic developments as well as social progress.

Iceland has not been presented as a success story this way, but it followed an unconventional path with a large depreciation and the introduction of capital controls. Practically the whole banking system collapsed in few days in Iceland while the banking system in Latvia, with the exception of Parax bank, was rescued.

While Iceland and Latvia are both small European countries hit hard by the crisis it is important to keep in mind that in many ways they are very different. They have their own history and culture and they are at a different stage of development, economically and socially. Iceland remains outside the EU while Latvia has been an EU member for ten years. According to World Bank classifications Iceland is a high income OECD country while Latvia remains on the margin of an upper middle income and high income country and is still in transition where poverty and social exclusion remains a concern.

The fact that Iceland and Latvia are small countries that were severely affected by the crisis and responded differently makes them an interesting comparator case. Nevertheless, because the countries are different this article will also make reference to other high and middle income countries in Europe when thought to be relevant and useful.

2. Economic growth and social progress in the European Union (EU)

While the focus here is on Iceland and Latvia, the study can also have relevance for other countries. Important lessons maybe learned about the effects of different policy responses during times of crisis, including in the European Union and the Euro area. In fact, among the main reasons for new member states to seek membership in the EU has been its economic success. For the time being this success has disappeared. Both the EU and the Euro area continue to experience slow economic growth and high unemployment especially among its youth. Poverty and social exclusion is an increasing concern within the EU and income inequality is alarming in some countries. High levels of long term unemployment within the EU will without doubt influence long term growth in the area, but little attention has been given to this matter so far.

Iceland recently decided not to continue with its accession negotiation with the EU and the negotiation team has been dissolved. Benefits of EU membership are in doubt, at least for the time being, and too many people feel that the EU has not adequately dealt with its problems, including a sick banking system where the strategy seems to be to buy time. There also seems to be a tendency to impose additional burden on taxpayers to keep the financial sector going and social problems are alarming, including dismal prospects for young people to find jobs.

3. Was there "government ownership" of economic policies?

When the crisis hit Iceland and Latvia the response in the two countries was very different. In reality Iceland had no choice other than let its national currency depreciate sharply. The depreciation in nominal terms was about 50 percent. Limited fiscal space and insufficient reserves in the Central Bank of Iceland meant that Iceland did not have capacity to defend its currency. This is clear and obvious and all statements that Icelandic government decided to depreciate its currency do not hold water. Iceland was isolated, and sufficient international assistance to defend its local currency, could not be assembled.

Latvia on the other hand went for internal devaluation attempting to cut wages (mainly public) and prices sharply. This response was consistent with its goal to adopt the Euro which it in January 2014. Latvia's policy response was supported by a large international rescue package worth 7.5 billion Euros, then about one third of Latvia's GDP. This package was provided by the International Monetary Fund (IMF), the European Union (EU), the European Bank for Reconstruction and Development (EBRD), the World Bank, and bilaterally by countries, especially Scandinavian that had made large investments in the banking sector. Even one of the Baltic State's, Estonia, offered assistance to Latvia. Latvia's adoption of the Euro required a peg with the Euro and this international effort enabled to Latvia fulfil its commitments.

Iceland, a non EU member, could not relay on the EU as Latvia did. Iceland could also not go to the World Bank or the EBRD since Iceland is a high income OECD donor country. Latvia with its EU membership and middle income status, when the crisis hit, had access to the multilateral development banks. In addition to this the foreign owners of the banks in Latvia were not passive bystanders during the crisis. They defended their own interests.

The Latvian government claims to have decided to keep a fixed exchange rate regime in Latvia, while the IMF initially suggested 15 percent depreciation. The policy to keep the exchange rate fixed was, however clearly favored by external interests, especially Scandinavian banks who owned most of the Latvian banking system and the European Union. EU interests feared the effects of a large depreciation on the banking sector in the other Baltic States and the Scandinavian countries that then could spill over to other EU member countries. Disorderly devaluation would have caused a Swedish Banking crisis (Åslund, Dombrovskis, 2011: 116).

When the banks were privatized in Iceland, they were sold to local interests or more precisely local actors with political interests and connections (see. e.g. Hilmarsson, 2013). No foreign investment was made in the Icelandic banks and no foreign banks were operating in Iceland when the crisis hit. This was fundamentally different in Latvia where foreign investors became the owners of the banking system, except for Parex bank. Given the size of the banking system in Iceland, with total assets more than nine times GDP[4] the local government had no choice other than let the banks fall. In Latvia the mostly foreign owned banking system was rescued via a concerted international effort lead by external interests. It is highly questionable if Latvian government had any choice other than to rescue the banks if it wanted to keep good standing within the EU.

The IMF likes to talk about a strong government ownership of the reform program in Iceland and Latvia. In the initial phases of the crisis there was hardly much ownership in Iceland as there was only one way to go, sharp exchange rate depreciation and the collapse of the major banks. Latvian government ownership is also in doubt. As the IMF sais "The European Commission was heavily involved in program design, especially in the fiscal and financial sectors" (IMF, 2012: 7). Åslund and Dombrovskis state in their book when discussing the government's aggressive cuts in the education and health sectors: "Reform starts where the money ends" (Åslundand, Dombrovskis, 2011: 73). The policy was chosen because the flow of outside money had ended, not because the government or the people wanted to go this path. The foreign owned banks also had a strong voice and as IMF´s chief economist said in a recent article "if your financial sector is largely composed of foreign subsidiaries, it is a good idea to be friends with the parent banks" (Blanchard, et al, 2013: 33).

During the crisis capital controls were introduced in Iceland, but not in Latvia. The decision to introduce capital controls was supported by the IMF, and thus also the EU, whose member states are represented at IMFs board of directors. Those controls were introduced as a temporary measure. Capital controls helped prevent the currency from depreciating further than it did. Nevertheless the sharp depreciation resulted in balance sheet problems for household and corporate that still remain a hotly debated issue in Iceland. Adjustment in corporate and household debts is debated and the current government has introduced a large package of debt relief for households that it may have problem delivering on when considering the limited fiscal space available to policy makers. The government plans to implement extensive tax cuts and large write-downs of household debt in the next 4 years. There is a high risk of free riding here. Those who took high risks and borrowed excessively will be allowed to impose costs on those who where more modest in their investments and borrowed little or nothing. Those who purchased more modest homes or rented a place to live will be punished. This is a dangerous path chosen by the government of Iceland.

In conclusion, it can be argued that neither Iceland nor Latvia had a choice when the crisis hit. Iceland could not save its banks and had little international support. Only after its banking system had collapsed did outside support emerge. In the case of Latvia, it also had no choice. External interests took control with a large rescue package. No country wanted to save the locally owned Icelandic banks, but in Latvia the foreign owners were keen to protect the financial system that was mostly in their ownership. The EU also feared domino effects of a banking collapse in Latvia and acted swiftly, overruling the IMF's initial advise for a 15 percent depreciation of the Lat.

4. Economic outcomes in Iceland and Latvia

During the crisis Latvia suffered the greatest fall in GDP of any country in the world, around 23 percent. Iceland was less affected with GDP falling about 10 percent, see table 1. Prior to the crisis Latvia and Iceland had unusually large current account deficits – over 20 percent of GDP (see table 1; Latvia's current account deficit in 2007 was 22.4 percent of GDP).

Imports declined by about 40 percent in Iceland and Latvia during the crisis and investment collapsed in both countries. Private consumption declined during the crises but growth has resumed in both countries. Both countries cut their government budget but public consumption adjusted more in Latvia than in Iceland (Darvas, 2011).

4 According to the IMF the consolidated assets of the three main Icelandic banks increased from 100 percent of GDP in 2004 to 923 percent at end 2007, reflecting expansion overseas. By end 2007, almost 50 percent of the three banks' assets were held abroad (IMF, 2008: 11).

Table 1. Real GDP, Consumer Prices, Current Account Balance, and Unemployment

Iceland	**2008**	**2009**	**2010**	**2011**	**2012**	***2013***	***2014***
						Projections	
Real GDP	1.2	-6.6	-4.1	2.9	1.6	*1.9*	*2.1*
Consumer prices*	12.7	12.0	5.4	4.0	5.2	*3.7*	*3.1*
Current account balance**	-28.4	-11.6	-8.4	-5.6	-4.9	*-1.2*	*-1.9*
Unemployment***	1.6	8.0	8.1	7.4	5.8	*5.1*	*4.6*
Latvia	**2008**	**2009**	**2010**	**2011**	**2012**	***2013***	***2014***
						Projections	
Real GDP	-3.3	-17.7	-0.9	5.5	5.6	*4.0*	*4.2*
Consumer prices*	15.3	3.3	-1.2	4.2	2.3	*0.7*	*2.1*
Current account balance**	-13.2	8.7	2.9	-2.1	-1.7	*-1.1*	*-1.3*
Unemployment***	7.5	16.9	18.6	16.2	15.0	*11.9*	*10.7*
*) Movements in consumer prices are shown as annual averages. **) Percent of GDP. ***) National definitions on unemployment may differ							

Source: IMF, 2013a

Overall, the economic adjustment involved larger decrease in output, larger increase in unemployment, and more emigration in Latvia than in Iceland, see table 1 and 4. The question is whether an alternative strategy for Latvia could have achieved a better outcome, e.g. by depreciating around 15 percent as the IMF suggested. As Blanchard, et.al has stated nobody can give a definitive answer (Blanchard, et. al, 2013: 3).

After more than 5 years of adjustment, unemployment in Latvia is about 12 percent and GDP is still about 8 percent below the pre-crisis peak. Registered unemployment in Iceland is now below 4 percent. Both economies enjoy GDP growth rate that is much higher than the average EU or Euro GDP rate growth rates. Latvia's GDP growth is projected by the IMF to be around 4 percent in 2013 while Iceland's growth is projected around 2 percent[5]. According to Statistics Iceland, GDP increased by 3.1 percent in the first nine months of 2013 (Statistics Iceland, 2013b). Both countries have dramatically improved their current account balance and the IMF projects only a minor current account deficit in Iceland and Latvia[6] in 2013 and 2014, see table 1.

5. Social impact in Iceland and Latvia

If one looks at unemployment, job losses were much more dramatic in Latvia than in Iceland. As stated above unemployment in Iceland is about 4 percent but about 12 percent in Latvia, close to the EU average, and twice the pre crisis unemployment rate. As the IMF has noted in a recent report, the labor market is improving, but unemployment, especially long-term unemployment is still high in Latvia (IMF, 2013b: 4)[7].

Many economists were critical of Latvia's reform program during the crisis. Nobel Prize-winning economist Paul Krugman, for example, stated that "They have made a desert, and called it adjustment" (Krugman, 2011). The sitting Prime Minister of Latvia on the other hand stated that the "The greatest pleasure in life is doing what people say you cannot do..."[8] (Åslund, Dombrovskis, 2011: 53). The question remains what costs

5 The Statistical Office in Iceland reports higher GDP growth rate for Iceland than the IMF does.

6 For a comprehensive analysis of Latvia's recent export performance, see Vanags (2013).

7 It remains unclear how far unemployment needs to adjust to reach the natural rate of unemployment in Latvia. According to Blanchard et.al 2013 output has not yet reached its potential and unemployment is not back to the natural rate? But they may not be very far (Blanchard, et.al, 2013: 3). The question remains, how can a country with a low minimum wage, weak unions, limited unemployment insurance and employment protection, have such a high natural rate of unemployment.

8 Here Åslund and Dombrovskis are citing Walter Bagehot, an English economist and journalist.

the government is prepared to impose on its people to adjust and how is this likely to affect the social fabric and long term growth in the country?

Latvia's claim to victory, post crisis, is to a large extent based on recent GDP[9] growth and reduction in unemployment. It is true that according to this measure, Latvia is on a path to recovery, and its GDP growth appear to be healthy as compared with other EU11 countries and strong compared to EU15 countries currently with little or no growth. Recent data from the World Bank on Latvia, for example, show GDP growth rate of 5.6 percent in 2012, an estimate of 3.6 percent in 2013 and projection of 4.1 percent growth rate in 2014 (World Bank, 2013). The two other Baltic States, Estonia and Lithuania, also compare well with other EU11 countries. However, one needs to review these numbers in the context of post crisis growth rates where Latvia was that hardest hit country in the world and lost about 23 percent of its GDP, see table 1. After 5 years of adjustment Latvia's GDP remains 11 percent below the pre-crisis peak. Nevertheless the returning to a path of grow this a welcome development.

Economic growth in Iceland remains lower which to a large extent is due to the fact that Iceland is a very open economy with most of its exports going to the EU that has recently had little or no GDP growth at all. The second estimate for the third quarter of 2013 from Eurostat shows Euro area GDP growing by 0.1 percent and EU28 growing by 0.2 percent (Eurostat, 2013). Thus recovery in the EU remains both weak and fragile.

Few would doubt the importance of economic growth, as measured by GDP, as an indicator for the performance of an economy, but the question remains if this indicator is sufficient to support Latvia's claim to victory and to declare it a success story for other countries to follow.

6. Measures of economic performance and social progress and their limitations

How good is GDP as an indicator of economic and social progress in a country? It maybe worth review instatements that some Nobel prize-winning economists and policy makers have made about the importance, as well as the limitations, of GDP as an indicator economic development.

Paul Samuelsson, for example, stated that "Without measures of economic aggregates like GDP, policymakers would be adrift in a sea of unorganized data. The GDP and related data are like beacons that help policymakers steer the economy toward the key economic objectives" (Samuelson and Nordhaus, 1995). It is understandable that economists want to have a common measure of economic progress and development, but the views are diverse. The creator of GDP, Nobel Prize winning economist Simon Kuznets, once stated that "The welfare of a nation can scarcely be inferred from a measurement of national income" (European Commission, 2013). Thus the creator and promoter of this indicator recognized its obvious limitations. More recently another Nobel Laurate, Joseph Stiglitz, has stated that "No one would look just at a firm's revenues to assess how well it was doing. Far more relevant is the balance sheet, which shows assets and liability. That is also true for a country" (Foreign Affairs, 2005).

So it is clear that there are leading economists who view GDP critically including its creator who states that is does not measure the welfare of nations adequately. Regarding Stiglitz comments there are additional problems. Human capital is normally not included in company's balance sheet, yet it is critical, both to a company's profitability, and a countries growth.

Policy makers have also commented on GDP as a measure of economic development. Robert McNamara, then the president of the World Bank, for example, commented that the "Progress measured by a single measuring rod, the GNP, has contributed significantly to exacerbate the inequalities of income distribution"

9 Gross domestic product, abbreviated as GDP, is the most widely used measure of a country's overall economic health and development. As an aggregate measure of production, GDP is equal to the sum of the gross value added of all resident institutional units (i.e. industries) engaged in production, plus any taxes, and minus any subsidies, on products not included in the value of their outputs. Gross value added is the difference between output and intermediate consumption. − See, further, for example, Eurostat: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Gross_domestic_product_(GDP)

(European Commission, 2013). French president Nicolas Sarkozy once stated that "Nothing is more destructive than the gap between people's perceptions of their own day-to-day economic well-being and what politicians and statisticians are telling them about the economy" (Sarkozy, 2009). This is an interesting statement coming from someone who has played an important role in policy and decision making in the European Union.

7. Going "beyond" Gross Domestic Product (GDP)

Recently there has been a movement to go "beyond" GDP when measuring progress within the EU. Given the very uneven developments in the EU in terms of economic and social progress it is understandable that the EU wants a more comprehensive picture on the status within the union. The EU has also performed poorly according to the GDP measure during the crisis, especially the EU15.What story would other indicators tell about EU´s economic and social progress?

The Commission on the Measurement of Economic Performance and Social Progress issued a report in 2009[10]. One can argue that the global economic and financial crisis has reinforced the need for additional indicators to assess the economic and social situation in the world, in particular poverty and social exclusion, risks and sustainability. GDP per capita and its growth over time does also not tell how economic benefits are shared within a society. "A 2008 Eurobarometer poll showed that more than two thirds of EU citizens feel that social, environmental and economic indicators should be used equally to evaluate progress. Only just under one sixth prefer evaluation based mostly on economic indicators" (Commission on the Euorpean Communities, 2009).

While the work based on the Report by the Commission on the Measurement of Economic Performance and Social Progress continues, and new indicators are developed and introduced, one can review some of the indicators that are currently published by Eurostat. Among those indicators are the Portion of people at-risk-of-poverty or social exclusion and at-risk-of-poverty rate. Regarding income distribution Eurostat calculates the Gini index and the Income quintile share ratio; see the table 2 below for results on Iceland and Latvia.

Table 2. Risk of Poverty, Social Exclusion and Income Distribution

Iceland	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Portion of people at-risk-of poverty or social exclusion	13.0	11.8	11.6	13.7	13.7	12.7
At-risk-of-poverty rate	10.1	10.1	10.2	9.8	9.2	7.9
The Gini index	28.0	27.3	29.6	25.7	23.6	24.0
Income quintile share ratio	3.9	3.8	4.2	3.6	3.3	3.4
Latvia	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Portion of people at-risk-of poverty or social exclusion	36.0	33.8	37.4	38.1	40.4	36.6
At-risk-of-poverty rate	21.2	25.6	25.7	21.3	19.1	19.4
The Gini index	35.4	37.7	37.4	36.1	35.4	35.9
Income quintile share ratio	6.3	7.3	7.3	6.9	6.6	6.5

Source: Statistics Iceland, 2013a

[10] The commission included Professor Joseph E. Stiglitz, Chair, Columbia University, Professor Amartya Sen, Chair Adviser, Harvard University, and Professor Jean-Paul Fitoussi, Coordinator of the Commission, IEP.

8. Poverty, social exclusion and income equality in Latvia and in Iceland

Iceland and Latvia have both returned to healthy GDP growth rates post crisis, but how are these countries performing according to other indicators currently measured by Eurostat?

In 2012 the proportion of people at risk of poverty or social exclusion in Iceland was the lowest in Europe, but among the highest in Latvia (only Bulgaria and Romania had higher ratios than Latvia). The rate in Iceland was 12.7 percent, 36.6 percent in Latvia, but 25 percent in the European Union. When focusing on those at risk of poverty the proportion was also lowest in Iceland or 7.9 present compared to 19.4 present in Latvia and 17.1 percent within the European Union. The at-risk-of-poverty threshold is defined as 60 present of median income in each country. Those who fall below that income threshold are considered to be at risk of poverty. Latvia´s distribution of prosperity as measured by the Gini coefficient is the most unequal in the EU.

One can argue that Iceland and Latvia should not be compared, using those indicators, because of the different income level. Latvia is on the margin of an upper middle and high income country, but Iceland a high income OECD country. However, one needs to keep in mind that the Czech Republic, a country with a similar income level as Latvia, has one of the lowest ratios in the European Union, both if one considers the ratios for the portion of people at-risk-of-poverty and social exclusion, as well as if one considers the at risk-of-poverty rate. Slovenia and Slovakia also perform much better than Latvia if one looks at those indicators. Also if one considers income distribution according to the Gini index and the Income quintile share ratio the Czech Republic, Slovenia and Slovakia have are among EU countries with the most even income distribution and have an income distribution that is more even than the average both in the EU(27) and the EURO(17) area.

In a recent IMF report one can find the following sentence: "Latvian authorities do believe that the current degree of inequality is unacceptable and the high level of poverty, tracing back to the collapse of the Soviet Union, should be reduced" (IMF, 2013: 2). Latvia's performance on the four accounts shown in table 2, measuring poverty, social exclusion and income equality, must be considered poor. Latvia has been an independent country for more than 20 years (since 1991) and a member of the European Union for 10 years (since 2004). Its policy makers must pay more attention to the problems of poverty, social exclusion and income equality, if they want to present Latvia internationally as a success story, and a model to follow for the rest of the world.

According to the EU (in its report Europe 2020) there is a high level of tax on low income earners in Latvia, high youth unemployment and 40 % of the population in Latvia is at risk of poverty or social exclusion – one of the highest rates in the EU (European Commission, 2012). A recent Latvia Competitiveness Report argues that "Latvia's high income inequality, is an indicator highlighting the presence of underlying competitiveness weaknesses that not only drive inequality but also negatively affect productivity" (Cunskaet et al., 2012: 17).

Table 3. Poverty, Social Exclusion and Income Distribution

Countries	GNI per capita (US$)	Proportion of people at-risk-of-poverty or social exclusion	At-risk-of-poverty rate	The Gini index	Income quintile share ratio
Iceland	38.710	12.7	7.9	24.0	3.4
Latvia	*14.180*	*36.6*	*19.4*	*35.9*	*6.5*
Bulgaria	*6.870*	*49.3*	*21.2*	*33.6*	*6.1*
Romania	*8.420*	*41.7*	*22.6*	*33.2*	*6.3*
Czech Republic	18.130	15.4	9.6	24.9	3.5
Slovak Republic	17.170	20.5	13.2	25.3	3.7
Slovenia	22.720	19.6	13.5	23.7	3.4

Source: Statistics Iceland, 2013a

If one reviews the indicators considered by the European Union that measure social progress, Latvia seems to have much more in common with Bulgaria and Romania, than the Czech Republic and the Slovak Republic, especially when one considers income distribution. This is not a favorable outcome for Latvia given that those countries only have about half of Latvia's per capita income and are the poorest countries in the EU. Latvia needs to reform its public policy before presenting itself internationally as a success story.

9. Emigration from Iceland and Latvia during the crisis

Latvia has claimed victory not only on the basis of GDP growth, but also referring to reduction in unemployment. Lower unemployment certainly is a welcome development in Latvia, but one needs to keep in mind that emigration explains a part of the reduction in unemployment in both Iceland and Latvia.

According to Darvas (2013) 8.5 percent of Latvians left the country from January 1 2008 to January 1 2012, but 2.3 percent in the case of Iceland, see table 4. According to a recent survey only 20 % of the emigrants who left Latvia during the crisis report an intention of coming back within 5 years (Blanchard, et. al., 2013: 30). Those who left tend to be younger Latvians with university education.

Iceland has over the decades lost people, but experience shows that a large share of those return when the economy recovers. In Latvia the largely permanent departure of the younger and more educated workers may indeed be costly for those who stay and those who leave may have little incentives to return as Latvia's per capita income remains far below EU average. In contrast Iceland´s per capita income is high in the EU context so the incentives to return during normal times are more obvious than in the case Latvia.

Table 4. Population change from 1 January 2008 to 1 January 2012

	Total population			**% change during 2008–2011 due to**		
Countries	**1/1 2008 (millions)**	**1/1 2012 (millions)**	**% change**	**Birth**	**Death**	**Other (= migration)**
Latvia	2.27	2.04	-10.1	3.7	-5.3	-8.5
Iceland	0.32	0.32	1.3	6.1	-2.5	-2.3

Source: Darvas, 2013

Conclusions

The 2008 global economic and financial crisis hit hard in Iceland and Latvia. Economic developments prior to the crisis, as well as response to the crisis were, however, different in these two countries, yielding different results. The response of those two small European countries has received international attention and continues to be debated by leading economists in the world.

If one looks at GDP growth, both countries are on a growth path. Latvia currently enjoys higher GDP growth than Iceland, but one needs to keep in mind that its GDP fell much more during the crisis and Latvia's GDP remains 8 percent below pre crisis peak. In Iceland unemployment is about 4 percent and only about one third of unemployment in Latvia about 12 percent. In Latvia unemployment is about the same as average unemployment in the EU, but twice the pre crisis level in Latvia. Neither economies has returned to full pre crisis health.

In terms of GDP growth and level of unemployment, Iceland has been successful, but problems related to its large currency depreciation, resulting in household and corporate balance sheet problems remain, and are hotly disputed in the country where the government has limited fiscal space to address those problems. It is also highly questionable if the government should use its limited fiscal space to implement actions that only favour part of the population that can't handle their private debts. One can argue that Iceland has become a society where free riding is becoming popular. Households e.g. demand repeated debt restructuring that eventually will have to be paid by taxpayers and be a burden on the economy and future generations for years to come. The current government has fuelled expectations in this area and this behaviour may result in much higher public debts and put further economic recovery at risk. As a result Iceland may continue falling behind the Scandinavian countries in terms of per capita income.

Latvia has also achieved healthy economic growth and unemployment has gone down, but it still remains high. The government of Latvia, via its former PM, has presented the country as a success story for the rest of the world to follow. If one considers the social indicators and measures of income inequality that the EU measures and publishes, Latvia looks bad not only in comparison with Iceland, but also compared with countries at similar income level (e.g. Czech Republic and Slovakia. In fact, if one considers social progress Latvia has more in common with Romania and Bulgaria that have per capita income that is only about half of Latvia's. Under those circumstances one can say that Latvia has shown some success, but the human costs remain high. Latvia can hardly be considered a success in the EU and a model for the rest of the world to follow. Measuring GDP growth only is too narrow. The Latvian prime minister during the crisis considered the Latvian program to be a success, and stated that "The greatest pleasure in life is doing what people say you cannot do..." Neither the former PM nor the government, should take pleasure in seeing the dismal status of human development in Latvia and the EU, and IMF should not declare success when viewing the miserable social progress in Latvia.

Iceland and Latvia were both severely affected by the crisis and the policy response was different, in Latvia's case with fixed exchange rate, and in Iceland with flexible exchange rate and large depreciation. Both countries adjusted and made sacrifices, implementing painful budget cuts. Both countries are enjoying GDP growth well beyond the EU and Euro area and unemployment has gone down although long term unemployment is still a concern in Latvia.

Neither Iceland nor Latvia have yet returned to full economic health and they face future challenges. By damaging the social fabric in Latvia, a burden has been placed on future generations, and many of the youngest and best educated have left the country. In Iceland, the planned debt forgiveness for households and corporate, risks imposing a burden on future generations, encouraging continued free riding, and is likely to result in slower economic growth, with Iceland falling further behind the other Nordic countries in terms of both income levels and living standards.

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ISLANDIJA IR LATVIJA: EKONOMINĖ IR SOCIALINĖ KRIZĖ

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Santrauka

2008 m. pasaulinė ekonominė ir finansų krizė gerokai paveikė Islandiją ir Latviją, tačiau šių šalių ekonominis vystymasis iki krizės ir pasirinktas atsakas į krizę bei jos rezultatai skyrėsi. Abi šalys krizės laikotarpiu gavo paramą iš Tarptautinio valiutos fondo (TVF), kuris vėliau teigiamai įvertino abiejose šalyse vykdytas reformas. Šiame straipsnyje apžvelgiama ir įvertinama Islandijos bei Latvijos situacija po krizės tiek ekonominiu, tiek socialiniu požiūriais. Aptariama, kaip kitos valstybės ir tarptautinės institucijos paveikė reformų programas Islandijoje ir Latvijoje.

PAGRINDINIAI ŽODŽIAI: *mažos valstybės, Latvija ir Islandija, pasaulinė krizė, ekonominė politika, privatizavimas.*

JEL KLASIFIKACIJA: H12, E63, L33

ROLES OF LITHUANIAN LIBRARY NETWORK IN REGIONAL INFRASTRUCTURE OF CULTURE AND INFORMATION

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ABSTRACT
Library and library network is a part of the infrastructure of culture and information, which, by fulfilling its roles, provides society and communities with a possibility to exploit information resources, participate in cultural activities, acquire knowledge, it encourages life-long learning, etc. The activity of the library network encompasses all the regions of the country, including the most remote locations and persons that face difficulties in obtaining information and enjoying cultural services by other means; therefore, discourse on the roles and functions of the library network as well as its activities in the regional infrastructure of culture and information is needed.
KEY WORDS: *libraries, library roles, regions, infrastructure of culture, infrastructure of information*.

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Introduction

A library is an institution of information and culture, which serves as a part of a country's infrastructure of culture and information. Library network connects regions across the whole country, reaching out to the most remote locations; for instance, rural libraries cover one third of the country's residents (Cicėnienė, 2009). Such scope allows for talking about the influence of the roles of the library network, their importance and the situation in the regional infrastructure of culture and information. Scientific problem of article topics formulate an aim to investigate a change of library roles and the importance of it in Lithuanian regions using a systematic approach to analyze and perceive the influence of the environment on the roles of libraries. Library roles, their changes and effecting at the infrastructure of culture and information are analyzed through the prism of stakeholders and persons which effect: policy makers who develop and provide the laws, which must be implemented, and members of the society, who say and indicate their needs and expectations (based on the accomplished surveys about the needs and the opinions). The analysis presented in this article is a part of the investigation about the changes of the roles of libraries in Lithuania and it is aimed to determine directions and opportunities of the changes of roles of libraries.

The aim of the article is to analyse the roles of the Lithuanian libraries in the regional infrastructure of culture and information;

The object is the roles of libraries in the regional infrastructure of culture and information.

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The following goals were set out in order to reach the aim:

1. To analyse the scope of the Lithuanian library network;
2. To identify the context of the infrastructure of culture and information of the Lithuanian library network;
3. To carry out the analysis of public needs and opinion surveys.

In order to reach the aim and implement the goals, the methods of the analysis, summary and synthesis of scientific literature, statistical data, analysis of strategic and other document as well as previously carried out public needs and opinion surveys were applied.

1. The scope of Lithuanian library network

A library network is defined in an encyclopaedia as a group of libraries sharing certain features (territory, departmental subordination, type, scientific field) (Knygotyra, 1997: 65). From the point of view of territorial distribution, the Lithuanian library network could comprise all libraries operating in Lithuania. According to the Law on Libraries of the Republic of Lithuania (Lietuvos Respublikos bibliotekų įstatymas, 1995; 2004), the Lithuanian library network consists of the following: Lithuanian national library, public county libraries, public municipal libraries, libraries of scientific and study institutions as well as schools (except higher education), specialized and other libraries (Lietuvos Respublikos bibliotekų įstatymas, 1995; 2004). There are also five libraries in Lithuania that enjoy the *status of state importance* due to the exceptional nature of their functions and funds accumulated (Lietuvos Respublikos bibliotekų įstatymas, 1995; 2004): Lithuanian Library for the Blind, The Wroblewski Library of the Lithuanian Academy of Sciences, Lithuanian Medical Library, Lithuanian Technical Library, and Vilnius University Library. Therefore, the Lithuanian library network in this article is perceived as a whole of libraries of different types, subordination, and status as well as libraries that are inhomogeneous due to other reasons such as different communities served or different funds managed, and widely geographically distributed ones (Fig. 1) (based on Manžuch, Macevičiūtė, Adomavičius, 2012: 10).

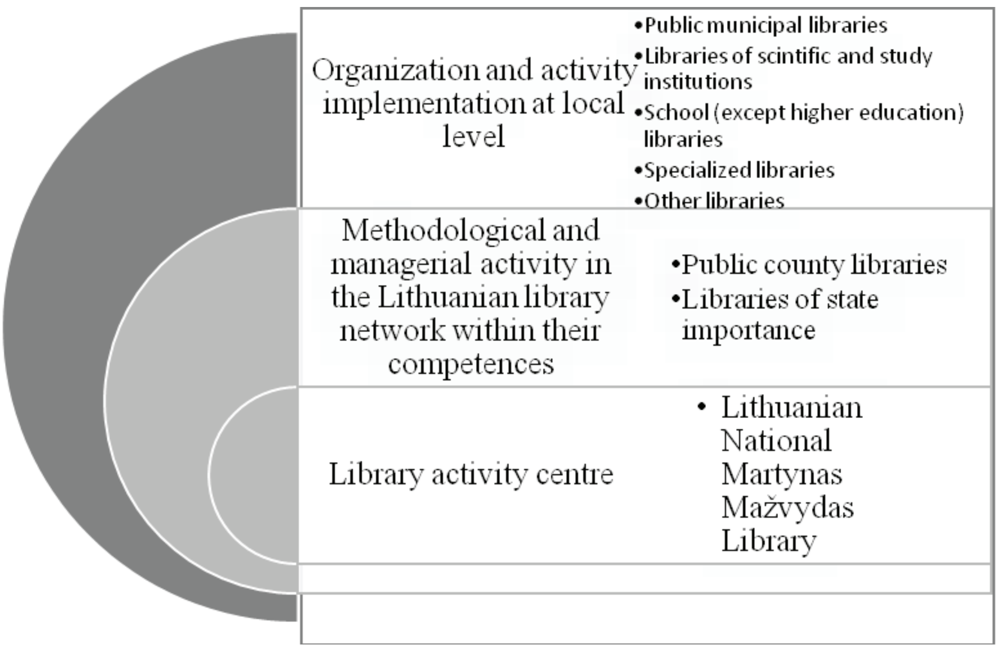

Fig. 1. Lithuanian library network
Source: based on Manžuch, Macevičiūtė, Adomavičius, 2012: 10

The Lithuanian library statistics of 2013 (Lietuvos bibliotekų statistika 2013 m., 2014) gives a record of 2 980 libraries of all types (including the main libraries, their branches, service points and mobile libraries), covering all the regions of Lithuania. In 2013, the network in Lithuania reached and had over one million registered users, and almost 25 million visitors, which were served by 6004 professional librarians (Table 1).

Table 1. Lithuanian library network indicators, 2013

Fund size (31 December, 2013)	**Number of registered users**	**Number of visits (visitors)**	**Professional librarians**
107 198 647 physical items	1 311 558	24 555 634	6004

Source: Lietuvos bibliotekų statistika 2013 m., 2014

Taking a more detailed look at the Lithuanian library network and its regional scope, libraries are further analysed according to their types:

- Lithuanian National Martynas Mažvydas Library (further referred to as LNL) is the main scientific library of the Republic of Lithuania accessible to all users (Lietuvos Respublikos bibliotekų įstatymas, 1995; 2004), which, implementing its functions provided for in the law and formulating the mission of a national library in a wider context, shifted the definition of its mission in 2012–2013 from library fund-orientated to social needs-oriented, based on the search of the place, role and perspectives of a library resulting from social and technological transformations in society (based on Renaldas Gudauskas, Lithuanian Public Libraries, 2012):

LNL mission, 2012: "…a national cultural institution, which collects, manages and preserves written Lithuanian cultural heritage, shapes the fund of Lithuanian and foreign documents to meet scientific, educational, cultural and economic needs, and also provides services to the public" (Lithuanian Public Libraries, 2012).

LNL mission, 2013: "...to ensure that the needs of the Lithuanian knowledge society for documented and digital information are met" (Lietuvos nacionalinė Martyno Mažvydo biblioteka, 2013; Lietuvos nacionalinė Martyno Mažvydo biblioteka, 2014).

According to Valerija Vilnonytė (1985), the appearance of the Lithuanian national library was historically determined by several factors, one of which was examples in foreign countries: "...the idea born to the Lithuanians abroad to have their own library was not an exceptional phenomenon. However, differently from others, the Lithuanian emigrants decided to use such a library as the beginnings for a national library. This is a specific phenomenon, urged by the ban on the press in the national language in Lithuania" (Vilnonytė, 1985: 100). It took decades to move from the first steps to the foundation of the actual Lithuanian national library, and it was only after the end of the period of the press ban, as cultural work became appreciated, and after the First World War, in 1919, when the State Central Library was reorganized, that the Lithuanian National Library (Lithuanian Central Bookstore) was founded (Sinkevičius, 1983; Vilnonytė, 1985).

- The status of a library of state importance (it is not a separate type of libraries but a name granted in the law) is granted to the libraries where the written and cultural heritage accumulated is of exceptional significance to science, education, culture and state economy (Law on Libraries of the Republic of Lithuania, 1995; 2004). According to the Lithuanian Library Optimization Network (LiBiTOP) feasibility study (Manžuch, Macevičiūtė, Adomavičius, 2012), libraries of state importance can be grouped into two types: libraries of science and study institutions (Vilnius University Library and The Wroblewski Library of the Lithuanian Academy of Sciences) and specialized libraries (Lithuanian Library for the Blind, Lithuanian Technical Library, Lithuanian Medical Library) (Manžuch, Macevičiūtė, Adomavičius, 2012: 15).

The current version of the Law on Libraries of the Republic of Lithuania (Lietuvos Respublikos bibliotekų įstatymas, 2004) stipulates that the document fund accumulated and preserved in the libraries of scientific and study institutions is needed for the activities of the institutions; in a scientific research institution it *meets the* *need to use documents and information* and in an institution of higher education it *guarantees a possibility for the institution to implement the scientific and study goals as well as upgrade the teachers' qualification* (Lietuvos Respublikos bibliotekų įstatymas, 2004). The libraries of scientific and study institutions serve users (most often, their own community), participate in shaping the Lithuanian library fund and designing library information system (Lietuvos Respublikos bibliotekų įstatymas, 1995; 2004).

A specialized library if defined in the Law on Libraries of the Republic of Lithuania (Lietuvos Respublikos bibliotekų įstatymas, 1995, 2004) as a library, which accumulates specialized fund of documents published in Lithuania and abroad, serves users, participates in shaping the Lithuanian library fund and designing library information system (Lietuvos Respublikos bibliotekų įstatymas, 1995; 2004).

- Public county libraries have undergone a number of changes[2], and in the Law Amending Articles 4, 9 and 10 of the Law on Libraries of the Republic of Lithuania (Lietuvos Respublikos bibliotekų įstatymo 4, 9 ir 10 straipsnių pakeitimo įstatymas, 2010) are defined as "a centre of the analysis and co-ordination of the activity of libraries operating in a defined territory, methodological assistance, upgrading librarian qualification, inter-library loan services, bibliography, ethnography and information", which also serves users, manages a universal document fund and carries out other library activities (Lietuvos Respublikos bibliotekų įstatymo 4, 9 ir 10 straipsnių pakeitimo įstatymas, 2010).

The current public county libraries were established when Lithuania was part of the Soviet Union (further referred to as SSR) as methodological centres for other libraries (and librarians): in 1950, the so-called area libraries were established in Vilnius, Kaunas, Šiauliai and Klaipėda (Sinkevičius, 1983). The staff of these libraries used to visit and consult public municipal library specialists, the majority of which lacked adequate education for library activities and the necessary knowledge in the field of fund management, reader services, etc.: specialists from public county libraries used to organize specialized trainings, conferences, etc. to the staff of other libraries (Sinkevičius, 1983). During the beginning of the independence period of Lithuania, although in the Law on Libraries of the Republic of Lithuania of 1995 the public county libraries and their scope of activity are defined, the activity of public county libraries was questioned because "their methodological activity became an object of discussions, <…> the librarians expressed dissatisfaction with their controlling function" (Jaskonienė, 2002: 20). Currently county public libraries are active participants in the network of libraries and are engaged in regional activities.

- The founders of public municipal libraries are municipalities. These libraries are distinguished by the concentrated community they serve (the main group of users served are the residents of the territory of the particular municipality) and a universal document fund they manage (Lietuvos Respublikos bibliotekų įstatymas, 1995).

In the library network of the Lithuanian SSR, the current public municipal libraries not only served readers in their own territory of activity but they also carried out "extensive propaganda and cultural education work" (Sinkevičius, 1983: 40). The restoration of the independence of Lithuania was the point when the public view of libraries and their roles changed, the libraries re-oriented and adapted to the environment as an open, democratic and accommodating institution. During the years 1990–2000, ideologized literature of outdated content was removed from library funds, the universal 10-point classification system was fully introduced, Lithuanian integral information system was introduced, and new services were designed and launched (Jaskonienė, 2002: 5). The political changes that took place, the disappearance of the old structures

[2] Law on Libraries of the Republic of Lithuania of the 6th of June, 1995, indicates that the founder of public county libraries is the Ministry of Culture; Article 9 of the Law Amending the Law on Libraries of the Republic of Lithuania No. IX-2378 of the 15th of July, 2004, stipulates that the founder of public county libraries is the head of the county; after the abolishment of the administrations of county heads, according to articles 4, 9 and 10 in the Law Amending the Law on Libraries of the Republic of Lithuania No. XI-775, the owner rights and duties to public county libraries went to the Ministry of Culture of the Republic of Education.

and the occurrence of the new ones (such as municipal committees and departments responsible for libraries), as well as unfavourable economic situation resulted in the decreasing number of public municipal libraries in Lithuania at the time, explaining it as corrections to network distribution (blind-alley settlements, short distances between libraries), inappropriate premises (the premises previously belonged to kolkhozes and were privatized and returned to the legal owners) (Jaskonienė, 2002: 6). Although the processes of closure were intense, chaotic and unpredictable when comparing the statistical data from the year 1990 and 2000, it turned out that in 1990, 49 public municipal libraries were operating (with 1706 branches in towns and villages), and in 2000, there were 61 public municipal libraries (with 1448 branches) (Jaskonienė, 2002). The Law on Libraries of the Republic of Lithuania of the year 1995 established the library names: the previously-called "central libraries", the public municipal libraries were given their current form and named "public municipal" (Jaskonienė, 2002). One may think that since the restoration of independence of the state, the situation stabilized in its essence, so the current public municipal library network is the continuation of the developed network.

Currently, 60 municipal and 5 county public libraries are operating in Lithuania, located throughout Lithuania and covering all regions of Lithuania (Fig. 2).

Fig. 2. Lithuanian library map
Source: Lithuanian Public Libraries, 2012: 6

Thus, library network encompasses all the Lithuanian regions and, acting in a coordinated manner, designs and provides services to the public, which are driven by public needs.

2. Context of the infrastructure of culture and information of Lithuanian libraries

The activity of the Lithuanian library network in the regions is affected by the overall situation of the infrastructure of culture and information in the country, its political environment and other factors. Libraries are also an inseparable part of the infrastructure of culture and information; although libraries are not always directly referred to in state strategic and other documents, one can guess and imply that the library network can also be used for the implementation of the strategies.

In 2010, The Guidelines for the Change in Lithuanian Cultural Policy (further referred to as Guidelines for the Change) (Lietuvos kultūros politikos kaitos gairės, 2010) were adopted in the Seimas of the Republic of Lithuania, defining the aim of the desired change as the renovation of the Lithuanian cultural policy model, which would help reveal, preserve and develop the cultural identity and creative potential of society (Lietuvos kultūros politikos kaitos gairės, 2010). In order to achieve the goals, the cultural situation in the country is going to be changed, considering the needs of a creative, changing, and technologically equipped society: to establish culture as a strategic direction of state development assigning priority to cultural policy; to reform and democratize culture management by developing self-regulation, to ensure high level protection of copyright and related rights, to increase the intellectual capital of the Lithuanian creators as well as the competing abilities of creative industries based on it, to ensure life-long development of personal cultural competences and creativity, to build common policy of integral heritage protection, to increase culture accessibility across Lithuania, to broaden the Lithuanian cultural space by bringing together Lithuanian representatives from abroad, etc. (Lietuvos kultūros politikos kaitos gairės, 2010). In the Guidelines for the Change, public libraries are referred to as institutions providing life-long development of people's cultural competences and creativity. This can be achieved through the implementation of functions that ensure the perspectives of a more meaningful and happier life of a person: updating one's knowledge, realizing interest in history and innovation, aiming at a better career, integrating into community, taking independent decisions and participating in public life (Lietuvos kultūros politikos kaitos gairės, 2010). The Guidelines for the Change also stipulate the importance of libraries' institutional response to public needs: free-of-charge access to a variety of science and art as well as modern information technologies is provided; they establish that libraries expand and supplement the activity of schools and education system; they provide a possibility to reveal oneself and participate in cultural life, to deepen one's cultural knowledge, develop one's creativity and apply it in daily life (Lietuvos kultūros politikos kaitos gairės, 2010). Therefore, "libraries are a fundamental institution of an educated and creative society, providing members of society with a free-of-charge access to a variety of science and art as well as modern information technologies" (Lietuvos kultūros politikos kaitos gairės, 2010), which create conditions to update one's knowledge, access literature, practice interest in history and innovation (Paliukaitė-Medeckienė, 2013). Moreover, in 2012, the Government of the Republic of Lithuania, implementing the State Progress Strategy "Lithuanian Progress Strategy "Lithuania 2030" (2014–2020 metų Nacionalinės pažangos programa, 2012), adopted the National progress programme for the Year 2014–2020, where libraries, as well as other cultural institutions, are given a role in increasing access to education and variety of services (2014–2020 metų Nacionalinės pažangos programa, 2012), thus encouraging life-long learning, attempting to involve socially vulnerable groups, and rural residents; in order to implement the goal of the programme, it is planned to strengthen the possibilities of cultural, sports and education institutions to provide formal and informal education services (2014–2020 metų Nacionalinės pažangos programa, 2012). Another role defined in the programme, given to libraries as memory institutions, is to preserve and bring relevance to cultural heritage and to develop conscientiousness (2014–2020 metų Nacionalinės pažangos programa, 2012). In carrying out the role, the libraries should expand and revive historical and cultural memory of the Lithuanian residents: give relevance to the cultural heritage with the help of modern tools and make it accessible, which means to preserve, digitalize, display the heritage in an interactive and attractive manner and to bring it closer to modern day (2014–2020 metų Nacionalinės pažangos programa, 2012). The programme also assigns yet another role to libraries, namely, to promote creativity, leadership, participation in cultural activity, cultural activeness and integration of communities (N2014-2020 metų Nacionalinės pažangos programa, 2012), libraries acquire the functions of strengthening creative abilities and developing talents of social groups, particularly young people, encouraging partnership between creative social groups as well as leadership within community by applying modern technologies (2014–2020 metų Nacionalinės pažangos programa, 2012).

The problem faced while working towards the integration of libraries in the infrastructure of culture and information of the country is the incompatibility of the Guidelines for the Change, other documents and documents aimed at individual areas of culture, as well as diverging visions; for instance, the Law on Libraries of the Republic of Lithuania and its versions (Lietuvos Respublikos bibliotekų įstatymas, 1995; 2004; Lietuvos Respublikos bibliotekų įstatymo 4, 9 ir 10 straipsnių pakeitimo įstatymas, 2010; Lietuvos

Respublikos bibliotekų įstatymo 2, 3, 4, 6, 7, 8, 9, 10, 11, 12 straipsnių pakeitimo (…), 2013) (further referred to as Law on Libraries) has lost its relevance in its essence and concept due to fundamental changes that society has undergone, the Law on Libraries does not reflect the directions established in the Guidelines for the Change, and cultural and information institutions are seen in the traditional way, considering only a small part of their actual roles and functions. In general, since 1995, when the Law on Libraries was adopted, only editorial amendments were introduced, although researchers see that the current Law on Libraries does not help the libraries fulfil their roles in society (Audronė Glosienė claimed so back in 2000 m. [Glosienė, 2000]). Renaldas Gudauskas (2013 a, 2013 b, 2013 c, 2014) comes back to the topic: he claims that a new law on libraries would allow libraries to be and fully participate in the Lithuanian information infrastructure, since the changed environment suggests that fundamental changes are needed in the laws, allowing for efficient activity of cultural institutions in carrying out functions that meet public needs and accepting timely roles (Gudauskas, 2013 a; 2013 b; 2013 c; 2014). In 2013, the Ministry of Culture of the Republic of Lithuania rallied an expert working group in order to establish the priority directions in library development; the aim of the group was to define library activity priorities, encompassing their functions and roles (Dėl bibliotekų plėtros prioritetinių krypčių nustatymo darbo grupės sudarymo, 2013), and, before the work of the working group was over, a version of the Law on Libraries was adopted in 2013 (Lietuvos Respublikos bibliotekų įstatymo 2, 3, 4, 6, 7, 8, 9, 10, 11, 12 straipsnių pakeitimo (…), 2013), where the definition of public libraries was expanded: a library accessible to all users, accumulating and preserving a universal document fund that meets the needs of the community of the territory (county, municipality) it is located in, providing the residents with information and public internet access services, implementing programs and projects of ethnography, socio-cultural education, reading promotion, information literacy and other programs and projects of informal education related to library activities (Lietuvos Respublikos bibliotekų įstatymo 2, 3, 4, 6, 7, 8, 9, 10, 11, 12 straipsnių pakeitimo (…), 2013). The next planned step in the preparation of a new, fundamentally different, law on libraries.

The Lithuanian Programme of the Development of Information Society for the Year 2011–2019 (Lietuvos informacinės visuomenės plėtros 2011–2019 metų programa, 2011) the role of libraries in information society is perceived as that of a prophet of information and communication technologies, aiming at ensuring the reach and access to information for the users: it is stipulated that by implementing the programme, the libraries will play a role of a memory institution, when their functions will include the following: to ensure the remaining of the Lithuanian language in the global society, via information and communication technologies, to spread information about the Lithuanian culture and to contribute to the preservation and strengthening of cultural variety in Europe as well as development of national self-expression (Lietuvos informacinės visuomenės plėtros 2011–2019 metų programa, 2011).

The Regional Cultural Development Programme for the Year 2011–2020 (Regionų kultūros plėtros 2012–2020 metų programa, 2011) also reflects the roles of libraries. In this case, the main focus is put on the accessibility of culture and its spread in the region through the use of existing and developed network of cultural institutions (Regionų kultūros plėtros 2012–2020 metų programa, 2011), libraries are given a role in creating conditions for the residents to use possibilities provided by information and communication technologies, in reducing social and electronic exclusion, integrating national communities, and developing information society competences (Paliukaitė-Medeckienė, 2013: 20).

Therefore, the roles of library network in regional infrastructure of culture and information are not fully defined, the library network is given broad and generic roles: memory preservation and transfer to future generations, information society development, community promotion and involvement in various activities, spreading information and communication technologies, etc.

3. Lithuanian library roles: analysis of public needs and opinion surveys

The assessment of library network activities, roles and functions is reflected in the results of public and library users' opinion surveys. They also reveal the scope of library activity in the regions. In Lithuania, library users' needs and opinion surveys are carried out both at library level (libraries carry out needs and opinion surveys in the communities they serve) and at state level. The largest public needs and opinion surveys that looked at library activities and revealed the public attitude towards the role of libraries were carried out in 2008–2012 during the impact assessment of the project "Libraries for Progress" (Lith. *Bibliotekos pažangai*) covering public libraries across the country.

From the chronological point of view, it is important to mention the surveys carried out prior to the year 2008: in 2004, an opinion survey of Lithuanian residents was carried out, where cultural needs as well as the evaluations of cultural institutions including libraries were looked at (Lietuvos gyventojų kultūriniai poreikiai, 2004). The report states that "in the context of the development of information society, the perception of libraries is changing; their focus shifts towards the function of information and communication, i. e. providing readers with a possibility to get acquainted with the latest global information online," and the role of libraries is also changing: "they do not only create conditions for the residents to familiarize with the Lithuanian periodicals and receive information on job vacancies but they often become centres of cultural life and interpersonal communication between people" (Lietuvos gyventojų kultūriniai poreikiai, 2004: 40). According to the researchers, the respondents perceive the library network as *an ordinary lifestyle attribute*, they look for information there (23 per cent of survey respondents), satisfy their aesthetic needs (search for works of fiction) (13 per cent of survey respondents), look at most recent topics (information in newspapers and magazines) (8 per cent), read scientific literature (4 per cent), etc. (Lietuvos gyventojų kultūriniai poreikiai, 2004).

In 2007, the Lithuanian National Martynas Mažvydas Library carried out a survey "Village (Town) Library as Community Centre" (Cicėnienė, 2009), the aim of which was to determine the place of a village library in socio-cultural environment of a contemporary village and its actual functions and role in the social life of a village community (Cicėnienė, 2009). The main purposes of the respondents' visits in village libraries were identified, which in their sequence and content resemble the opinion survey of the Lithuanian residents in 2004 (Fig. 3 Survey respondents' purposes of visits in village libraries (percentage).

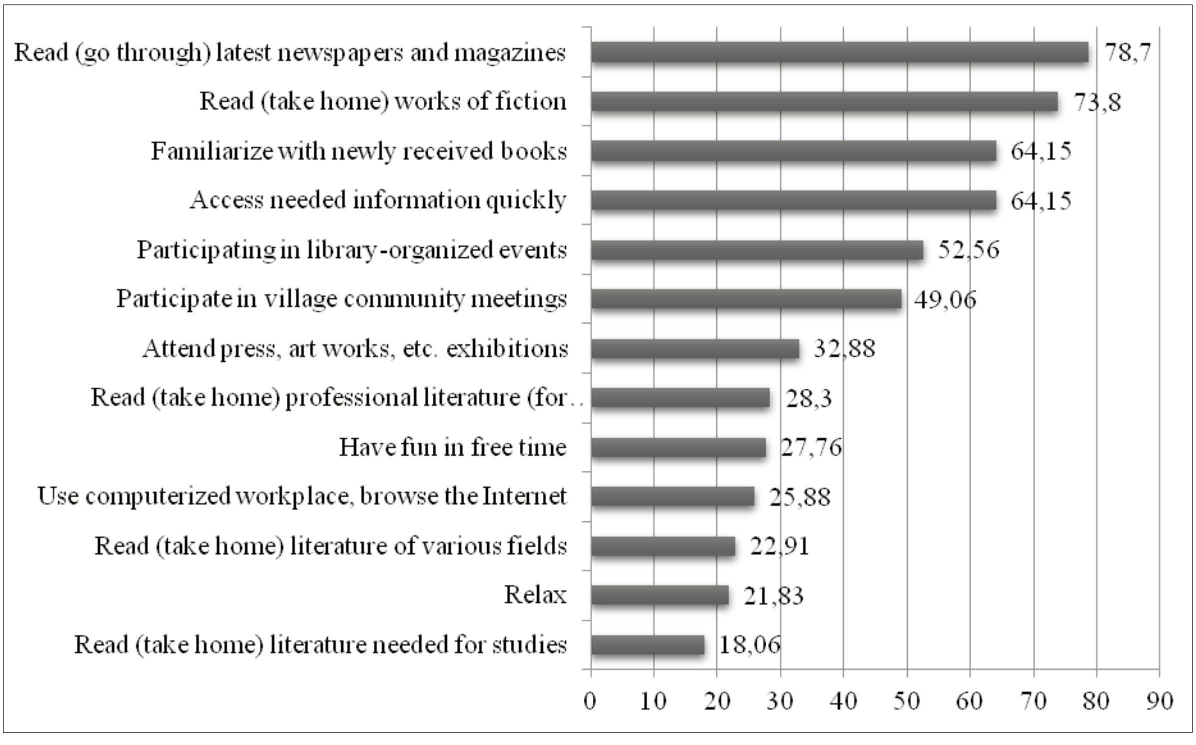

Fig. 3. Purposes of survey respondents' visits in village libraries (percentage)
Source: based on Cicėnienė, 2009: 125

The survey respondents also indicated that in the library they upgraded their qualification, looked for information regarding finding employment, used electronic services and CDs, studied foreign languages and tried out language learning software, they used music CDs, played computer games, listened to music recordings, used registered (subscribed) databases and computer catalogues of the library (Cicėnienė, 2009). The conclusions of the survey in question indicate that the role of a village library for local community manifests in the educational, informational, cultural and social life of the village people (Cicėnienė, 2009).
In 2008–2012, during the implementation of the project "Libraries for Progress", wide scale opinion surveys of the public, library visitors, heads and staff, socially vulnerable groups, and experts were carried out. The social research of the project "Libraries for Progress", which was launched before the implementation of the project (an initial situation analysis was carried out), continued up to 2012, when the final impact assessment of the project was carried out (Bibliotekos pažangai: projektas „Bibliotekos pažangai" 2008–2012 m.). The impact assessment analysis revealed how public attitude towards the roles, functions and activities of libraries changed throughout Lithuania (Bibliotekos pažangai: projektas „Bibliotekos pažangai" 2008–2012 m.; Bibliotekos pažangai (…), 2008; Bibliotekos pažangai (…), 2009; Bibliotekos pažangai (…), 2010; Bibliotekos pažangai (…), 2012):

- When the survey was launched in 2008, it was established that the public opinion on the roles of libraries was limited to a belief that these were institutions where one can get books. The initial situation analysis showed that adults usually borrowed books from libraries to take home (96 per cent of respondents), read periodicals (62 per cent), found other publications (30 per cent), etc. The first survey also revealed a large gap in the skills of information technology use and the possibilities of internet use between urban and rural residents: although one third of users (28 per cent) had libraries as the only place to use internet (Bibliotekos pažangai (…), 2008: 33), the Lithuanian library network infrastructure did not allow to reach all potential users. In her article in 2009, Ugnė Rutkauskienė claims that in Lithuania, technologies are unevenly spread between different society layers: "[technologies] are more frequently used by younger, socially active and better educated respondents as well as those with better income. Another part of society, which makes up around 40 per cent, can be attributed to the digitally excluded" (Rutkauskienė, 2009a; 2009b). Children saw libraries as conservative and unattractive institutions due to outdated infrastructure (Projekto „Bibliotekos pažangai" vaikų apklausa, 2008).
- The impact assessment in 2009 showed that the situation was changing: although many people still believed that libraries were "book reading centres", the broadened library functions allowed users to use other library services: free-of-charge internet access (Bibliotekos pažangai (…), 2009: 31). According to the survey of 2009, the public attitude towards the role of libraries was changing: "the number of those who find it a good place for communication, a place with pleasant atmosphere and a place to have fun is growing" (Bbliotekos pažangai (…), 2009).
- The mid-term survey in 2010 showed an even clearer impact of the new functions: "the "traditional" library activity is evaluated more poorly. Public internet access users gave the lowest evaluation to the following areas: book assortment and updating the periodicals" (Bibliotekos pažangai (…), 2010: 5). The perception of a library role in society was changing: "In the village, the role of a library as a social point of attraction is highlighted, while in the city emphasis is put on modernity and facilities" (Bibliotekos pažangai (…), 2010: 31). Having systemized the data of the surveys from all years, a chart is presented (Fig. 4), based on public opinion survey results from the year 2008–2011 on the associations that the public had on libraries. Since the questionnaire of 2008 differed from those of other years and the questionnaires of the years 2009–2012 also had slight differences among them, the chart presents only the main associations that characterize libraries, which were noticed in all or most surveys.

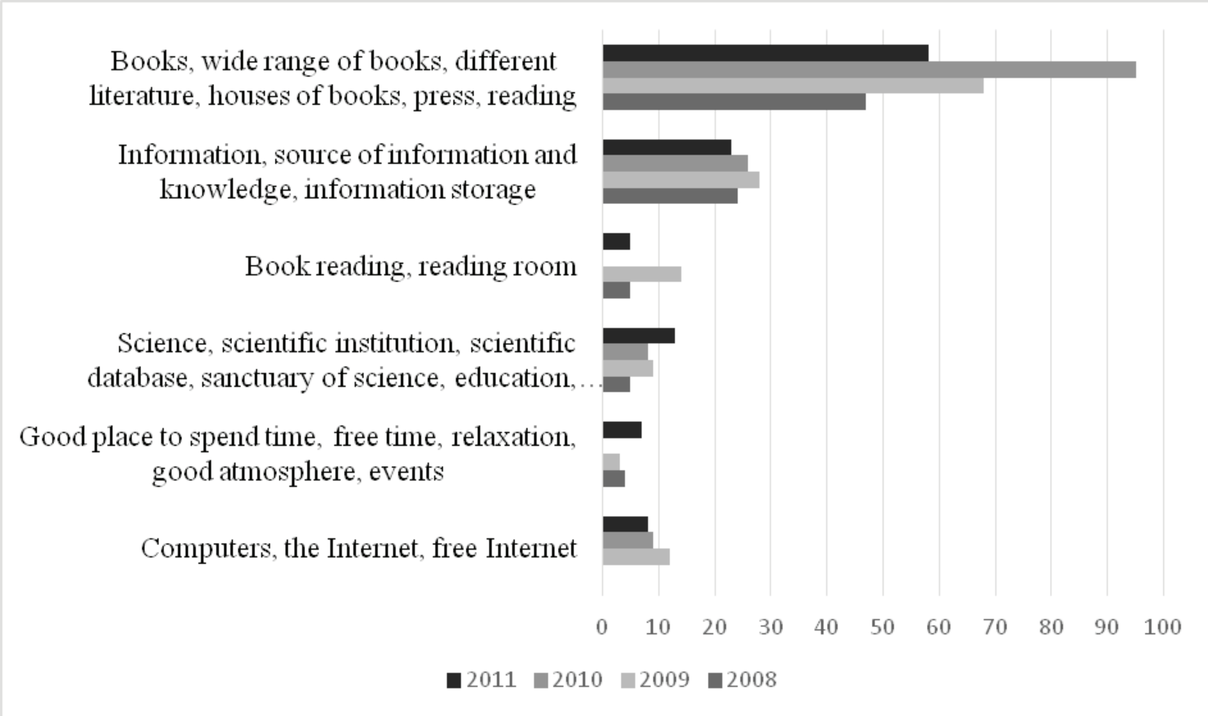

Fig. 4. Library associations with activities, services, etc. in society in 2008–2011
Source: Projekto „Bibliotekos pažangai“ gyventojų apklausa, 2008: 18; Projekto „Bibliotekos pažangai“ Lietuvos gyventojų apklausa, 2009: 65; Projekto „Bibliotekos pažangai“ Lietuvos gyventojų apklausa, 2010: 15; Projekto „Bibliotekos pažangai“ Lietuvos gyventojų apklausa 2011; 2012: 83

In 2012, the impact assessment of the whole project "Libraries for Progress" 2008–2012 was carried out, which revealed an altered attitude towards libraries: "The mission and role of a library expanded, the image of the institution in society improved. Library is currently considered as a provider of complex services, centre of information, culture, education and community attraction that constantly introduces innovations and encourages the residents to actively use them" (Bibliotekos pažangai (…), 2012: 5). The assessment report states that since 2008, the attitude towards library roles was constantly changing: "A library was perceived as a passive information mediator, an administrator of information sources (…) [as of 2009, the library] is perceived as multidimensional, encompassing a number of fields; to provide all-sided information, build favourable social space for residents, (…) to educate and teach community members (…) as of 2011, the library mission became linked to innovations, their introduction, promotion and teaching to use them" (Bibliotekos pažangai (…), 2012: 17).

Public needs and opinion surveys regarding information and cultural institutions and their activities continue and are further carried out, thus evaluating public attitude towards libraries, their roles, functions, activities and impact on society members in the regions. In 2012, under the commission of "Bill & Melinda Gates foundation", a research was carried out in 17 European Union (further referred to as EU) member states with the aim of establishing the perception of public libraries as well as types of their use, highlighting the role of public libraries in supporting the strategy *Europe 2020*. According to the report, the user opinions on the use of information and communication technologies in Lithuanian public libraries are identified and the results are compared to those of the entire EU (Vartotojų nuomonė apie informacinių ir komunikacinių technologijų naudą Lietuvos viešosiose bibliotekose, 2013):

1. Library and public access use. 96 per cent of the Lithuanian public libraries provide public internet access (further referred to as PIA) service, which the users use motivating that it is free of charge and in many cases they do not have other choices of access to computer or the Internet (Vartotojų nuomonė apie informacinių ir komunikacinių technologijų naudą Lietuvos viešosiose bibliotekose, 2013). 99 per cent of Lithuanian library service users, compared to the EU, believed

that the library's computer and internet connection services are valuable. During the survey it was established that it was people who can be attributed to the group of "digital exclusion" who used the computer services.

2. Opinion on public libraries and the impact of libraries on users. Compared to the EU, in Lithuania the users acknowledged the importance of libraries in providing services related to computer access, bringing community together, which was also linked to positive answers regarding the need to increase funding for libraries. The users state that libraries have impact on them (98 per cent). During the survey, it was determined that the most active users of information and communication services are the elderly, those with smaller income, unemployed and those in search of a job.
3. Self-education and informal education. According to survey data, during the 12 months of the period analysed, 75 per cent of library users participated in educational activities in libraries in Lithuania.
4. Occupation and public internet use for work. Half of the Lithuanian users admitted using library computers in order to keep a certain form of occupation. Library computers were also used for job search, for example, to submit application for a job.
5. E-government and active citizenship. During the 12 months of the period analysed, one in four Lithuanian library users (24 per cent) used interaction with governmental institutions (Vartotojų nuomonė apie informacinių ir komunikacinių technologijų naudą Lietuvos viešosiose bibliotekose, 2013) via library network: downloaded or filled tax returns, obtained information from the websites of governmental institutions, read and wrote to internet websites for civic or political purposes, carried out information search regarding consumer law or legislation, activities or policies of local, national or EU institutions.

To sum up, one can state that the Lithuanian library network, encompassing all regions of the country, carries out roles and functions that respond to public needs: provides access to information, brings community together, creates conditions to use information and communication technologies, and implements other activities relevant to communities.

Conclusions

The set out goals were implemented and the aim of the article, to analyse the roles of Lithuanian libraries in regional infrastructure of culture and information, was reached. It was established that the Lithuanian library network, a library network perceived as the entirety of libraries, covers the whole territory of Lithuania and builds a unified system available for use of all community members with no exceptions according to their needs. The library network is a part of the regional infrastructure of culture and information, which provides the community members with a possibility to participate in cultural activities, and be part of information society. Summing up the analysis of strategic documents that was carried out, one can claim that the situation of the Lithuanian library network in the infrastructure of culture and information is paradoxical: on the one hand, libraries serve as an important part of the infrastructure, capable of successful implementation of priority activities of the country; on the other hand, the library network is restricted and its potential is often not fully exploited due to fragmented shaping of the Lithuanian infrastructure of culture and information, which often fails to cover wider context. This also reflects in the public needs and opinion surveys of the year 2004–2013. Analysing the data received, it turned out that the main roles of library network in the regional infrastructure of culture and information are multiple: library as information mediator; the role of the library as an information and communication services provider and communal activity promoter also emerged. To sum up, it can be stated that the roles of the library network in the regional infrastructure of culture and information are those of an institution, which: develops cultural competences, creativity and conscientiousness in people, promotes leadership, provides free-of-charge access to the variety of science and art as well as new information technologies, provides a possibility to reveal oneself and participate in cultural life, encourages cultural activeness and integration in communities, increases access to education and variety of services, preserves and gives relevance to cultural heritage, disseminates the advantages provided by information and communication technologies, provides space with public internet access.

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LIETUVOS BIBLIOTEKŲ TINKLO VAIDMUO KULTŪRINĖJE IR INFORMACINĖJE REGIONŲ INFRASTRUKTŪROJE

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Santrauka

Bibliotekų tinklas yra kultūros ir informacijos infrastruktūros dalis, atlikdama savo vaidmenį, ji suteikia visuomenei ir bendruomenėms galimybę naudotis informacijos ištekliais, dalyvauti kultūrinėje veikloje, siekti žinių, skatina mokytis visą gyvenimą ir kt. Bibliotekų tinklo veikla apima visus šalies regionus, neaplenkiant net labiausiai nutolusių vietų ir asmenų, kuriems sudėtinga kitais būdais gauti informaciją ir naudotis kultūros paslaugomis, todėl tikslinga kalbėti apie bibliotekų tinklo vaidmenis, funkcijas ir veiklą regionų kultūros ir informacijos infrastruktūroje. Straipsnio temos mokslinė problema pasireiškia siekiu bibliotekų vaidmenų kaitą ir svarbą Lietuvos regionuose tirti sistemiškai, analizuoti visumą ir įžvelgti aplinkos įtaką bibliotekų vaidmenims. Bibliotekų vaidmenys, jų kaita, veikimas kultūros ir informacijos infrastruktūroje tiriami per suinteresuotų ir bibliotekų vaidmenis veikiančių asmenų prizmę: politikos kūrėjus, kurie rengia ir teikia įstatymus, visuomenės narius, kurie išsako savo lūkesčius, įvardija poreikius (remiamasi atliktais poreikių ir nuomonių tyrimais).

Šiame straipsnyje pateikiama analizė – dalis atliekamo tyrimo apie bibliotekų vaidmenų kaitą Lietuvoje, kuriuo siekiama nustatyti bibliotekų vaidmenų kaitos kryptis ir galimybes.

Šio straipsnio tikslas – išanalizuoti Lietuvos bibliotekų vaidmenis regionų kultūros ir informacijos infrastruktūroje. Objektas – bibliotekų vaidmenys regionų kultūros ir informacijos infrastruktūroje. Siekiant tikslo ir įgyvendinant užsibrėžtus uždavinius taikyti mokslinės literatūros, statistinių duomenų, strateginių ir kitų dokumentų, atliktų visuomenės poreikių ir nuomonių tyrimų analizės, apibendrinimo ir sintezės metodai.

Nustatyta, kad Lietuvos bibliotekų tinklas, jį suvokiant kaip bibliotekų visumą, apima visą Lietuvos teritoriją ir sukuria vieningą sistemą, kuria gali naudotis visi be išimties bendruomenės nariai, atsižvelgdami į savo poreikius. Apibendrinant atliktą strateginių dokumentų analizę, galima teigti, kad Lietuvos bibliotekų tinklo situacija kultūros ir informacijos infrastruktūroje yra paradoksali: viena vertus, bibliotekos yra svarbi infrastruktūros dalis, siekiant įgyvendinti šalies prioritetines veiklas; kita vertus, bibliotekų tinklas yra suvaržytas, dažnai neišnaudojamos tinklo galimybės dėl epizodiško, platesnio konteksto neapimančio Lietuvos kultūros ir informacijos infrastruktūros formavimo. Apibendrinant galima teigti, kad bibliotekų tinklo vaidmenys regiono kultūros ir informacijos infrastruktūroje yra šie: institucija, kuri ugdo kultūrines žmogaus kompetencijas, kūrybingumą ir sąmoningumą, skatina lyderystę, suteikia nemokamą prieigą prie mokslo ir meno šaltinių, naujų informacijos technologijų, galimybę atsiskleisti ir dalyvauti kultūriniame gyvenime, skatina bendruomenių kultūrinį aktyvumą ir integraciją, didina švietimo prieinamumą ir paslaugų įvairovę, išsaugo ir puoselėja kultūros paveldą, tai yra erdvės, kuriose sukurta viešoji interneto prieiga.

PAGRINDINIAI ŽODŽIAI: *bibliotekos, bibliotekų vaidmenys, regionai, kultūros infrastruktūra, informacijos infrastruktūra.*

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CAUSAL SURVEY OF PURCHASE OF NON-LIFE INSURANCE PRODUCTS FOR LITHUANIAN CONSUMERS

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ABSTRACT
On purpose to increase the demand for insurance services in Lithuania there still remains a problem of how consumers perceive this service as well as what components, influencing their decision to purchase non-life insurance products, they accentuate in the price of insurance service. Emphasizing the assumptions of sustainable economic development in Lithuania and attempting to form regional policy by means of research, the study was implemented in order to identify factors and causal relationships that determine non-life insurance product purchasing motives in Lithuania. The study conducted a survey of Klaipeda city residents who buy various insurance products in different insurance companies. In total 420 respondents participated in this survey. To verify the results of the research three tests were applied: Pearson's Chi-square test, Fisher test (Fisher's exact) and Cramer's V test. It was identified that friends' recommendations do not affect consumer's choice for insurance products. Higher rates of benefits as well as flexible pricing policy were not important factors choosing an insurance company. High insurance product's cost and unclear conditions set in the contracts do not encourage consumers to purchase them. In the course of the research significant relationships between the consumer's choice to insure by specific insurance product and consumer's discount-enhanced motivation to purchase insurance products were not observed. All measured insurance products did not reflect statistically significant correlations between the decision to get insured and the knowledge about the prices in other insurance companies.
KEY WORDS: *non-life insurance products, price, consumers' perceived value.*

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Introduction

Insurance and its associated processes are treated ambiguously by scientists due to the different points of view to this object (Čibinskienė, Činauskaitė, Navickas, 2005: 33). As stated by Narkūnienė and Stašys (2003: 79), insurance companies are important for both sides, i.e. the national economy and separate insurer.

The success of insurance business development is determined by companies' ability to focus on the relevant segments of insurers and efficiency in responding their insurance needs and expectations. Perceiving insurers, understanding their needs, expectations and behavioral patterns in the insurance market, insurance companies can take effective marketing actions and measures to encourage potential insurers to insure in their company, or change their behavior towards the direction desired by insurers (Kindurys, 2008: 52). The most significant participants in the insurance market are customers whose wishes and financial capacity

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allow insurance business to exist. Potential consumers of insurance services are critical for the insurance company, therefore, the success of any insurance business depends on the ability to focus on the relevant segments of the insurers and intelligently respond to their needs and expectations in regard to insurance services.

Problem. Insurance services – is one of the most complicated sort of services generally, as well as on the scale of all financial services that are relevant to them. Such service consumers face with perhaps one of the highest level of uncertainties regarding the service they pay for. For consumers it is actually difficult to understand the essence of insurance services and functioning of the mechanism, without having incurred property losses or collected information on insurance loss compensation subtleties (Ulbinaitė, 2010: 1). The insurance services product main features include: the price (insurance premiums rate), covered insuring risks and insurance company's liability conditions (extreme conditions, exceptions and franchise).

According to V. Kindurys (2002), insurance services product price is the key thing of importance to most consumers of these services with the exception of experienced customers and financial institutions. Kiyak and Pranckevičiūtė (2014) systematized the prices of Lithuanian insurance companies' sold non-life insurance types of products. The offers of the registered and operating non-life insurance companies in Lithuania examined in the price study were the following: AB "Lietuvos draudimas", UAB DK "PZU Lietuva", "ERGO Insurance SE" Lietuvos filialas, "IF P&C Insurance" AS filialas, "BTA Insurance company" SE filialas, "SEESAM Insurance" AS filialas, "Compensa Towarzystwo Ubezpieczeń S.A." Vienna Insurance Group filialas, AAS "Gjensidige Baltic" Lietuvos filialas. The study showed that the insurance prices in different insurance companies differ significantly. The authors found that the compulsory motor third party liability insurance price in different companies ranges in 200–273 Lt limits. CASCO insurance product price fluctuations were especially vivid (in 666–1552 Lt limits). Property insurance rates are also markedly different – ranging between 261–570 Lt. In non-life insurance companies operating in Lithuania insurance against accidents prices varied even up to 5 times. At least prices differ in travel insurance offers. The most significant differences appeared in vehicle insurance as well as in the same kinds of insurance contributions in different companies. The data of insurance product prices analysis revealed differences in prices reaching up to 5 times of different insurance products operating in Lithuania in different non-life insurance companies. Frequent price fluctuations determined by the fact that different companies have different priority types of insurance lead to their competition in offering the best option for a minimum price for their customers. The essential conclusion affirmed that insurance products cannot be measured only in terms of price, as the product consists of the price as well as of the risks and benefits which are defined in the insurance contract.

Kiyak and Pranckevičiūtė (2014) comparing Lithuania's non-life insurance companies' product prices identified that the consumers find it difficult to choose them. Such difficulty is caused by a few reasons. First, insurance prices are strictly regulated by the Insurance Supervisory Authority, according to the company's technical reserves, but such information is only available to insurance companies and insurance brokers. Second, this analysis is quite difficult to perform because of the difficult calculations, although the price calculators are available on the websites of insurance companies. However, for the average consumer they are confusing, similarly to the insurance companies' product offers. The terminology used and the components of the contract, and the contract with the insurance-related conditions usually exceed the length of one page in the contracts. All the terms of the contract can only be found in a review of the insurance regulations related to the insurance contract. Insights in Kiyak and Pranckevičiūtė's (2014) study showed that frequently the inter-comparison of different companies' presented insurance product prices for the average consumer is even impossible.

Also Kiyak and Pranckevičiūtė (2014) performed consumers' attitudes to non-life insurance products price survey and emphasized that consumers, choosing the insurer, pay attention not only to the price but also to such factors as prompt service, suitable ready settlement of claims, the insurance service after the acquisition of insurance, high-level personnel work. The authors identified that almost for a half of the surveyed respondents while insuring it is important whether the chosen company is socially responsible. Meanwhile, factors, such as loyalty to one company, known brand and the emotional satisfaction after the purchase, were of minor importance.

Therefore, in order to increase the demand for insurance services in Lithuania a relevant problem to disclose how consumers perceive the service, what collectivity, economy, need existence, randomness, measurability and the risk signs they emphasize in the insurance services price, remains. This would allow insurance companies to review their pricing strategies, involving the application of product value theories in practical solutions, reducing the gap between the price paid and the value received.

The research object: the factors influencing consumers' decision to purchase non-life insurance products.

The aim of the research: to identify the factors and determine the causal relationships influencing non-life insurance product purchasing motives in Lithuania.

Research methodology. In order to identify consumers' attitudes to non-life insurance products price components the empirical study conducted Klaipeda city residents', who buy various insurance products in different insurance companies, survey. General population – Klaipeda city residents. According to the Department of Statistics established General population is 158541 residents. The survey sample was established in accordance with V. Dikčius (2006) recommended formula. In total 420 respondents participated in this survey. For the collection of the data a structured questionnaire was used (the majority of the questions included closed-ended type questions). The survey data was processed using SPSS.15 statistical data processing program, and MS Excel. For the evaluation of the research results three tests were used: Pearson Chi-square test, Fisher's exact, and Cramer's. V. Pearson Chi-square test was used to check hypothesis of independence of the two variables. The null hypothesis states that the features are independent, and the alternative states that there are features statistically significantly dependent (or in other words, statistically significant correlation between the analyzed features exists). The null hypothesis is rejected (i.e., statistically significant difference between the features exists), if the Pearson Chi-square test corresponding p-value is less than 0.05. Fisher's exact test is applied for the same purpose as the Pearson Chi-square, only gives more accurate results when both compared features gain 2 values only. The differences are statistically significant when the test p-value is less than 0.05. Cramer's V test is also a Chi-square test analog, when two nominal features are being compared. There is a statistically significant relationship among the features, if the corresponding p-value is less than 0.05.

Research methods: examination of legislation, data collection, classification, grouping, collation, specification, elimination, generalization, systematization, interpretation, statistical methods, logical comparative analysis and synthesis.

1. Non-life insurance product pricing theoretical aspects

The most important insurance market participants are customers whose wishes and financial capabilities allow insurance business to exist. Potential consumers of insurance services are critical for the insurance company, so the insurance business success depends on its ability to focus on the relevant segments of the policyholders and intelligently meet their insurance needs and expectations. So the insurance companies, with a view to efficient and profitable operation must use sophisticated testing methods by which would be able to assess insurers' expectations and determine the reasons for their behavior (Lezgovko, 2010). Therefore, a specific product offered in the insurance market, the insurance service, which consumption price is insurance protection, making insurance benefits form, granting.

Insurance, as well as other purchases of services starts from the understanding the need for insurance. The appropriate type of insurance services will satisfy insurer's demands, which is directly related to the reduction of risk, because the insurer takes the policyholder's incurred risk. A policyholder does not realize insurance service's content and benefits while no real loss appears. Thus, the need for insurance services can lead to a variety of reasons for consumer behavior, involving the desire to feel safe and worry about the future, lifestyle, risk reduction or its management mode, binding laws and contractual requirements, or the view of insurance as an investment when the investment of insurance premiums helps to protect against major financial losses in the future (Kindurys, 2008: 57).

Insurance products are among those which are difficult to sell their providers, and consumers find it difficult to use, i.e., consumers struggle understanding the risk they face, probabilities, it is difficult to correctly interpret, to evaluate and choose their price, quality, benefits, compare the products offered in the market, and etc.. The decision to purchase and to use insurance services, as well as the consumption itself are processes that arouse consumer's doubts and considerations (Ulbinaitė, 2010: 5).

In the scientific literature, companies are advised to set prices according to the cost, consumer perceived value, the current price level (Christopher, 1982; Bakanauskas, 1997; Bakanauskas, Liesionis, 2002; Kotler, Keller, 2007; Rastenis, 2005; Barzdenytė, 2000). They also emphasize (Huber, Herrmann, Henneberg, 2007; Bakanauskas, 1997; Smith, Colgate, 2007; Khalifa, 2004; Dovalienė, 2005; Dovalienė, Viršilaitė, 2008; Eggert, Ulaga, 2002), that, before determining the product price, companies have to find out whether the benefits provided by the product are equal to the benefits which the consumer desires to obtain.

Determining the price in terms of value, companies' prices must reflect how consumers evaluate a product or service. Consumers' decision to buy one or another product is influenced by their perception of the value they expect to get. A. Ravald, Ch. Gronroos (1996) argue that the value to the consumer – is the cost faced by consumers (price, service, risk of failure, the time spent by the user) for the purchase of service. A. Eggert, W. Ulaga (2002) received user benefits perceive as certain qualitative characteristics of services and servicing combination. A. S. Khalifa (2004) indicates that the user's perceived value is the maximum price that he is willing to pay for the economic and non-economic signs of the product. J. C. F. Roig, J. S. Garcia, M. A. M. Tena, J. L. Monzonis (2006) provide consumers' perceived benefits as three-dimensional (functional, social, emotional) mix that reflects the benefit for the consumer. As stated by R. Vaitkienė and V. Pilibaitytė (2008) customer value is related to the relationship between the main product's produced tangible and intangible benefits and monetary and non-monetary cost of user-experience while acquiring the product. Other authors (Reddy, 1991; Snoj, 2004; Ge, 2002) define user's perceived value as the relationship between perceived benefits and perceived price. W. L. Chang and Y. T. Hong (2011) indicate that the value for the consumer is an assumption for all other values. V. Praude and E. Shalkovska (2009) delivering concept of the value identify three main components of the value for consumers: the user's benefit, the additional benefit for the user, user's costs incurred.

Value for the consumer can be considered the basis of all marketing decisions because providing greater value for the consumer is expected to be one of the most important competitive advantage and increase consumer loyalty factors (Dovalienė, 2005; Snieškienė, Pridotkienė, 2011). The company, in order to create greater value for the consumer, needs to understand how consumers perceive the value of their offer and make product proposal corresponding to the expectations (Kiyak, 2013).

2. Consumers' non-life insurance products purchase reasons survey results and discussion

The study sought to identify which aspects influence customers when choosing insurance products of the existing offers in Lithuanian market and what determinants operate making the decision to insure. One of the factors that may influence the decision to purchase insurance product in one or another insurance company was "recommendation of a friend". It was assessed that only 11.1 % of respondents chose the purchase of the insurance product recommended by their friends in one or another insurance company. As Fisher's exact test statistical probability $p = 0.035 < 0.05$, there is a statistically significant basis to state that friends' recommendations do not affect the respondents choice to purchase insurance products.

Bigger benefit rates and flexible pricing policy have not been identified as important factors for users that determine their choice for insurance products as well (see Table 1).

Table 1. Bigger benefit payments and flexible price policy impact to insurance product selection test results

Question		No matter	Neither important nor does not matter	Important	Very important	Total
Bigger benefit payments	No	0 %	11.1 %	19.0 %	57.1 %	87.3 %
	Yes	1.6 %	1.6 %	4.8 %	4.8 %	12.7 %
Total		1.6 %	12.7 %	23.8 %	61.9 %	100.0 %
Flexible pricing policy	No	0.0 %	12.7 %	17.5 %	57.1 %	87.3 %
	Yes	1.6 %	1.6 %	6.3 %	3.2 %	12.7 %
Total		1.6 %	14.3 %	23.8 %	60.3 %	100.0 %

Source: composed by authors

Statistical significance of these relationships are confirmed by Chi-square test statistical probability $p = 0.037$ and $0.010 < 0.05$. The latter allows to presume that bigger benefit rates and flexible pricing policy do not affect the consumer's choice of the insurance company.

The objective of the study was to determine whether the insurance company's office equipped with modern interior design is an important factor for choosing the insurance. More than 80 % of the respondents believe that this factor does not affect the decision whether to purchase insurance products (see Table 2).

Table 2. Beautiful and modern office factor importance when choosing an insurance product

Question		No matter at all	No matter	Neither important nor does not matter	Important	Very important	Total
Beautiful, modern office	No	25.0 %	25.0 %	25.0 %	5.0 %	3.3 %	83.3 %
	Yes	1.7 %	1.7 %	5.0 %	6.7 %	1.7 %	16.7 %
Total		26.7 %	26.7 %	30.0 %	11.7 %	5.0 %	100.0 %

Source: composed by authors

The statistical importance of this relationship is supported by Chi-square test statistical probability $p = 0.023 < 0.05$, so there is a statistically relevant basis to say that beautiful office does not have impact on consumers' decision to buy an insurance product.

Even 45.2 % of consumers claimed that high cost of insurance product does not encourage them to purchase voluntary motor insurance products, and 38.1 % of the respondents indicated that the deterrent factor is unclear insurance conditions (see Table 3).

Table 3. Discouraging factors to purchase insurance products, test results

Question		High cost of insurance product	Uncertain insurance product conditions	Such insurance is not relevant to me	Total
Discouraging factors to purchase CASCO insurance	No	4.8 %	2.4 %	9.5 %	16.7 %
	Yes	45.2 %	38.1 %	0.0 %	83.3 %
Total		50.0 %	40.5 %	9.5 %	100.0 %

Source: composed by authors

A statistically significant correlation is approved by Chi-square test statistical probability $p = 0.000 < 0.05$, which suggests, that high price of insurance products and its unclear acquisition conditions have a significant impact on consumers decision to insure. This relationship is strong and in Cramer's $V = 0.727$, because the symmetrical dependence test statistical probability $p = 0.000 < 0.05$.

Among the insured with property insurance, 9.5 % of the respondents stated that high cost of insurance product does not encourage them to buy this insurance, and 23.8 % of the respondents indicated that the deterrent factor is unclear insurance conditions of the products (see Table 4).

Table 4. Factors discouraging to purchase property insurance

Question		**Discouraging to purchase property insurance**			**Total**
		High cost of insurance product	**Uncertain insurance product conditions**	**Such insurance is not relevant to me**	
I use property insurance	No	16.7 %	21.4 %	28.6 %	66.7 %
	Yes	9.5 %	23.8 %	0.0 %	33.3 %
Total		26.2 %	45.2 %	28.6 %	100.0 %

Source: composed by authors

Statistical essence of this relationship is confirmed by Chi-square test statistical probability $p = 0.010 < 0.05$. The latter formula yet again verifies that uncertain security conditions and high cost of property insurance have impact on the consumer's choice of property insurance.

Assessing consumer satisfaction in non-life insurance products prices, it was determined that none of the insurance product has a statistically significant difference between the satisfaction levels which were given in the survey. That is, we cannot say that satisfaction of the cost of insurance affects user's willingness to insure a specific insurance product.

Significant dependencies were not determined while analyzing consumers' choices for insurance products to whether or not an insurance product price reflects its quality. It can be argued that there is no significant difference comparing consumers' choice to insure specific insurance product in the approach of how price of the product reflects its quality. In order to determine whether the discounts made encourage consumers to buy a particular insurance product, significant dependencies were not observed as well.

The study analyzed the influence of loyalty when choosing accident insurance, vehicle insurance, property insurance, travel insurance, third party liability insurance products. Evaluating members, insured CASCO insurance approach, it was found that 11.6 % of the insured by this insurance believe that loyalty can be an aspect to be taken into account when calculating the cost of this kind of insurance (see Table 5). Meanwhile, between consumers who do not buy this insurance, even 50.7 % believe that it is not a significant factor in calculating the cost of CASCO insurance (see Table 5).

Table 5. A relationship between aspect of loyalty and insurance product price results

Question		**Loyalty to the company**		**Total**
		No	**Yes**	
I use CASCO insurance	No	50.7 %	34.8 %	85.5 %
	Yes	2.9 %	11.6 %	14.5 %
Total		53.6 %	46.4 %	100.0 %
I use travel insurance	No	43.5 %	23.2 %	66.7 %
	Yes	10.1 %	23.2 %	33.3 %
Total		53.6 %	46.4 %	100.0 %

Source: composed by authors

The statistical importance of this relationship is confirmed by Fisher's Exact test statistical probability $p = 0.037 < 0.05$. Therefore it can be claimed that the inclusion of loyalty as a component into the price formula of CASCO insurance would not affect the respondents' who do not buy insurance CASCO decision to purchase it. Loyalty, as one of the possible aspects calculating the price, appeared to be a significant factor between respondents who have opted for travel insurance. 23.2 % of all respondents insured by travel insurance believe that loyalty is an important aspect evaluating the cost of this kind of insurance (see Table 5). The statistical prominence of this relationship is embodied in Fisher's Exact test statistical probability $p = 0.010 < 0.05$. Therefore, there is a statistically significant basis for the statement that involving loyalty as one of the pricing aspects into prices' spreadsheets should affect consumers' choice in travel insurance.

The study found that education, as one of the pricing aspects, is an important factor between respondents who have opted for travel insurance. The majority, i.e. 52.2 % of all respondents do not use this insurance and do not think that it is important. Meanwhile, among the insured persons, 18.8 % believe that this is an important aspect (see Table 6). Statistical relevance of this relationship is confirmed by Fisher's Exact test statistical probability $p = 0.006 < 0.05$.

Table 6. Importance of education as a pricing aspect for respondents who purchase travel insurance

Question		**Education**		**Total**
		No	**Yes**	
I use travel insurance	No	52.2 %	14.5 %	66.7 %
	Yes	14.5 %	18.8 %	33.3 %
Total		66.7 %	33.3 %	100.0 %

Source: composed by authors

Respondents insured by property insurance showed a tendency of pursuit of optimum variant between the protection granted, and the price paid for it. The percentage of such respondents comprised 27.5 % of all insured by property insurance (see Table 7). The statistical significance of this relationship is justified by Fisher's Exact test statistical probability $p = 0.015 < 0.05$.

Table 7. Importance of search of a variant of optimal protection and price for consumers buying property insurance

Question		**I always try to find optimum variant between granted protection and the price paid for it**		**Total**
		No	**Yes**	
I use property insurance	No	23.2 %	47.8 %	71.0 %
	Yes	1.4 %	27.5 %	29.0 %
Total		24.6 %	75.4 %	100.0 %

Source: composed by authors

The influence of the insured person's independence on the choice of insurance mode is reflected in Table 8. It is noted that in most cases customers choose insurance companies independently or partially independently. A similar trend is observed among respondents who choose insurance brokers. Meanwhile, internet is usually chosen by respondents who consider themselves exclusively independent. The statistical importance of this relationship is confirmed by Fisher's Exact test statistical probability $p = 0.036 < 0.05$. Therefore there are statistically significant grounds to assert that the presence of independence influences respondents in their choice of insuring online.

Table 8. Influence of the policyholder's independence on the choice of insurance mode

Question		**I am independent, for me it is easy and convenient to order services myself , and therefore pay less**			**Total**
		I agree	**Partially agree**	**I do not agree**	
I usually insure	In the insurance company	25.8%	21.0%	6.5%	53.2%
	I use insurance brokers	16.1%	8.1%	11.3%	35.5%
	Via internet	11.3%	0.0%	0.0%	11.3%
Total		53.2%	29.0%	17.7%	100.0%

Source: composed by authors

Among the respondents, who prefer broker services, a clearly distinguished inclination to purchase face-to-face with the seller appears. This type of respondents amounted 29.5 % of all examined (see Table 9).

Table 9. The relationship between the pursuit of direct communication and choice of insurance brokers' services

Question		**I like to purchase services dealing directly with the seller, so I agree to pay slightly more**			**Total**
		I agree	**Partially agree**	**I do not agree**	
Do you use insurance brokers' services	Yes	29.5 %	11.5 %	9.8 %	50.8 %
	No	13.1 %	14.8 %	21.3 %	49.2 %
Total		42.6 %	26.2 %	31.1 %	100.0 %

Source: composed by authors

The statistical relevance of this relationship is approved by Fisher's Exact test statistical probability $p = 0.034 < 0.05$, therefore, there exist statistically significant grounds to claim that direct communication with the seller affect respondents to choose insurance brokers' services, i.e., those who like to purchase directly communicating with the sellers often choose insurance brokerage services.

It can be seen that among those who insure themselves against accidents, the major part are respondents with higher income (more than 2000 Lt), that is 17.7 % of all respondents. Among those who do not purchase this insurance, the greater part is represented by people with lower than 2000 Lt income, that is 47.1 % of all respondents (see Table 10).

Table 10. Influence of family income on the selection of insurance against accidents

Question		**Family income levels**						**Total**
		Up to 1000 Lt	**1001–2000 Lt**	**2001–3000 Lt**	**3001–4000 Lt**	**4001–5000 Lt**	**More than 5001 Lt**	
I use insurance against accidents	No	25.0 %	22.1 %	13.2 %	5.9 %	2.9 %	8.8 %	77.9 %
	Yes	0.0 %	4.4 %	7.4 %	4.4 %	2.9%	2.9 %	22.1 %
Total		25.0 %	26.5 %	20.6 %	10.3 %	5.9%	11.8 %	100.0 %

Source: composed by authors

The statistical importance of this relationship is justified by Fisher's Exact test statistical probability $p = 0.023 < 0.05$. Accordingly, there are statistically significant features to claim that family income has impact on respondents' choice to buy insurance against accidents, i.e., those who have higher income insure against accidents more frequently.

Observing relationships between travel insurance and education, it is clear that respondents with higher education use travel insurance more frequently. The percentage of respondents with secondary education who opted for travel insurance was only 4.3 %, while of those having a university degree – 20.3 % (see Table 11).

Table 11. Influence of education on travel insurance purchase

Question		**Education**				**Total**
		Secondary education	**Professional qualification**	**Higher education in acquisition**	**University education**	
I use travel insurance	No	24.6 %	11.6 %	10.1 %	20.3 %	66.7 %
	Yes	4.3 %	1.4 %	7.2 %	20.3 %	33.3 %
Total		29.0 %	13.0 %	17.4 %	40.6 %	100.0 %

Source: composed by authors

The statistical significance of this relationship is confirmed by Fisher's Exact test statistical probability $p = 0.031 < 0.05$, so there is a statistically significant basis to assert that education has impact on respondents' choice to buy travel insurance, i.e., those who have higher education, are more common customers of travel insurance.

Conclusions

The study showed that friends' recommendations have no influence on the choice of insurance products. Higher benefit rates and flexible pricing policy are also not important elements choosing an insurance company. High cost of the insurance product and unclear conditions in the insurance product purchase contract do not encourage consumers to purchase motor third party liability and property insurance. Moreover, the study did not reveal significant relationships between consumer's choice to insure a specific insurance product and consumer's encouragement to purchase insurance products using offered discounts. As well no inter-correlations between the decision to insure and familiarity with other companies' prices were noticed. Loyalty as a potential component for CASCO insurance cost calculation is irrelevant for respondents who do not buy such insurance. Meanwhile, respondents insured by travel insurance believe that loyalty is an important factor assessing the cost of this insurance. It was assessed that education, as one of the aspects of insurance pricing, was an important factor for travel insurance consumers. Property insurance consumers aim to find optimal variant between the protection granted and the price paid for it. The consumers who find themselves independent enough are inclined to purchase insurance products on the internet, whereas insurance brokerage services are more prevalent among customers with a marked feature of direct communication with the seller. Accordingly, the latter mentioned insurance brokers' customers expect to save and pay less for insurance. Consumers with higher income are inclined to insure against accidents more frequently, similarly to how respondents with higher education are more likely to purchase travel insurance.

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NE GYVYBĖS DRAUDIMO PRODUKTŲ PIRKIMO PRIEŽASČIŲ TYRIMAS

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Santrauka

Draudimo paslaugos yra vienos sudėtingiausių paslaugų tiek tarp bendrai visų paslaugų, tiek ir tarp joms artimų finansinių paslaugų. Šių paslaugų vartotojai bene labiausiai jaučia tam tikrą paslaugų, už kurias jie moka, netikrumą. Paprastai suvokti draudimo paslaugos esmę ir paslaugos funkcionavimo mechanizmą, nepatyrus nuostolių ir nesurinkus informacijos apie draudimo nuostolio kompensavimo subtilybes, vartotojams iš tiesų yra sunku. Prie draudimo paslaugų produkto pagrindinių savybių priskiriama: jo kaina (draudimo įmokos tarifas), padengiamos draudžiamos rizikos ir draudimo įmonės atsakomybės sąlygos (ypatingos sąlygos, išimtys ir franšizė).

Todėl siekiant Lietuvoje didinti draudimo paslaugų paklausą išlieka aktuali problema atskleisti, kaip vartotojai suvokia šią paslaugą, kokius kolektyviškumo, ekonomiškumo, poreikio egzistavimo, atsitiktinumo, išmatuojamumo ir tos pačios rizikos egzistavimo požymius akcentuoja rinkdamiesi draudimo paslaugos kainą. Tai leistų draudimo paslaugų bendrovėms peržiūrėti savo kainodaros strategijas, įtraukiant produktų vertės teorijų taikymą priimant praktinius sprendimus, mažinant atotrūkį tarp mokamos kainos ir gaunamos vertės. Tyrimo tikslas – nustatyti veiksnius ir priežastinius ryšius, kurie lemia ne gyvybės draudimo produkto pirkimo motyvus Lietuvoje.

Siekiant identifikuoti vartotojų požiūrio į ne gyvybės draudimo produktų kainų dedamąsias, atliekant empirinį tyrimą, atlikta Klaipėdos miesto gyventojų, perkančių skirtingus draudimo produktus skirtingose draudimo bendrovėse, apklausa. Generalinė visuma – Klaipėdos miesto gyventojai. Remiantis Statistikos departamento pateiktais duomenimis, nustatyta generalinė visuma – 158 541 gyventojas. Iš viso tyrime dalyvavo 420 respondentų. Duomenims rinkti pasirinkta struktūruota anketinė apklausa (dauguma anketos klausimų – uždarieji). Anketinės apklausos būdu gauti duomenys apdoroti naudojant SPSS.15 statistinę duomenų apdorojimo programą ir *MS EXCEL* programą. Tyrimo rezultatams patvirtinti taikyti trys testai: *Pearson Chi kvadrato* testas, *Fisherio* testas (*Fisher's exact*) ir *Cramer's V*.

Atliktas tyrimas atskleidė, kad draugų rekomendacijos neturi jokios įtakos renkantis draudimo produktus. Didesni išmokų tarifai ir lanksti kainų sistema taip pat nėra reikšmingi veiksniai, renkantis draudimo bendrovę. Aukšta draudimo produkto kaina ir neaiškios draudimo produkto sąlygos neskatina vartotojų įsigyti TPVCA ir turto draudimą. Tyrimo metu nenustatyta reikšmingų ryšių tarp vartotojų pasirinkimo pirkti konkretų draudimo produktą ir vartotojų skatinimo įsigyti draudimo produktą įvairiomis akcijomis. Lojalumas, kaip vienas iš aspektų, lemiančių KASKO draudimo kainą, nesvarbus respondentams, kurie nesidraudžia šiuo draudimu. Tuo tarpu kelionių draudimu besidraudžiantys respondentai mano, kad lojalumas yra svarbus aspektas įvertinant šio draudimo kainą. Nustatyta, kad išsilavinimas, kaip vienas draudimo kainos nustatymo aspektų, buvo svarbus veiksnys tarp kelionių draudimą pasirinkusių respondentų. Respondentams, kurie draudžiasi turto draudimu, ypač svarbu atrasti optimalų variantą tarp teikiamos apsaugos ir už ją mokamos kainos. Savarankiškais save laikantys vartotojai linkę pirkti draudimo produktus internetu. Tuo tarpu tie, kurie mėgsta pirkti tiesiogiai bendraudami su pardavėju, dažniau renkasi draudimo brokerių paslaugas. Be to, rinkdamiesi draudimo brokerių paslaugas vartotojai tikisi sutaupyti ir mokėti už draudimą mažiau. Didesnes pajamas gaunantys vartotojai labiau linkę draustis nuo nelaimingų atsitikimų, o aukštesnį išsilavinimą turintys respondentai labiau linkę draustis kelionių draudimu.

PAGRINDINIAI ŽODŽIAI: *ne gyvybės draudimo produktai, kaina, vartotojų suvokiama vertė.*

JEL KLASIFIKACIJA: C83; G 22; E30; L11; Y10; D46.

KNOWLEDGE SPREAD IN LITHUANIA IN TERMS OF PUBLISHED PATENT APPLICATIONS

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ABSTRACT
The main processes of knowledge management are analyzed in this publication. Spread of knowledge was evaluated by analyzing published patent applications. All published applications for inventions subdivided into the three groups. The number of applicants (inventors) in the separate application are ascertained. The number of published applications in the International Patent Classification sections for the 2005-2014 years are ascertained. Selecting published applications R&D and high technology development directions are described.
KEY WORDS: *knowledge creation, knowledge value, intellectual capital, patent application.*

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Introduction

Actual or potential competition is generally considered a primary driver of innovation. Global competition as the foundation of industrialized economics has shifted from natural resources to intellectual assets in such a way that current era is titled knowledge era. It is now widely recognized that global competitiveness is dependent on the capacity of economies to acquire knowledge capital and to apply new knowledge through a highly trained and specialized workforce. Firms have always been oriented toward accumulating and applying knowledge to create economic value and competitive advantage and the need to do it has never been more. The term "knowledge-based" or "learning economy" has emerged to describe those economies in which the production, distribution and use of knowledge are the main drivers of growth, wealth creation and employment across all industrial sectors.

Problem: to determine the spread of knowledge in Lithuania is necessary to investigate submission of an applications to Patent Office.

Purpose: to produce the situation of published applications.

Object: invention applications published under 21 and 26 articles of Lithuania Republic Patent Law.

Tasks of the article:

- To review literature (scientific and official documents) of knowledge management.
- To investigate situation of published applications for 2015–2014 years.

Methods: analysis and summary of scientific literature and official documents, selection of published applications from The Official Bulletin of the State Patent Bureau of the Republic of Lithuania for 2005–2014 years.

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Knowledge

Knowledge can be considered in a variety of ways. Classifying knowledge helps organizations to identify the different types of knowledge. The organization that wishes to cope dynamically with the changing environment must be able to create knowledge better and faster than its competitors (Bratianu, Orzea, 2010). Knowledge creation is defined as a continuous process (Nejatian, et al, 2013). Creativity is associated with that part of the innovation process which is labeled as "idea generation" (Bratianu, Orzea, 2010). Within business and knowledge management (KM), two types of knowledge are usually defined, namely explicit and tacit knowledge. The former refers to codified knowledge, such as that found in documents, while the latter refers to non-codified and often personal/experience-based knowledge. Knowledge management and organizational learning theory almost always take root in the interaction and relationship between these two types of knowledge.

The first time term "knowledge worker" was mentioned by Peter Drucker in his work "Landmarks of To-morrow" (1959) (Daugelienė, 2007). The conception of knowledge workers presented in the latest works of Drucker (Drucker, 1986; Drucker, 1999; Drucker, 2002). According Drucker the most valuable assets of a 20th century company was its production equipment. The most valuable asset of a 21st century institution (whether business or non-business) will be its knowledge workers and their productivity. Six major factors determine knowledge-worker productivity (Drucker, 1999: 83–84).

- Knowledge-worker productivity demands that we ask the question: "What is the task?"
- It demands that we impose the responsibility for their productivity on the individual knowledge workers themselves. Knowledge Workers have to manage themselves. They have to have *autonomy*.
- Continuing innovation has to be part of the work, the task and the responsibility of knowledge workers.
- Knowledge work requires continuous learning on the part of the knowledge worker, but equally continuous teaching on the part of the knowledge worker.
- Productivity of the knowledge worker is not-at least not primarily-a matter of the *quantity* of output. *Quality* is at least as important.
- Finally, knowledge-worker productivity requires that the knowledge worker is both seen and treated as an "asset" rather than a "cost." It requires that knowledge workers *want* to work for the organization in preference to all other opportunities.

Peter Senge defines a learning organization as: "At the heart of a learning organization is a shift of mind – from seeing ourselves as separate from the world to connected to the world, from seeing problems as caused by someone or something "out there to seeing how our own actions create the problems we experience. A learning organization is a place where people are continually discovering how they create their reality. And how they can change it" (Senge, 2004: 13). Peter Senge (Senge, 2004) suggests that there are five "disciplines" associated with the learning organization: systems thinking, personal mastery, mental models, building shared vision, and team learning. Peter Senge's Fifth Discipline is a classic work in systems thinking (Pollock, 2002). Systems thinking expands individual thinking perspectives and improves individual and organizational decision-making. P. Senge (1990) emphasizes team learning and team skills rather than individual skills and individual learning as the key to competitiveness (OECD, 2000).

Karl-Erik Sveiby, author of the book The New Organizational Wealth (1997), has described "Ten Knowledge Strategy Issues" in a white paper entitled "A Knowledge-based Theory of the Firm to Guide Strategy Formulation" (Sveiby, 2001). This model is based on nine primary knowledge transfers, and seeks to maximize the enterprise-value as a whole. Sveiby presents this model as a way of understanding the enterprise from a "knowledge-based perspective".

Definition of knowledge in Oxford dictionary (Oxford dictionary, 2014): 1. Facts, information, and skills acquired through experience or education; the theoretical or practical understanding of a subject. 1.1. The sum of what is known: *the transmission of knowledge*. 1.2. Information held on a computer system. 1.3. *Philosophy:* True, justified belief; certain understanding, as opposed to opinion.

Definition of knowledge in Meriam Webster`s Collegiate Dictionary (Dictionary, 2014): information, understanding, or skill that you get from experience or education; awareness of something: the state of being aware of something; the fact or condition of knowing something with familiarity gained through experience or association: acquaintance with understanding of a science, art, or technique; the fact or condition of being aware of something: the range of one's information or understanding; the circumstance or condition of apprehending truth or fact through reasoning: cognition; the fact or condition of having information or of being learned; the sum of what is known: the body of truth, information, and principles acquired by humankind.

Nedella and Paun presented complex definition of knowledge: "Knowledge is a more operational and extensive concept than information from the content, meaning, value and size point of view, with a high level of context dependence and pattern understanding (considered as cumulated inventories of information describing reality at a profound level and allowing its transformation in order to reach certain objectives). Knowledge has the capacity to produce value and is the element on which individual and organizational competences are based on" (Nedella, Paun, 2009: 746).

The concept of tacit knowledge was originally developed by Polanyi (1958/1978 and 1966). Knowledge Management in the Learning Society patent (OECD, 2000). Polanyi in 1958 introduced the term into modern circulation by referring to a component of human knowledge distinct from but complementary to knowledge explicit in conscious cognitive processes. Much knowledge is transcribed into a language, onto a storable, transportable medium. It is thus codified-by the use of some code (a language) the knowledge is turned into messages. Tacit knowledge, by contrast, has not undergone this transformation. A standard example of tacit knowledge is the knowledge of how to ride a bicycle (Cowan, Gert van de Paal, 2000). Polanyi in 1966 argued that knowledge can be classified into two broad categories: explicit/codified knowledge and tacit knowledge. The first category is articulated and transmitted in formal language, including grammatical statements, mathematical expressions and models. It can be processed by computers, transmitted electronically or stored in databases. For example, patents, trademarks, business plans, marketing research and customer lists are all forms of explicit knowledge, which can be documented, archived and codified. Conversely, it is difficult (though not impossible) to articulate tacit knowledge in formal language as it comprises subjective insights, hunches and intuition. In a sense, it is context-specific and often lies within the individual. Tacit knowledge is obtained through experience and learning by doing. Very often, it is internalized to such an extent that it is taken for granted. In other words, it is know-how contained in people's heads (Sulaiman et al, 2009) Michael Polanyi in 1966 argues that human beings obtain new knowledge through their individual, active, and subjective shaping and integration of experience, which he calls "tacit knowing" (Soviar, Zavodska, 2011). As Michael Polanyi (1967: 4) wrote in The Tacit Dimension, we should start from the fact that "we can know more than we can tell". He termed this prelogical phase of knowing as "tacit knowledge" (Smith, 2003).

In 1985, product developers at the Osaka-based Matshusita Electric Company were hard at work on a new home-bread-making machine, but they were having trouble getting the machine to knead dough correctly. Software developer Ikuko Tonaka proposed a creative solution. Ikuko Tanaka's innovation illustrates a movement between two very different types of knowledge. The end point of that movement is "explicit" knowledge: the product specifications for bread-making machine. Explicit knowledge is formal and systematic. For this reason, it can be easily communicated and shared. But the starting point of Tanaka`s innovation is another kind of knowledge that is not easy expressible-"tacit" knowledge". Tacit knowledge consists partly of technical skills the kind of informal skills captured in the term "know-how". At the same time, tacit knowledge has an important cognitive dimension. The distinction between tacit and explicit knowledge suggests four basic patterns for creating knowledge in any organization: 1. From Tacit to Tacit. 2. From Explicit to Explicit. 3. From Tacit to Explicit. 4. From Explicit to Tacit (Nonaka, 1991).

Bratianu and Orzea (Bratianu, Orzea, 2010: 42) emphasize "The study of literature revealed that there are three distinct phases of knowledge management: before the 90s, the early 90s and the late 90s". There are at least three accounts of generations of knowledge management: 1. In the first phase of knowledge management mangers focused on data and information processing, and on information systems management. The goal was to observe, gather, store in data bases, and manage existing knowledge in information systems as any other assets. 2. In the second phase, knowledge management focused on the organizational knowledge sharing process. 3. In the third phase the focus changed to the sources and stimulating factors of knowledge creation (Vorakulpipat, Rezgui, 2008; Bratianu, Orzea, 2010).

The theory of knowledge creation was first introduced by Nonaka (Nonaka, 1991). According Nonaka (Nonaka, 1991) in an economy where the only certainty is uncertainty the one sure source of lasting competitive advantage is knowledge. When markets shift, technologies proliferate, competitors multiply, and products become obsolete almost overnight, successful companies are those that consistently create new knowledge, disseminate it widely throughout the organization, and quickly embody it in new technologies and products. Nonaka formulated: "These activities define the "knowledge-creating" company, whose sole business is continuous innovation" (Nonaka, 1991: 162). As for the process function, knowledge managers can lead and facilitate knowledge creation, accumulation and sharing of tacit knowledge activities by socially nurturing a "good" Ba (physical and nonphysical environment) for converting individual knowledge into organizational knowledge (Nonaka and Konno, 1998), contrasting re-use and distribution of explicit knowledge in the Western tradition (Nonaka, Konno, 1998).

2. Knowledge creation

SECI model. The SECI model is the spiral, interaction process of knowledge conversion between tacit and explicit knowledge (Nonaka et al., 2000; Nejatian, et al., 2013). The theory of organizational knowledge creation defends that tacit and explicit knowledge are complementary and interact with each other in creative activities carried by individuals and groups. The knowledge conversion includes four modes: socialization, externalization, combination, and internalization. The socialization highlights the conversion of tacit to new tacit knowledge through shared experience (e.g. apprenticeship). The externalization mode focuses on the conversion of tacit knowledge to explicit knowledge by creating concepts articulating tacit knowledge (e.g. metaphor, analogy and model). The combination mode refers to the conversion of explicit knowledge to new explicit knowledge that is more systematic. The internalization mode refers to embodying explicit knowledge into tacit knowledge through learning by doing. It is required for organizations to establish place or space, "ba", to create knowledge. Four types of "ba" within the SECI process are identified: originating "ba", dialoguing "ba", systemizing "ba", and exercising "ba". Originating "ba" is a common place for sharing experience through face-to-face interactions. Dialoguing "ba" is a place where mental models and skills are articulated by common terms or concepts. Systemizing "ba" is a place of collective and virtual interaction, where people can have activities through on-line networks or any computer technologies. Exercising "ba" is the place for embodying explicit knowledge through virtual interaction (Nonaka, Konno, 1998). Knowledge assets are intangible resources that contribute to value creation. They can be inputs or outputs of the SECI process (Jafari, et a.l, 2009; Bratianu, Orzea, 2010).

Extended SECI model. Uotila et al. (2005) designed an extended version of the SECI model-two new knowledge conversion modes focusing on self-transcending knowledge (not yet embodied tacit knowledge) and two new ''bas'' are added to the extension model. Two additional modes are identified: visualization and potentialization. The visualization mode is the conversion from self-transcending to tacit knowledge through visions, feelings, mental model, etc. This mode takes place in "imagination ba". Forecasts, scenarios and expert-based statements can be made. A combination of scenarios and expert-based statements may be suitable. The potentialization mode is the conversion from tacit to self-transcending knowledge by sensing the future potentials and seeing what does not yet exist. The potentialization process takes place in "futurizing ba" (Nejatian, et al., 2013).

7C model. 1996 Prasad proposed seven elements (called 7Cs) to team cooperation philosophy (Prasad, 1998): 1. Collaboration: this describes a process of value creation that a traditional structure of communication and teamwork cannot achieve. 2. Commitment: empowered teams define the tasks and prioritize areas to make breakthrough opportunities. 3. Communications: effective communication is the precursor to meaningful collaboration. 4. Compromise: there is compromise and input from every discipline so that simultaneous development of the product, process, and associated tooling can be achieved. 5. Consensus: project team and management members may disagree on some issues, but teams' support on the requirements and a commitment to project objectives from the very outset is essential. 6. Continuous improvement: product or process design teams work toward the total elimination of waste. 7. Coordination: Coordination involves actors performing interdependent activities that achieve goals, and its analysis includes goal decomposition, resource allocation, synchronization, group decision making, communication and the preparation of common objectives. The "7C model" for understanding organizational knowledge creation is proposed by Oinas-Kukkonen (2004). The 7Cs (which consist of Connection, Concurrency, Comprehension, Communication, Conceptualization, Collaboration, and Collective intelligence) play a critical role in the knowledge creation process. The 7C model is described as the dimension of different contexts: technology, language, and organizational contexts. In the technology context, Internet "connection" can provide knowledge for several "concurrent" users. In the language context, "comprehending" and "communicating" are introduced as the important factors when information is provided to users. In the organizational context, knowledge "conceptualization" can articulate knowledge through interaction among people ("collaboration"). These six "C"s lead to a greater sense of togetherness and "collective intelligence". The 7C model is not linear, but a multiple-cycle spiral process. Four key phases or sub-processes driven within the knowledge creation exercise are proposed: comprehension, communication, conceptualization, and collaboration. Comprehension refers to a process of surveying and interacting with the external environment and embodying explicit knowledge into tacit knowledge by "learning by doing" (similar to internalization in the SECI model). Communication refers to a process of sharing experiences (similar to socialization in the SECI model). Conceptualization refers to a collective reflection process articulating tacit knowledge to form explicit concepts and systemizing the concepts into a knowledge system (similar to externalization and combination in the SECI model). Collaboration refers to a true team interaction process of using the produced conceptualizations within teamwork and other organizational processes (Oinas-Kukkonen, 2004; Oinas-Kukkonen, 2005; Raisanen, Oinas-Kukkonen, 2008).

Combined research model. To compete in a dynamic global market, the need for tools and decision-making technology increases. Heinrichs and Lim propose the "combined research model", combining organizational decision models and competitive intelligence tools. Four factors of knowledge creation and strategic use of information competence are identified (Heinrichs, Lim, 2005):

- Pattern discovery: pattern discovery drives organizations to create new knowledge from existing knowledge such as past decisions, past solutions, and diagnostic evaluation of past rules and models.
- Strategy appraisal: appraising the impact of a strategy is necessary before deciding to continue or develop new niches, and allows organizations to develop an historical knowledge base regarding the success and failure of past strategic decisions.
- Solution formulation: formulated solutions are key components affecting insight generation competence and can gain higher confidence of knowledge workers.
- Insight generation: Insight generation involves observing and interpreting charts, graphs, tables, and other information to derive meaningful ideas, directions, and solutions for the organization. Insights can provide guidance to innovative problem solving and strategic decision-making.
- Value creation: the third generation knowledge management.

3. Knowledge value

The relationship between value creation and knowledge management has been argued by several researchers.

One of the key authors in the area of intellectual capital is Sveiby (Sveiby, 2001), who has developed a knowledge-based theory of the firm to guide in strategy formulation. He distinguished between three families of intangible assets. The external structure family consists of relationships with customers and suppliers and the reputation (image) of the firm. Some of these relationships can be converted into legal property such as trademarks and brand names. The value of such assets is primarily influenced by how well the company solves its customers' problems, and there is always and element of uncertainty here. The internal structure family consists of patents, concepts, models, and computer and administrative systems. These are created by the employees and are thus generally owned by the organization. The structure is partly independent of individuals and some of it remains even if a large number of the employees leave. Competence can be defined as the sum of knowledge, skills and abilities at the individual level.

Bose (2004) presented some of the currently used measures for knowledge assets or intellectual capital. Bose affirm that presented metrics are very helpful and desirable for the purpose of identifying and development future measures. Currently used measures for knowledge (intellectual capital) (Bose, 2004):

- Based on the intellectual Capital Management (ICM) Group study in 1998: value extraction (including patents pending); customer capital; structural capital; value creation; human capital.
- Based on the Canadian Management Account's (CMA) 1999 report on measuring knowledge assets: including number of patent filed.
- Roos et al. (1998) developed the following indicators: human capital (competence, attitude, intellectual agility); structural capital (relationships, organization, renewal and development) – including revenues from patents.
- Based on the Universal Intellectual Capital Report: financial focus; customer focus; process focus; renewal and development focus-including average age of company patents and patents pending; human focus.

Qureshi and Briggs in 2006 suggest, that the key contribution is in making explicit the relationship between knowledge management and collaboration and in doing so explanatory power is provided to the Intellectual Bandwidth model. The Intellectual Bandwidth model posits a variation to the conventional hierarchy of understanding: data (understanding *symbols* in the context where they were collected), information (understanding *relationship* among data in the context in which they are presented), knowledge (understanding *patterns* in the context which they emerge) and wisdom (understanding principles-wisdom entails understanding the causes and consequences underlying patterns, and the context in which they manifest). The Intellectual Bandwidth model posits that an organization's potential to create value is determined by its intellectual assets and collaboration capabilities (Quereshi, Briggs, 2006).

Value creation is gradually being established as the third generation of knowledge management. Five major factors toward value creation emerge from the literature: 1. Human networks. 2. Social capital. 3. Intellectual capital. 4. Technology assets. 5. Change processes (Vorakulpipat, Rezgui, 2006; Vorakulpipat, Rezgui, 2007; Vorakulpipat, Rezgui, 2008).

In order to find out the prevailing methodological features among the intellectual capital measurement methods, the comparative analysis of different methods was performed by Vaškelienė (Vaškelienė, 2007). According to the results different intellectual capital measurement methods are based on different management paradigms, and differ in their theoretical background, methodological approach, number and type of indicators used, benchmarks applied, techniques implemented and other features. Brief results of the comparison of intellectual capital measurement methods included 30 titles of methods (including Citation-Weighted patents, Balanced Scorecard, Skandia Navigator) (Vaškelienė, 2007).

Mačerinskienė and Survilaite (Mačerinskienė, Survilaite, 2011) accentuates that intellectual capital is very important for company's value added and intellectual capital can increase it.

Todorova (Todorova et al., 2012) show that values generated by CreMS (Credit and relationship management system) fall into the following major categories: efficiencies; improved customer service and relationships; learning and collaboration; effectiveness; strategic response and compliance and risk reduction.

Skandia Navigator is a tool for evaluating financial and intellectual capitals. Skandia Navigator's intellectual capital index helps measure the changes (positive or negative) in a firms's overall market value based on both financial and intellectual capitals. A brief description of each intellectual capital element of the Skandia Navigator is: human capital; structural capital; customer capital; organizational capital; innovation capital expressed as intellectual property and other intangible assets and values; process capital; intellectual property-this is patents, trademarks, copyrights, designs and other specifications; other intangible assets-this is culture (Bose, 2004).

Several authors (Mouritsen et al., 2001; Gao et al., 2002; Bose, Thomas, 2007) saw the true value of knowledge in understanding the difference between visible and invisible intellectual capital and maximized the five success factors: (1) financial; (2) customer; (3) process; (4) renewal and development; and (5) human. Knowledge management became part of visualizing and cultivating knowledge (intellectual capital) and found ways to leverage an organization's intangible intellectual assets for more value. Along with knowledge management, organizations can create and utilize the best possible capital hidden in people's brain via tools for measuring and presenting intangible assets (Mouritsen et al., 2001; Gao et al., 2002; Bose, Thomas, 2007).

Ramanauskaitė and Rudžionienė in 2013 described four groups of methods for intellectual capital valuation: 1. Classification according to general principles of valuation (Market Capitalization Methods-MCM; Return of Assets Methods-ROA; Direct Intellectual Capital Methods-DIC, including citation-weighted patents; Scorecard Methods-SC, including Skandia navigator, intellectual capital index. 2. Classification according to the valued objects (Holistic, Atomistic). 3. Classification according to the use of a monetary in the process of valuation (Monetary, Non-monetary). 4. Classification according to the expression of valuation result (Financial valuation, Value measurement, Value assessment, Measurement-including citation-weighted patents) (Ramanauskaitė, Rudžionienė, 2013).

The impact of knowledge management on an organization's performance is strongly tied to the ability of an organization to identify where knowledge management will be of most value that contributes to its market strength. In essence, intellectual capital is the knowledge capability of an organization to convert knowledge, skills and expertise into profitable intellectual assets, and include inventions, technical know-how, design approaches, computer software and programs. When these assets become protected by patents, copyrights, trademarks, and trade secrets, they assume the character of an intellectual property (Bose, Thomas, 2007). Intellectual property such as patents, technologies, ideas, and designs are what keep leading companies ahead of their competition.

Paris Convention for the protection on Industrial Property declare: "The protection of industrial property has as its object patents, utility models, industrial designs, trademarks, service marks, trade names, indications of source or appellations of origin, and the repression of unfair competition" (WIPO, 2014, article 1: 2).

4. Science and technology indicators

The main challenges for science and technology indicators are manifold.

1. The Technology Balance of Payments (TBP) series are data extracted from national sources (balance of payments or survey results) with the aim of measuring the flow of technological know-how and services into and out of the country concerned. The OECD manual "Proposed Standard Method of Compiling and Interpreting Technology Balance of Payments Data", TBP Manual 1990, gives the methodology for the international standards for compiling such data. The TBP registers the commercial transactions related to international technology transfers. The series quoted comprise money paid or received for the acquisition or use of patents, licenses, trademarks, designs, inventions, know-how and closely related technical services and for industrial R&D carried out abroad, etc (TBA manual, 1990).
2. It has been long understood that the generation, exploitation and diffusion of knowledge are fundamental to economic growth, development and the wellbeing of nations. Central to this is the need for better measures of innovation. Innovation is a continuous process. Over time the nature and landscape of innovation have changed, and so has the need for indicators to capture those

changes and provide policy makers with appropriate tools of analysis. Globalization has led to dramatic increases in access to information and new markets for firms. Owing to advances in technologies and greater flows of information, knowledge is more and more viewed as a central driver of economic growth and innovation. The aim of the third edition of the Oslo Manual is to provide guidelines for the collection and interpretation of data on innovation. Firms constantly make changes to products and processes and collect new knowledge, and it is more difficult to measure a dynamic process than a static activity. With the objective of capturing this process, the Oslo Manual presents guidelines for collecting data on the general process of innovation (for example, innovation activities, expenditures and linkages), the implementation of significant changes in the firm (i.e. innovations), the factors that influence innovation activities, and the outcomes of innovation (Oslo manual, 2005).

3. The Patent Manual follows on from the TBP Manual (on international trade in technology) and the Oslo Manual (on innovation surveys), and is an essential item for fuller understanding of the process of technological innovation and dissemination. Alongside other science and technology indicators such as R&D expenditure and personnel, data on the technology balance of payments, and so on, patents provide a uniquely detailed source of information on inventive activity. Patent data provide detailed information on countries' technological activities, covering long periods through the time series available. The main information that can be drawn from patent documents relates to the type of technology covered by the claim, the name and nationality of the inventor (individual, government agency, private corporation), links between a new patent and knowledge in earlier ones and scientific publications, the economic sector where the invention originated, and the fields and markets covered by the patents. The International Patent Classification (IPC) entered into force in 1975, under the Strasbourg Agreement of 1971 which determined its principles and form of operation. IPC is a retrieval system for inventions claimed in patent documents and for certain significant information only available in descriptions. IPC is designed so that each technical object to which a patent relates can be classified as a whole. A patent may contain several technical objects and therefore be allocated several classification symbols. An invention is normally classified according to its function or intrinsic nature, except when its application alone determines its technical characteristics. IPC is a tiered structure in which all techniques are classified in sections, classes, subclasses, groups and subgroups. Each subgroup may be further subdivided. Every patent document receives one or more classification symbols corresponding to the invention claimed in the application. So that the classification can be understood, the designations of the various IPC symbols are defined by IPC entry labels. Coding rules, applied generally or locally, have also been established. Examiners have precise instructions on how to classify a claim in accordance with the technical description. The International Patents Classification is revised and if necessary amended every five years, but not retroactively. The first edition of the Classification was in force from September 1, 1968 to June 30, 1974. From January 1, 2011, onwards, the division of the Classification into core and advanced levels was discontinued and each new version of the IPC is indicated by the year and the month of the entry into force of that version, for example, IPC-2011.01. Today IPC version-IPC-2014. It contains about 80000 entries, each represented by an alphanumeric symbol corresponding to one of the tiered divisions in the classification (WIPO, IPC full edition, 2014). Database Espacenet offers free access to more than 80 million patent documents worldwide, containing information about inventions and technical developments from 1836 to today (EPO, Espacenet, 2014).

When a patent corresponds to multiple technological fields, not only the first code of the International Patent Classification (IPC) indicated on the patent is taken into account but all of them. Based on the data on patent applications by IPC subclass, Eurostat calculates data on patent applications in high technology fields. High tech patents are counted following the criteria established by the Trilateral Statistical Report, where the subsequent technical fields are defined as high technology: Computer and automated business equipment; micro-organism and genetic engineering; aviation; communications technology; semiconductors; lasers (Eurostat, Patent classifications (...), 2009).

Patentable inventions. European patents shall be granted for any inventions, in all fields of technology, provided that they are new, involve an inventive step and are susceptible of industrial application (EPO, European Patent Convention, article 52, 2013).

Exceptions to patentability. European patents shall not be granted in respect of: (a) inventions the commercial exploitation of which would be contrary to "ordre public" or morality; such exploitation shall not be deemed to be so contrary merely because it is prohibited by law or regulation in some or all of the Contracting States (EPO, European Patent Convention, article 53, 2013).

Novelty. An invention shall be considered to be new if it does not form part of the state of the art. The state of the art shall be held to comprise everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the European patent application (EPO, European Patent Convention, article 52, 2013). Under the EPC, the novelty of an invention depends upon the "state of the art" as of the filing date (or the priority date, if one is available) of the patent application in question. The general rule is: the first to file, wins. If no one else has made the invention public as of the filing date, or has filed, at an earlier date, a patent application for the same invention, you win. The "state of the art" includes: 1. Everything made available to the public, before the date of filing the European patent application in question, by means of: a. Written description; b. Oral description; c. Use; or d. in any other way. 2. Other European patent applications (EPO, European Patent Convention, 2013).

The search is carried out by highly specialized examiners. The aim is to find the state of the art at the date of filing, in order to determine whether the invention is new and involves an inventive step. Examiners search in databases containing millions of patent documents and non-patent literature. State-of-the-art searches include:

1. World's largest collection of documents (more than 600 million records of patent and non-patent literature documents in over 120 databases, more than 7000 journals, databases updated daily).

2. High-performance EPOQUE search tool (used by examiners, a worldwide benchmark, used by over 40 patent offices, including Australia, Brazil, Canada and China).

3. Machine translation to extend the range of easily accessible information (Goetz, 2014).

4. The combination of science and technology (S&T) and human resources (HR) is seen as a key ingredient of competitiveness and economic development and also as a means of safeguarding and enhancing our environment over the coming decades. New technologies are being developed and applied, very quickly in many cases. An increasingly skilled and effective workforce will be required if countries are to negotiate the rapid change and new challenges that are emerging in S&T. Highly skilled human resources are essential for the development and diffusion of knowledge and constitute the crucial link between technological progress and economic growth, social development and environmental well-being. The purpose of this manual is to provide a framework for compiling data on stocks and flows of Human Resources in Science and Technology, for analyzing profiles and trends and for preparing up-to-date series for the users (policymakers and analysts in government, related agencies and the private sector (notably industry), and academics) (Canberra manual, 1995).

5. Within the realm of science and technology indicators, data relating to research and development statistics are undoubtedly of the highest quality since the work has extended over four decades. Nevertheless, changes in the nature of research and development have created new challenges, necessitating a review of how to maintain the relevance of current measurement methods. The sixth revision of the Frascati manual, the most important and standard methodological work for the collection of research and development statistics with worldwide acceptance, first published by OECD in 1963, marks the most recent attempt to improve the statistical methodology for measuring research and development (Frascati manual, 2002; UN Report (...), 2004).

6. A new ad hoc publication on patent statistics was released in September 2003. The aim of this manual is to provide basic information about patent data used in the measurement of science and technology (S&T),

the construction of indicators of technological activity, as well as guidelines for the compilation and interpretation of patent indicators. Patent data are complex. It is necessary to have precise knowledge of patenting laws and procedures and the patenting behavior of companies to be able to apply proper controls and filters to the data, obtain meaningful indicators, and interpret them correctly. The complexity of patent data is due to various factors, e.g. the diversity of patent offices and procedures (which can be national or regional in their judicial scope); the variety of ways to file for patent protection (national or international) and the changing behavior of applicants in this regard; and the patent document's differing status and dates in line with the complexity of procedures (applications, grants, international phase, etc.). In addition, experts may still be debating some patent information (value indicators, number of citations / claims, etc.). The Compendium of Patent Statistics presents various patent indicators to reflect the recent trends in innovative activity across a wide range of OECD member and non-member countries. Alongside other science and technology indicators, such as R&D expenditure and personnel, innovation survey data, etc., patents provide a uniquely detailed source of information on inventive activity. Patent data complement other S&T data, and it is generally good to use several types of data in conjunction (R&D, innovation, patents) as a means of cross-validation and to help in interpretation. Patent-based statistics reflect the inventive performance of countries, regions and firms as well as other aspects of the dynamics of the innovation process (cooperation in innovation, technology paths, etc.). Patent indicators, along with other science and technology indicators, thus contribute to our understanding of the innovation system and factors that support economic growth. These indicators have their strengths and weaknesses; they also reflect various stages in the innovation process (OECD Patent Statistics Manual, 2009).

National patenting activity depends on institutional factors, the nature of the legal system and various domestic factors related to the size of the country: the size of the population, of the economy (GDP), and of its R&D and research community. The statistical properties of patent data are determined by their legal characteristics and by their economic implementation. According to the Patent Statistics Manual a patent document contains a large amount of information, all of which has potential for statistical analysis. For statistical purposes, information contained in a patent document can be grouped into three distinct categories (OECD Patent Statistics Manual, 2009): 1. Technical description of the invention. 2. Development and ownership of the invention. 3. History of the application. Among the few available indicators of technology output, patent indicators are probably the most frequently used. Empirical research has shown that patents are frequently a good predictor of economic and technological performances. Patents statistics are also used to map certain aspects of the dynamics of the innovation process (e.g. co-operation in research, diffusion of technology across industries or countries, etc.), or of the competitive process (the market strategy of businesses); they are also used to monitor the patent system itself. In addition, patents are helpful for tracking globalisation patterns. Patents can also be considered as an intermediate step between R&D (upstream) and innovation (the invention is used downstream in economic processes). Patent data have advantages and disadvantages for reflecting inventive activities (OECD Patent Statistics Manual, 2009).

Their major advantages are (OECD Patent Statistics Manual, 2009): 1. Patents cover a broad range of technologies. 2. Patents have a close (if imperfect) link to invention. 3. Each patent document contains detailed information on the invention process: a reasonably complete description of the invention, the technology field concerned, the inventors (name, address), the applicant (owner), citations to previous patents and scientific articles to which the invention relates, etc. (WIPO, Standard ST.9, 2013; WIPO, Standard ST.13, 2008; WIPO, Standard ST.16, 2001). 4. The spatial and temporal coverage of patent data is unique. 5. Patent data are quite readily available from national and regional patent offices.

However, as indicators of technological activity, patents have certain drawbacks (OECD Patent Statistics Manual, 2009): 1. Not all inventions are patented. 2. The propensity to file patent applications differs significantly across technical fields. 3. Several studies have shown that the value distribution of patents is highly skewed. 4. Differences in patent law and practices around the world limit the comparability of patent statistics across countries. 5. Changes in patent laws over the years call for caution when analyzing trends over time. 6. Patent data are complex, as they are generated by complex legal and economic processes.

5. Results

The study was to review the Official bulletins for the years 2005–2014 of State Patent Bureau of the Republic of Lithuania (VPB, Valstybinio patent (...), 2005–2014). The study selected 765 valid patent application published under the Patent Law of the Republic of Lithuania (21 and 26 articles). Aggregated search results are presented in Figure 1.

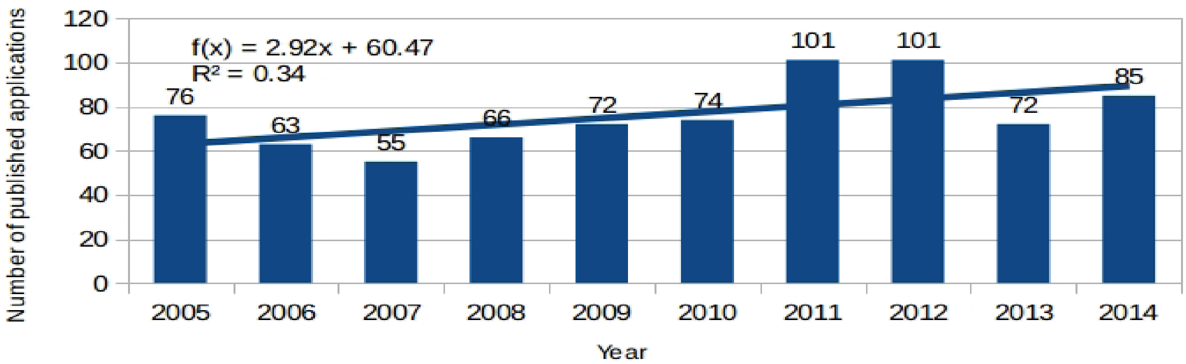

Figure 1. Published applications for inventions made in 2005–2014

Source: developed by the author based on the survey

It was found that the patent for an invention is characterized by the provision in 2005–2014 rising trends (linear regression type, coefficient of determination $R^2 = 0.34$).

In Table 1 all published applications for inventions made in 2005–2014 was subdivided into the following groups.

Table 1. Groups of published applications for the 2005–2014 years

Groups	**Applications**		**All applications**
	Lithuania	**Foreign countries**	
Private persons	300	27	327
Organizations	237	67	304
Universities	134	0	134
Total			765

Source: developed by the author based on the survey.

Applicants of private persons and organizations to published applications for the invention exceeds the number of applications submitted by universities.

It was further analyzed the extent to which applicants (inventors) are in a separate published application.

Table 2. The number of applicants in the application in different groups

Groups	**The number of applicants in the application**										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**12**
Private persons	231	122	33	60	20	24	7	0	0	0	0
Organizations	114	122	132	152	130	72	21	24	18	0	12
Universities	9	80	99	104	80	48	7	0	0	10	0
All applicant	354	324	264	316	230	144	35	24	18	10	12
In all applicant	1731										

Source: developed by the author based on the survey.

According to the data in Table 2, it can be said: mostly applicants in private persons groups are mostly 1–2 applicants in every application; mostly applicants in organizations group are mostly 4–3–2–1 applicants in every application; mostly applicants in universities group are mostly 4–3–2–5 applicants in every application. In total published 765 applications are 1731 applicants.

It was found in the 2005–2014 published applications dynamics:

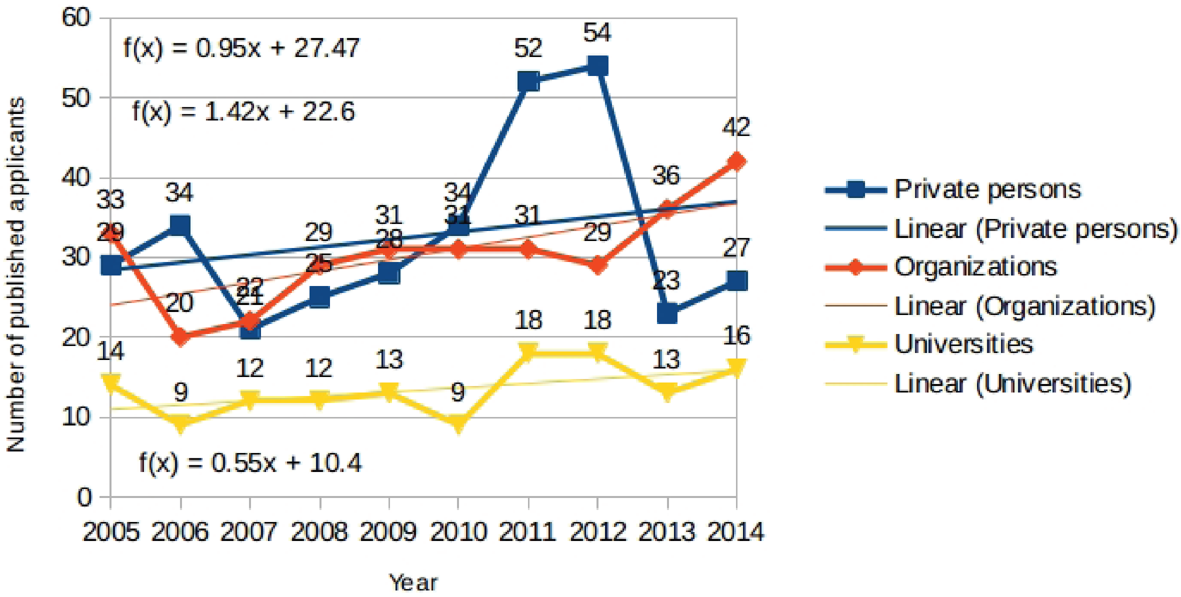

Figure 2. Published applications for inventions of different groups made in 2005–2014

Source: developed by the author based on the survey.

It was found that the applications for an invention is characterized by providing the year 2005–2014 growing linear trend in all groups.

Next set of inventions breakdown of applications by IPC section.

Table 3. The number of published applications in the IPC sections for the 2005–2014 years

IPC section	Published applications
A section. Human necessities	180
B section. Performing operations; transporting	120
C section. Chemistry; metallurgy	97
D section. Textiles; paper	3
E section. Fixed constructions	71
F section. Mechanical engineering; lighting; heating; weapons; blasting	116
G section. Physics	114
H section. Electricity	64
Total	765

Source: developed by the author based on the survey.

According to the data in Table 3, it can be said that the main R & D specialization in the Republic of Lithuania is: human necessities; performing operations and transporting; mechanical engineering, lighting, heating, weapons, blasting.

It was found that the applications for high technology fields included next IPC subclasses:

Table 4. The number of published applications for high technology fields in the IPC subclasses for the 2005–2014 years

IPC subclasses	Number of applications
G01H subclass. Measurement of mechanical vibrations or ultrasonic, sonic or infrasonic waves	14
GO1B subclass. Measuring length, thickness, or similar linear dimensions; measuring angles; measuring areas; measuring irregularities of surfaces or contours	14
H01S subclass. Devices using stimulation emission (Lasers)	13
H01L subclass. Semiconductor devices; electric solid state devises not otherwise provided for (Semiconductors)	12
G01F subclass. Measuring volume, volume flow, mass flow, or liquid level; metering by volume	9
H03K subclass. Tuning resonant circuits; selecting resonant circuits	7
G01R subclass. Measuring electric variables; measuring magnetic variables	5
C12N subclass. Micro-organisms or enzymes; compositions thereof; propagating, preserving, or maintaining micro-organisms; mutation or genetic engineering; culture media	5
Total	79

Source: developed by the author based on the survey.

According to the data in Table 4, it can be said that the main applications for high technology fields in the Republic of Lithuania included next subclasses: G01H, G01B, H01S, H01L, G01F, H03K, G01R, C12N. It is established that inventors filed 128 applications for high technology fields.

Conclusions

When analyzing knowledge management it is important to pay attention to various definitions of term – knowledge, its classification. A lot of scientific literature concentrates on defining the factors that influence the productivity of knowledge workers and how do they operate in learning organizations. Main models that explain the creation of knowledge within organization are SECI, modified SECI, 7 C, and combined model of knowledge creation. When measuring knowledge the concept of intellectual capital becomes important, as well as patent information, which provides quantifiable indicators for evaluation.

Main tendencies of knowledge creation based on patent information are – among private inventors application for patent usually is submitted by 1–2 inventors, among organizations applications are submitted by 4–3–2–1 inventors, in universities 4–3–2–5 inventors.

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ŽINIŲ PLITIMAS LIETUVOJE PASKELBTŲ PATENTINIŲ PARAIŠKŲ POŽIŪRIU

Arimantas Bronislovas Knašas
Klaipėdos universitetas (Lietuva)

Santrauka

Šiame straipsnyje nagrinėjami pagrindiniai *žinių* termino apibrėžimai ir žinių klasifikavimo klausimai. Aprašomi pagrindiniai „žinių darbininkų“ produktyvumą lemiantys veiksniai, 5 besimokančios organizacijos dalykai. Aprašomi ir lyginami pagrindiniai žinių kūrimo modeliai SECI, išplėstas SECI modelis, 7C elementų modelis, mišrus žinių tyrimo modelis. Analizuojami mokslininkų žinių vertės kūrimo darbai, pabrėžiama intelektinio kapitalo reikšmė organizacijos veikloje ir įvairūs intelektinio kapitalo matavimo rodikliai. Išanalizavus mokslo ir technologijų rodiklių aprašymą tarptautiniuose oficialiuose dokumentuose pabrėžiama patentinės informacijos ir patentinės dokumentacijos reikšmė. Atliekant tyrimą iš 2005–2014 metų valstybinių patentų biuletenių išrinktos paskelbtos išradimų paraiškos. Nustatytos išradimų paraiškų vystymosi tendencijos, privačių asmenų, organizacijų ir universitetų paraiškų pateikimas, pagrindinės MTEP vystymo tendencijos Lietuvoje. Nustatyta: privačių asmenų grupėje paraiškas teikia 1–2 išradėjai, organizacijų grupėje – 4–3–2–1 išradėjai, universitetų grupėje – 4–3–2–5 išradėjai. Tyrimu nustatyta, kad paraiškos pagal Tarptautinę patentų klasifikaciją priskirtinos aukštosioms technologijoms.

PAGRINDINIAI ŽODŽIAI: *žinių kūrimas, žinių vertė, intelektinis kapitalas, patentinė paraiška*.

JEL KLASIFIKACIJA: D80, O31, O34.

UNIVERSITY AS AN ACTOR OF A REGIONAL DEVELOPMENT PROCESSES: PRACTICES OF THE SOUTHERN FEDERAL DISTRICT OF RUSSIA

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ABSTRACT

Author analyzed the ways of overcoming the negative tendency to the degradation of the human capital in the provincial regions of Russia and other countries of the Eastern Europe. It's shown that the important role in the processes of solving the problem should be played by the technical universities, situated in the small towns of the region. The development of the universities should be carried on according to the specific strategy, which's goal is a training of the qualified specialists, and to take as the students the local young people, which are going to live and get a job in the region in future. There are also presented a set of requirements for this kind of the strategy, which are based on the idea of the institutional projecting of the University Technopolis.

KEY WORDS: *higher education, human capital, institutional designing, regional development, technopolis.*

JEL CODES: R110, I230, I250

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Introduction

Problem. The countries of the Eastern Europe and Russia in the last two decades show the tendencies to decreasing a quality level of the human capital. The numerous researches analyzed the different aspects of the problem, such as: the demographic setting (Anderson, 2002); investment in the human resources (Tondl, 2003: 35); role of the human capital and level of the management quality, as a reason for the appearance of the gap in production level indexes between the Eastern and Western Europe (Steffen, 2008: 19). All of them agree, that the main reasons for the mentioned problems are the features of the transition from the totalitarian society to the societies, based on the mechanisms of the market economy (that differ in one country from another), and the influence of the worldwide globalization processes.

In the regions of Russian provinces the basic reasons for the degradation of the human capital are the following:

- a considerable decreasing of the professional activities' creativity of the substantial percent of the population, the reasons for which are the laying of the numerous high-technology production enterprises and people's leaving a creative sphere for the primitive commerce, government service, office work and other activities with a low level of the intellectual and creative component;

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- decreasing of the efficiency and effectiveness level of the universal secondary education and substitution of the educational values by the pupils' preparation for the primitive Concluding State Attestation procedure as a goal;
- decreasing of the effectiveness level of higher and secondary professional education: the reason for such tendency is the job shortage in the high-technology sphere and disbelief of the substantial percent of students in the prospects of getting a job, which would answer the student's special subject (Kolbachev, 2012: 7).

Besides the aforesaid, in the last decades in Russia increases the level of the inequality in a property status as a key social stratification, and a gap between the life quality and development prospects level between the people of the capital and the cities, and the people from provinces (small towns and villages), also increased the people's outflow level (first of all – the most educated part of them) from the provinces to the cities, and the flight of the human capital. The reason is the dislocation of the majority of the higher professional education institutions in the capital and the cities, as the hands-on experience in the Soviet period (Gerrber, 1995: 49).

Purpose. The research purpose is the formation of the Development Strategies of the Universities and other higher education institutions which should do their best in covering the region's social demands. The information that can be obtained as a result of the research should be used to improve the theory of the regions' educational institutions strategic development.

Object. The research object is the employees structure of the enterprises, universities and other higher education institutions in the Southern Federal District of Russia.

Tasks. The tasks of the article are the research of the region's employees educational level; the analysis of the social role played by the Technical University in the region; the application of the institutional approach to the Technical University Development Strategy; the consideration of the Technical University as a part of the regional innovation system and the formation of its Development Strategy.

Methods. The major research methods adopted by the author's scientific work are the descriptive method, typical for social and economic sciences, the method of analysis and synthesis. Author also use a human capital theory (Becker, 1991: 26), theory of the firm (Coase, 1992: 6; Williamson, 1970: 135), the triple helix theory (Shinn, 2002: 15) and the institutional designing methodology (Gooding, 1996: 62). For the empirical studies author used common statistical methods.

1. Education of the region's employees

We investigated some of the significant features of the professionals' educations. All of the investigation participants are the employees at the enterprises of the Southern Federal District of Russia. The numerous enterprises are situated in the Rostov region, Volgograd region, Krasnodar krai, and Adygeya Republic. There was examined the education of 1545 professionals of 81 enterprise. This number of the participants and enterprises means that the results of the research are representative.

There were investigated the big enterprises and business groups with more than 1000 employees. The exception was made for the finance organizations (the most of them are the regional branches of the commercial banks and finance companies with the All-Russian volume of activity), and also for some small trade enterprises. The "Mechanical engineering" group of the enterprises includes also the enterprises of the metallurgy and metal working industry, the "Chemical industry group" includes the cement production and production of the building materials. More than a half of the enterprises, which's employees took part in the investigation, are situated in the small towns of the Southern Federal District of Russia.

A special attention is paid to the professionals, which are the graduates of the higher education institution of the Southern Federal District of Russia. We also demonstrate the difference between the graduates, who studied in the higher education institutions of the cities (regions' centers) and ones who studied in the towns of middle and small size. As the regions' centers of the Southern Federal District of Russia we assigned Rostov-on-Don, Krasnodar and Volgograd. The most of the regions' universities and other higher education institutions are situated in these three cities.

In the table 1 we present a structure of the enterprises' employees, based on the location of the institution, where they got their professional education. In the table 2 there is information about how the employees' professional activity conforms to their graduates' chief subject.

According to the information in the tables, we can make a conclusion, that the most of the regional enterprises' employees are also the graduates of the higher education institutions of the same region. The number of the Moscow and Saint-Petersburg universities' graduates at the enterprises of the region is very small. It's the prove for the above said idea that the students of these universities don't see any reasons for getting jobs in provinces (even if the provinces is their birthplace).

All of the professionals, who got their educations in the institutions of the foreign countries, are the graduates of the higher education institutions, situated in the post-Soviet independent states (the former republics of the USSR). There weren't any graduates of the universities of other foreign countries among the participants of the investigation.

An overwhelming majority of the professionals, working at the agriculture enterprises, are the graduates of the higher education institutions of the small towns. It is the result of traditional Soviet Union's and Russia's policy: the most of the agricultural educational institutions in the country are situated not in the cities, but in the towns of the province. Authors consider it as a right political decision.

The object of our special interest is the information, presented in the table 2. The table shows, that a significant amount of the specialists at the enterprises got the jobs, which greatly differ from the special subject that they studied in the higher education institution. One of the reasons of that is the people's inability to get a job that was coinciding with their special subject, in their home region, and changing a place of living to get a job is not typical for Russians' national traditions (Heleniak, 2012: 98). In other hand, a meaningful number of these specialists later got a postgraduate education, some of them – in the educational institutions of the foreign countries.

2. Social role, played by the Technical University in the region

The basic tasks, that should be accomplished to solve the above-mentioned problems, are the tasks of encouraging the youth's creative initiatives. The development of such activities is a way to building a new system of values and life goals.

The University, if it's placed in the provinces, is the best fit educational institution for this kind of development, because of its key competences and other features of the activities. First of all, we speak about the "classical" University, which's curriculum is based on the ideas of natural science, technical University, and other institutions of the higher professional education. The graduates of these institutions then become the employees in the real sector of the economy.

The high enough level of the people's intellectual potential and especially increasing of this level is possible if the professional activities in the regions of the country become more creative. To develop the creativeness, in the real sector of economy should appear the new high-technology production systems and the existing productions should be modernized (the base for the modernization is to be made up of the modern technological and organizational knowledge). And the graduates of the regional educational institutions should get the jobs in these production systems.

Technical University is able to develop the important competences for this kind of workers, further the appearance of the high-technology production systems, and carry out the scientific researches and design projects (R&D). Working out a curriculum on the base of these knowledge, and using it for teaching the students makes the University a place of forming the professional community for the high-technology productions.

Table 1. Description of the employees of the enterprises in the Southern Federal District of Russia as of the Higher Education Institutions graduates

Sector of the national economy	**Number of the exami-ned enterprises**	**Percent of the employees, which are the graduates of:**				
		The institutions of higher education in Moscow and Saint-Petersburg	**The institutions of higher education in the cities of the Southern Federal District**	**The institutions of higher education in the towns of the Southern Federal District**	**The institutions of higher education in the other regions of Russia**	**The institutions of higher education in the foreign countries**
Engineering and production departments						
Mechanical engineering	11	1.3	32.4	38.3	22.3	5.7
Chemical industry	9	2.1	19.4	36.9	24.4	17.2
Food industry	10	0.3	18.4	38.1	12.3	7.1
Agriculture	12	0.6	12.3	58.4	15.6	13.1
Building	7	0.7	21.2	53.1	14.3	10.7
Transportation	8	0.5	21.4	56.7	12.1	9.3
Trading	11	0.6	24.2	49.3	13.6	12.3
Finance organizations	13	1.3	37.4	32.2	21.2	7.9
Economic and marketing departments						
Mechanical engineering	11	0.9	25.4	31.3	18.4	
Chemical industry	9	1.1	26.4	30.5	19.2	22.8
Food industry	10	0.6	21.3	32.0	16.3	29.8
Agriculture	12	0.1	18.4	40.1	13.4	28
Building	7	0.4	19.3	41.2	22.3	16.8
Transportation	8	0.5	18.7	43.1	26.1	11.6
Trading	11	0.6	20.1	47.4	20.1	11.8
Finance organizations	13	0.9	19.8	30.6	19.1	29.60.2
Managers						
Mechanical engineering	11	0.2	20.3	51.7	17.3	10.5
Chemical industry	9	0.3	21.1	45.7	21.1	11.8
Food industry	10	0.2	20.1	46.9	20.1	12.7
Agriculture	12	0.1	19.3	65.9	10.3	4.4
Building	7	0.2	20.3	51.8	17.9	9.8
Transportation	8	0.3	19.2	49.3	20.3	10.9
Trading	11	0.1	38.2	51.6	17.3	10.4
Finance organizations	13	0.2	39.3	32.7	19.3	8.5

As a result, the region should get a balance between the number of the jobs in the high-technology production sphere and the number of the graduates, whose professional thesaurus is sufficient, and who can become the employees of the new production systems.

Technical University's key competences also give a possibility to increase the quality level of the general secondary education in the region, and contribute to the revival of the secondary education's "enlightening" mission. This mission includes, first of all, the special attention, paid to teaching the natural science and mathematics, and preparing the youth for the future work in the real sector of the economy. The young people should be the ones, who will continue the education as the students in the colleges and Universities, and then become the specialists to get the "creative jobs" in the production and other sectors of the national economy.

Table 2. Description of the employees of the enterprises in the Southern Federal District of Russia: how the graduates' chief subject answers the purpose of their professional activity

Sector of the national economy	Percent of the employees, and how their chief subject answers the purpose of the professional activity			
	Completely answers	Partially answers	Doesn't answer	Answers because of the post-graduate education
Mechanical engineering	29	28	22	21
Chemical industry	34	23	12	31
Food industry	19	25	39	17
Agriculture	17	27	47	9
Building	20	24	33	23
Transportation	19	27	32	22
Trading	7	24	46	23
Finance organizations	21	23	8	48

Training of the engineering personnel in the technical University may be joined to the exercises in the economy, management and law. This "union" should be a step to creating a community of managers, which's fundamental education, is engineering, and the "extra" complementary education is management. The effectiveness of this kind of people is the highest when their job is to manage the economy or the government agency, because the most of them are experienced in creative production activities (and this experience they can get during their University studies).

Solving the problem of increasing region's human capital level is also a way to the intensifying of the innovation activities, increasing the level of the regional economy's competitiveness and promotes the social stability.

Technical University, if it's placed in the provinces and covers the regional requirements, becomes a means to fight the social disunity, decrease the gap in the life quality level and possibilities, given to the people of the capitals and cities, and of the towns and villages. It also helps to decrease the outflow of the young people (first of all – the most promising of them) from the provinces to the cities, and the flight of the human capital. These young people will study not far from their native lands, in the usual social and cultural environment. Intellectual growth of the young people in the provinces and creating the facilities for their development should also promote the homecoming of the people, who left the region for the capital, other cities, or left aboard.

The interaction between the technical and economic principles of the engineering economy is a reason for the appearance of the synergistic effects, which enrich both the economic and the engineering scientific approaches. Using of the engineering methods (based on natural science) in the economic solutions makes these solutions more constructive, creative and gives a chance to make manager's work not resemblance to a primitive money-grabbing. In other hand, using the economic criteria for the economic decision-making increases the efficiency of these decisions, and makes them more competitive.

Solving of these problems is contingent on the successful development of the engineering and management personnel, which personnel should be able to accept the challenges of the nowadays economy. The basic "source" of this kind of personnel is the higher education institutions' graduates.

3. Development Strategy of the Technical University: The institutional approach

Working out a development strategy for the technical University should be based on the understanding of their major task: generating a new knowledge; and the universities themselves should be regarded as an important part of the national and regional innovation systems.

The efficient generating of the new knowledge in general, and specially in the technical University, requires the appropriate institutional environment. This environment is to be developed in conformity with the strategic goals and tasks. Following the ideas, presented in the well-known work (Reichert, 2006: 48), we assert that working out a development strategy of the technical University is a particular case of the institutional designing – a special kind of activity, which's goal is creating or transformation of the institutional environment.

There is a well-known approach to understanding the innovations (Barras, 1990: 24), which is based on the idea of the firm as of the main source of the innovations. That's why, studying the generating of the new knowledge as a part of the firms' activities is said as the most important task. This approach may be interpreted as an idea that generating of the new knowledge is a business process only, but it is a mistake. Technical University's activities are the example of the different way of the knowledge generating.

In actual fact, technical University, as a non-commercial organization, generates a great volume of the new knowledge during its research, innovation and educational activities. But the innovations, which appear as a result of these activities, require the complex of special measures to be commercialized and introduced as a part of the production and business processes by the commercial organizations (Gomulka, 1990: 238).

In the other hand, this problem may be considered in a different ways, if we pay attention only to some features of the firm's nature. We'll analyze only the features, which are the most important for the processes of generating the new knowledge.

Taking as a base R. Coase theory (Coase, 1992: 6), or, saying more precisely, this author's idea about the contract of hiring as a key feature, which characterizes a firm as it is, and a number of the hired workers is a characteristics of the firm size, we guesstimate that for the process of generating the new knowledge this idea is not correct, because of special mechanism of vesting the rights to the new knowledge, which knowledge the employees acquire due to job responsibilities.

In the context of the new knowledge generating, the approach of O. Williamson (1970: 135) should be used not less distinctively. This approach presents "the firm" as one of the ways of transaction organization. A special attention is also to be paid to this author's ideas about the incompleteness of contracts, and about a particular role of the specific assets in the process of choosing a form of contract.

During the working out of the technical University's development strategy, we should also pay attention to the features of its goal-setting.

As we mentioned above, the primary goal for the modern technical University's activities, and specially – the goal for the University in provinces, is the development of human and social capital, and the support of the young people's creative activities. It's obvious that the process of generating the new knowledge in the technical University should be a major task for this kind of the creative activity. In other words, the students (first of all – the future competitors for Master's degree), postgraduate students and competitors for Doctor's degree should constantly take part in the processes of generating the new knowledge.

Here we notice an above mentioned peculiarity of the University's social and economic sphere of action. The mentioned propositions of R. Coase theory are not quite correct not only for the process of generating the new knowledge (because of special mechanism of vesting the rights to the new knowledge, which is a result of the special practice of creating and using of the intellectual property). Students and postgraduate students can't be considered as the intra-corporate (if we present University in general as a corporation) actors. This tendency is the most evident for the students, who pay for learning themselves, or, in other words, act as the consumers of the educational services.

This situation is a reason for the ambivalent standing of the students and postgraduate students: each of them in the same time is a representative of the University's internal system and a component of the external environment, having a special contractual relationship with the University. The run of things can be described in the best way if we present a model of the University as of social and economic system of mesolevel (Matkovskyy, 2012: 124).

Organization of the education processes, which's goals list include the salvation of the aforesaid problems, should take in account the universally recognized features of the efficient learning process, typical for the education of the 21st century (Coates, 2007: 212). The set of these features includes the cooperative work of the students, cooperation in the workgroups instead of the competition between them. The practical utility of the knowledge that students get is also very important. The subject that the students of the new generation are trying to pursue is getting the information, which's practical utility is evident. Students' motivation level in this situation depends on how clear they understand the ways of using the accumulated knowledge, and the do their best if these ways can be carried out as getting the job in the home region after becoming the graduate.

4. Technical University as a part of the regional innovation system

Technical University, which is situated in a region, and has a number of the described above features, is one of the full-fledged parts of the region's innovation system. The University Technopolis is the most efficient as a part of the innovation system.

There is a set of the well-known criteria for choosing a place to situate the technoplos:

- it should be situated in the "mother town" with the population of 150–200 thousand people, or close enough (not more then 30 minutes' journey from it) to simplify the task of supporting its communal services;
- be situated closely to the airport (it does its best if it is close to the international airport) and to the railroad station;
- in the town should be situated a base University, which's task is to train the personnel and to develop the research projects in the field of high technologies;
- it should include a harmonic set of the industrial zones, research institutions and residential settlements;
- it should use a modern informational networks;
- the conditions of the people's leaving should be a factor of promotion the creative and research work, and thinking processes;
- in the work planning should take part all of three interested parties: business, the University and the local government. (Araki, 2000: 136; Yamasaki, 1992: 196).

In the today's conditions, the universities should play a key role in the regional innovation systems. To meet this requirement they should not only present the innovational education and create the startup-enterprises, but also develop the projects in the field of the applied science and engineering for the "traditional" sector of the economy. The University should become not only the educational and research institution, but also a birthplace for the innovations and innovation businesses, in other words – it should transform to a University Technopolis. One of the basic tasks for the development of the higher professional education is students' and teachers' participation in the fundamental and applied research projects. We mean, they should be the direct participants of the process of the new knowledge generating.

A distinctive feature of the University Technopolis is being a polytechnic (multidiscipline) institution. This feature gives a possibility to integrate the activities of the researchers and development engineers to implement the complex projects for the benefit of the region. For example, if the University's staff includes the researchers and development engineers, working in the field of biotechnology; working out the manufacturing equipment; automation of the technological processes; information technology, the University is able to develop the complex projects of the new production systems for the region's agriculture and food production.

The concept of the University Technopolis enables the realization of the most successful models of state-private partnership (Sakata, 1991: 96). To realize this model, the participants should achieve a consistency of the agent's interests; taking in account that each of the agents may act in a different economic environment (with different traditions of the institutional organization). That's why in the last years the projects with a state-private partnership are often being presented in a context of the development of the triple helix model

(University-industry-government) (Shinn, 2002: 15). This model can be successfully used by the University to develop the regional projects.

In this case, the basic functions of the state-private partnership will be the following:

- affecting the economic choice of the private agents, including the situations of the adverse selection;
- partially overcoming the informational asymmetry in the local markets and facilitating the private agents' adaptation for the decision-making under the conditions of the informational asymmetry and incompleteness;
- affect the ratio of the innovators, imitators and laggards in the markets of the scientific and technological products;
- supporting the process of the businesses' adaptation for the reality of macroeconomic disequilibrium;
- being a means for the realization of the state and regional priorities (Nizhegorodtsev, 2014: 7).

Analyzing of the conditions of the Southern Federal District of Russia gives us a possibility to draw a conclusion that the South-Russian State Polytechnic University (situated in Novocherkassk) meets all the requirements to do its best during the creating of the University Technopolis. At the present time the administration is making an attempt to create the University Technopolis on the base of this University.

The efforts of creating the University Technopolis were undertaken during the working out of the SRSPU (NPI) strategic development program. The idea was to solve three basic problems that exist during the University's scientific project development. Fist problem is the lack of the stable relations to the corporative sector of the real economy. The second is the insufficient development of the research and development departments and poor infrastructure for the commercialization of the technologies. The third – a loss of the scientific authorities (in the universities, in comparison with the institutions of the Russian Academy of Sciences), which authorities could have efficiently developed the most innovatively prospective fields of the research. In general, as the index of the scientific efficiency level (total number and quality level of the scientific papers; citation indexes; participation in the international research projects; etc.) shows, the University's scientists are inferior to the ones from the Academy's institutions (Shmatkov, 2011: 6).

Conclusion

Most of the countries of the Eastern Europe (including Russia) in the last two decades show the tendencies to decreasing a quality level of the human capital. This tendency is very brightly appeared in the provinces.

To overcome the unfavorable tendency the universities and other higher education institutions, which are situated in the provinces, should follow a specific development strategy that's goal is training of the qualified specialists, and to take as the students the local young people, which are going to live and get a job in the region in future.

The strategy should be based on the institutional projecting of the University Technopolis – a social and economic system of mesolevel, in which the students take part in the processes of generating the new knowledge, and that is based on the principles of the state-private partnership and the ideas of triple helix concept.

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UNIVERSITETAS, KAIP REGIONO VYSTYMO VEIKSNYS: FEDERALINIO PIETŲ RUSIJOS REGIONO PAVYZDYS

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Santrauka

Autorius nagrinėjo būdus, kaip įveikti neigiamas žmogiškojo kapitalo degradavimo Rusijos ir Rytų Europos provincijos regionuose tendencijas. Nustatyta, kad svarbus vaidmuo sprendžiant šias problemas tenka technikos universitetams, kurie įsikūrę mažuose regionų miestuose. Universitetų vystymasis turėtų remtis tam tikra strategija, kurios tikslas – rengti kvalifikuotus specialistus iš vietos jaunimo, kurie vėliau gyventų ir dirbtų tame pačiame regione. Pateikiami tokios strategijos rengimo reikalavimai, pagrįsti institucinio universitetinio technopolio projektavimo idėja.

PAGRINDINIAI ŽODŽIAI: *aukštasis mokslas, žmogiškasis kapitalas, institucinis projektavimas, regionų vystymas, technopolis*.

JEL KLASIFIKACIJA: R110, I230, I250

LITHUANIAN AND LATVIAN URBAN YOUTH PERCEPTIONS AND STEREOTYPES OF FARMER AND AGRICULTURE

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ABSTRACT
The article examines the theoretical approach of the terms stereotypes and occupational stereotyping. The term "stereotype" is seldom encountered in the sociological or economical papers dealing with farmer, farming and agriculture. There are existing differences of characteristics of stereotypes therefore article will try to detect features described by W. Lipmann, R. Dyer, S. Oskamp, R. W. Schultz and others. Some of the definitions offer thought that stereotypes are oversimplifications or generalizations while they are more complicated as it seems from the first sight. The current article will discover sociological concern of how stereotypes function in social thought and the specific concerns how stereotypes function in urban youth thoughts. Article will distinguish negative, neutral and positive stereotypes. The article will include both qualitative and quantitative research methods in order to reveal Lithuanian and Latvian urban youth perceptions and stereotypes of Farmer and Agriculture.
KEY WORDS: *stereotype, occupational stereotype, urban youth*.

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Introduction

Agriculture in Europe is expected to fulfill a variety of functions. It contributes to the supply of European citizens with safe and high quality food in a competitive market, to maintain valuable cultural landscapes across Europe through sustainable land management and to help rural areas to remain attractive. At the same time, agriculture is undergoing fundamental changes which require farmers to adapt to new conditions and seize new opportunities (European Commission, 2009: 1). While Europe's rural communities are under threat. With farmers' incomes only about half the average EU wage, it's no surprise that over the last decade agricultural employment fell by 25 percent. Every year Europe has 2 percent fewer farmers. Around 60 percent of the EU population lives in the countryside which covers 90 percent of the Union's territory. The countryside is one of our greatest and farmers need help to protect the rural environment and way of life (Debating Europe, 2014: 1).

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In the context of the importance of the agriculture it is essential to raise understanding within society that agriculture is particularly significant for economic development. Almost half of all agricultural workers are 55 years or older. At EU-27 level there is approximately 1 farmer of less than 35 years old for each 9 farmers of more than 55 years (Young Farmers Statistics, 2014). Therefore it is essential to raise awareness and popularity within youth as regards farming and agriculture.

The aim of the article is to discover sociological concern of stereotypes (by W. Lipmann, R. Dyer, S. Oskamp, R. W. Schultz) function in social thought and the specific concerns how stereotypes function in urban youth thoughts. The tasks of the article:

- to discover theoretical aspects of sociological stereotype backgrounds;
- to reveal Lithuanian and Latvian urban youth perceptions of farmer and agriculture;
- to analyze expert views of youth perceptions and agriculture sector issues.

The both qualitative and quantitative research methods where applied to identify Latvian urban youth perceptions of farmer and agriculture. In the first pilot phase of the research a focus group discussion was been conducted with participation of urban city youth. In total there were 9 youth, age 20–26 representing different gender, both from the last classes of the secondary schools and the first and second year students at university. The focus group role was to pick up the most widespread stereotypes about farmer and agriculture that will be used at the next steps of the research.

The next step in the research concerned quantitative research approach based on the urban youth survey to define and analyze the first phase of the research findings - identification of the Lithuanian and Latvian urban youth perceptions of farmer and agriculture. The urban youth survey was been carried out in the secondary schools and universities of the urban cities in Lithuania and Latvia by applying availability sampling (950 urban youth from Latvia – Jelgava, Daugavpils, Liepaja, Riga where universities are schools are available and 908 from Lithuania – Vilnius, Kaunas, Panevėžys, Klaipėda where universities are schools are available).
An availability sample is often appropriate in social research – for example, when a field researcher is exploring a new setting and trying to get some sense of the prevailing attitudes or when a survey researcher conducts a preliminary test of a new set of questions (Engel, 2009: 122). Elements are selected for availability sampling because they're available or easy to find respondents in the classes of the secondary schools or the first and the second year students at university.

The current article analyses students' responses to the questionnaire and explores wider issues relating to stereotyping and occupational stereotyping discussing the interpretation of these concepts. Results suggest that pupils and students held both positive and negative assumptions about specific occupations such as farmer. Further qualitative research methods where applied to identify EU Member States agricultural policy expert opinions of youth perceptions and agriculture sector issues, to describe how stereotypic views arise and what determines such perceptions. There where made interviews with agricultural policy experts in 12 EU Member States. By using a combination of qualitative and quantitative data was been possible to improve an evaluation by ensuring that the limitations of one type of data are balanced by the strengths of another.

1. Research theoretical approach

Stereotypes vary in their nature and significance, in their way of expression while it also creates stamps and they concern tolerance of the society. In accordance with the Edinburgh University professor R. Dyer the term "stereotype" is today almost always a term of abuse. This stems from the wholly justified objections of various groups in recent years, blacks, women and gays, in particular to the ways in which they find themselves stereotyped in the mass media and in everyday speech (Dyer, 1999: 1). Stereotypes are characteristics ascribed to groups of people involving occupation, gender, national origin and other factors. These characteristics tend to be oversimplifications of the groups involved.

The term stereotype was first introduced to the social sciences by the American journalist Walter Lippmann in 1922. According to Lippmann, stereotypes are employed to help impose order onto a complex world. They present a shortcut in the processing of data, which, in his words, "precedes the use of reason". Stereotypes are seen as dependent on cultural traditions, group interests, and the differentiation of the *in-group* from outsiders. As Dyer concludes even school children hold stereotypes about ethnic groups, perhaps largely because of the effect of mass media (Seite, 2006: 14). Indeed, mass media play a role in stereotypes, though it is more a case of reinforcing rather than creating stereotypes.

According to W. B. Helmreich stereotypes are most often exaggerations or distortions of reality, they are often accepted by people as fact. When people employ stereotypes they are usually making judgments about a given individual's potential to fit into a certain category based upon that person's professional, racial or ethnic origins.

Another cause of stereotypes may be the cultural background of the individual. Most cultures encourage prejudiced attitudes toward other groups. These attitudes are integrated in people beginning with early childhood, and are therefore very difficult to overcome. In general, the longer one has such attitudes, the harder it is to change them. In many cases, people select minority group members as scapegoats because they are powerless, relatively speaking and/or easily identifiable (Helmreich, 2004: 4). The Helmreich reflected very important point that importance of developing stereotypes start from the early childhood and youth age is important period when formal and non formal activities of the education, leisure time and hobby can reflect certain cultural background that can influence change of stereotypic thinking.

There are exists various explanations of the term „stereotypes" while one of the most commonly used are thought or assumption that may be adopted about specific types of individuals while these thoughts or beliefs may or may not accurately reflect reality (Lipmann, Dyer, Oskamp, Schultz). In order to reveal the essence of the stereotypes it is important to describe the characteristics of stereotypes.

Four characteristics of stereotypes:

1. Simple: They're far more simple than reality and often expressed in two to three sentences.
2. Acquired second hand: we acquire (and absorb) stereotypes from cultural mediators (like the mass media) rather than from our own direct experience with the stereotyped groups. The culture "distils" reality and then expresses its beliefs and values in stereotypical images that convince audiences of the "truth" of the stereotype by placing it in a carefully controlled context in which there is a measure of truth to the image: for example, "Of course women can and should be thin and beautiful: Look at Julia Roberts!.."
3. Erroneous: All stereotypes are false – although some are less false than others, and more (more importantly) some are less harmful than others. Because they claim that each and every individual human being in a certain group shares a set of common qualities, stereotypes are a logical impossibility. Even countertypes presented as the "new" truth about a group are false unless presented as possibilities rather than actualities.
4. Resistant to change: Even through race and sex inequalities have alerted most of us to the tragic consequences of stereotypes, old stereotypes nevertheless still colors our perceptions. Fortunately, stereotypes can change when we decide to break the mold and recast those pictures in our heads (Analysis and criticism, 2013: 35).

Because stereotypes is simple way to imagine or get picture of something not existing it is more easy way for urban youth to acquire them. Cultural mediator like mass media is having potential to reinforce stereotypes. It is a commonplace that the mass media are populates stereotypes. They strongly supported by some of the society members and widely distributed.

Lippmann also observed a social function of stereotyping, namely, as a "projection upon the world of our own sense of our own value, our own position and our own rights" (Lipmann, 1998: 79). The some other theoreticians like Oskamp and Schultz did described stereotype as "picture in our heads" about various ra-

cial, national or social group – that is perceptions of members of a given group as all being identical copies of each other, all having the same characteristics and traits (Oskamp, Schultz, 2009: 304).
In accordance with Dyer term "stereotypes" where developed particularly stressing stereotypes as:

- an ordering process;
- a ‚short cut‘;
- referring to ‚the world‘;
- expressing values and beliefs (Dyer, 1999: 1).

The current paper will discover sociological concern of Lippmann, Dyer, White, Hinton and others in order to describe how stereotypes functions in social thought and the specific concerns how stereotypes function in urban youth thoughts. The position behind all these considerations is that it is not stereotypes, as an aspect of human thought and representation, therefore it is important to discover how they are served in accordance with the occupational stereotyping of farmer portrait.

2. Stereotypes and Occupational stereotyping

The inherent problem is that a general stereotype influences the way we think and talk about individual members of a group. One related problem in assessment of stereotype are centrality of the supposed characteristics – ambitious. As Lipmann is stating "a great deal of confusion arises when people decline to classify themselves as we have classified them. Prophecy would be so much easier if only they would stay where we put them. But, as a matter of fact, a phase like the working class will cover only some of the truth for a part of the time. When you take all the people, below a certain level of income, and call them the working class, you cannot help assuming that the people so classifies will behave in accordance with your stereotype. Just who those people and mine workers fit in more or less, but farms hands, small farmers, peddlers, little shop keepers, clerks, servants, soldiers, policemen, firemen slip out of the net" (Lipmann, 1998: 79).

The Lipmann observation leads us to the concern that persons acquire stereotypes in part, though personal experience. But because these stereotypes are part of the beliefs and shared assumptions that societies have about different types of people and groups, they are also part of the society collective knowledge.

In order for a society to socialize its members, stereotypes must be explicitly, even if subtlety, taught. Whether stereotypes are individual or cultural in origin, the emphasis on explicit beliefs is not surprising considering that the content of stereotypes has great intrinsic interest to both the person using the stereotype and the person targeted by it. Even when objectively wrong, stereotypes simplify social perception and serve as guidelines for social interaction (White, 2006: 3).

When individuals interact, in formal or informal groups, with people from diverse social categories, their differences are more likely to be salient and, therefore, more likely to activate social stereotypes associated with that category. For example, people from urbanized environment and people from periphery.

When stereotypes are well known, but individuals are not known personally to each other, those stereotypes may affect both how individuals treat one another and how they view themselves. Many stereotypes exist about particular occupations. Occupational stereotypes are often activated in situations where people from multiple occupations come together to work on a shared task, such as architects, engineers, and contractors on construction sites. But within a given occupation, occupational stereotypes can be activated when group members come from different environments (Leonardi, 2013: 3). It could be linked with environment that is characterized as office or clerical work in the building and agriculture or field work that is work in the open space.

Stereotypes may not be simply a view of the world that is either right or wrong, but linked into a person's understanding of wider perspective of the world. Stereotypes can be viewed as intergroup perception since people belong to number of social groups like family member, occupational group, etc. (Hinton, 2013: 105).

In accordance with occupational context stereotyping is the act of labeling or treating people with similar characteristics as though they all exhibit the same values, judgments, and behavior. Stereotyping develops from information we choose to hear and remember from our family, peers, religious establishments, teachers, community and the entertainment media (Young, 2012: 25). Since stereotyping by definition ignores individual differences it can be problematic situation if it refers to the workplace, like lady in the bank should look formal, military soldier is a powerful man. Gilmore and Hunt argued that in general practice professional stereotyping is common. Doctors and nurses saw social workers as "trendies' who were unrealistic about health problems, while social workers saw doctors and nurses as authoritarian (Leathard, 2002: 137). The same stereotypic context can be reflected as regards farmer and other professions like agronomist or biologist.

Some other sociological approaches reflect that stereotypes are categorical units of negative beliefs that leads to discrimination. Discrimination against those who have not "measured up" begins to spread. Stereotypes therefore can be defined as stigmatized beliefs (Sociology, 2013: 138).

As described previously in the article stereotype is used to categorize a group of people. For example, urban youth don't understand farmers, so they put them into classifications, thinking that everyone who is that needs to be like that, or anyone who acts like their classifications is one. Therefore a social perception is used to reveal urban youth stereotypes of Farmer and Agriculture in the further subsections of article.

2. Urban youth stereotypes of Farmer and Agriculture

The observation behind the research on urban youth perception of the farmer is based on the theoretical approach of the term "stereotypes". Lippmann's notion of stereotypes as a short cut points to the manner which stereotypes are a very simple, striking, easily grasped form of representation but none the less capable of condensing a great deal of complex information and a host of connotations.

It is interesting revealing stereotypes of the Lithuanian and Latvian urban youth perception in order to find out the different assumptions of what farmer role is in accordance with occupational context.

As regards United Nations concept "Youth" is best understood as a period of transition from the dependence of childhood to adulthood's independence and awareness of our interdependence as members of a community (UN, 2013). Youth is best understood as a period of transition from the dependence of childhood to adulthood's independence. In this context certain cultural background can influence change of stereotypic thinking and can affect both the perceived and perceiver.

Keeping in mind that there are specificities in between urban and rural communities it was been essential to find out urban youth perceptions as regards farmer and agriculture. An urban community refers to a community that is mostly composed of residents in a cities or towns and is also referred to as a residential community.

According to the experiences, youth primarily make judgments about agriculture and the support mechanism attached to it through what they have read or stories reflected in media, often influenced by different opinions. There are many initiatives at a European Union level in the form of EU funded projects, web sites, blogs, discussion clubs, other activities dedicated to the youth. However it was been essential to find out how stereotypes function in urban youth thoughts. (In 2013 there was conducted research where 950 urban youth participated from Latvia and 908 from Lithuanian in order to share their views and thoughts in survey as regards perceptions on Farmer Portrait and Agriculture (Urban Youth Perceptions, 2013: 8). They indicated existing stereotypes about farmers and agriculture in Latvia and Lithuania. Overall youth did point that stereotypes exists while there are differences on evaluation of dissemination level. The question as regards stereotypes about farmers and agriculture exists in Latvia, Lithuania the majority of youth in both countries pointed "rather yes" – 45 % (LV) and 34 % (LT). Agreed that there are existing stereotypes where 20 % of respondents (LV) and 27 % (LT). Nevertheless some of the respondents didn't agree on the statement 19 % (LT) and 29 % (LV) and rather disagreed 20 % (LT) and 29 % (LV) of the youth.

Apart from quantitative data respondents did described characteristics of farmer role. The both Latvian and Lithuanian youth did pointed that farmers are persons who working hard and long hours; farmers are close to the nature and they like animals. Lithuanian youth did reflected that work in agriculture for several years was been unfashionable, but nowadays when European Union financial support is available it becomes more attractive. Youth from Latvia pointed out that farmers are patient in Latvia. They also described that farmer need to be educated in agriculture, chemistry and /or biology as well as more using technical skills of equipment in order to be successful.

Latvian respondents acknowledged that the work in the fresh air is one of the main advantages of the farmers. However, a number of young people do not see a prospect for agriculture and believes that hard work is not comparative with compensation.

Lithuanian youth reflected that agriculture is profitable, it has the potential. Overall young people think that farming is a natural way of life.

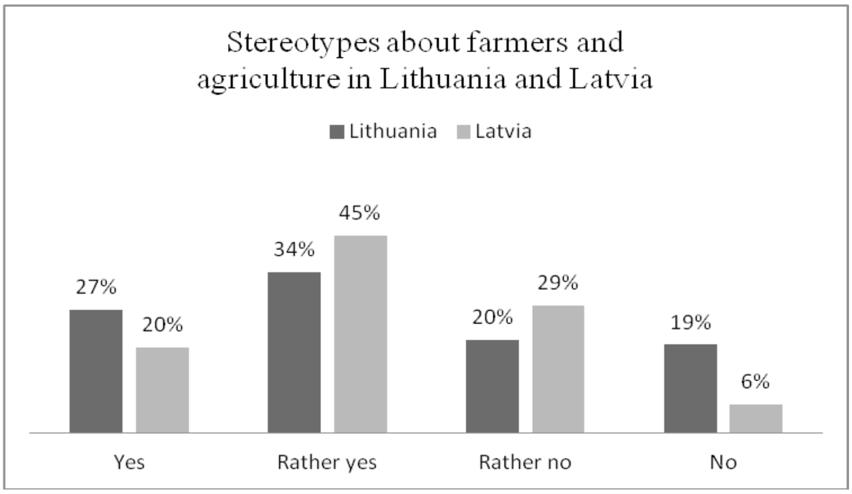

Figure 1. Stereotypes about farmers and agriculture in Latvia and Lithuania

Source: Urban Youth Perceptions, 2013: 17

As it was described in the Lipmann description of the term “stereotypes” it holds thoughts or beliefs that may or may not accurately reflect reality. Youth reflect reality from the perspective of life in the city they are living and creating “picture in their heads” keeping in mind urban environment. Nevertheless youth are influenced by the personal experience. Overall youth think that farming is hard, physical labor and stressful because of machinery breakage, weather uncertainties, and price variances. While these were little described advantages that agriculture might bring like research, engineering, financial management, or international commodity markets were described by youth.

Apart from the quantitative approach respondents did described their observation as regards specificity of the farmer and farming. The descriptions were diverse while the common part revealed occupational stereotype perspective.

Stereotypic categorization helps the human psyche to deal with uncertainties, to generalize from limited data, and to define the self and others. While in the same time stereotypes can be positive, neutral, or negative. Positive or negative characterizations and categorizations of a group of people based only on expectations or assumptions about the group rather than on individual who compose the group (Galician, 2013: 26).

The view of positive and negative stereotyping is analyzed in the Diaz, Saran work on “Beyond Stereotypes. Minority Children of Immigrants in Urban Schools”. It was stated that positive or negative stereotyping justifies and rationalizes an individual’s love-prejudice or hate-prejudice. Simultaneously, stereotyping as a continuous process of “selected perception” and “selective forgetting” that celebrates a group for its success but forgets their contribution if the group fails to achieve success (Diaz, Saran, 2010: 3).

In accordance with the research (Urban Youth Perceptions, 2013: 8) the most prevailing categories where possible to divide in 3 stereotype categories – positive stereotypes, negative stereotypes and neutral.

The description of negative stereotypes in the research reflected more that positive ones since negative perception and judgments seem easier to develop for youth. Also it is more likely that those youth who didn't had any experience or relation with farming or agricultural issues made more negative stereotypes than those who had heard or seen more on the everyday life of the farm.

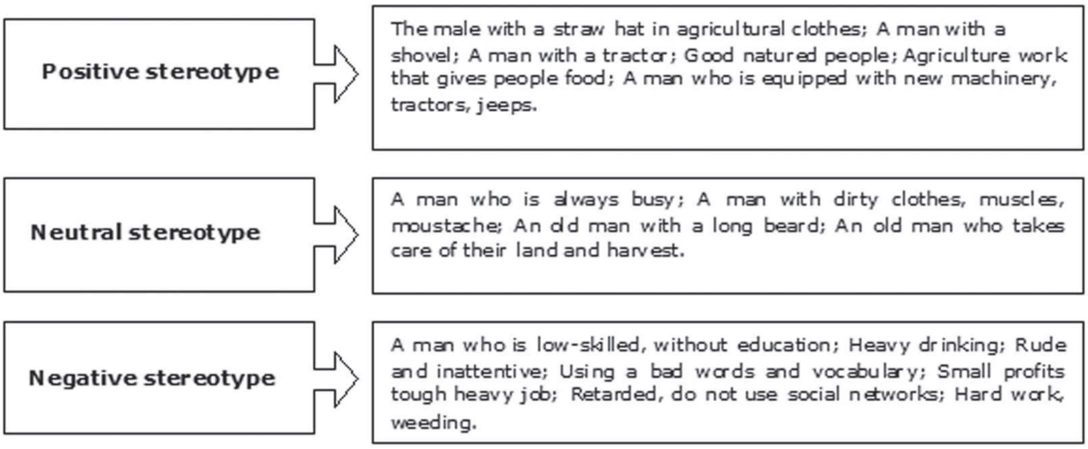

Figure 2. Stereotypic categorization

Source: Urban Youth Perceptions, 2013: 8

Overall people use stereotypes as a simplification tool which helps them in their everyday life to make decisions faster. Stereotypes can never illustrate the objective variation that exists but doubtlessly they contain a grain of truth.

In accordance with expert view on the urban youth perceptions on Farmer Portrait there were more fundamental views that arises of stereotypes and might be influenced by the mass media. "Media and advertising in creating a flavor or backdrop for drama and advertising, they hold outdated or misconceived ideas" (Urban Youth Perceptions, 2013: 13).

Some others did pointed the role of journalists might affect youth perceptions. "I think if journalists have to report about farmers and agriculture they start consciously or unconsciously from those stereotypes and although they try to describe an objective picture, in some respect the stereotype will be a part of it. A special case is a – unfortunately – very successful TV series called "Bauer sucht Frau" (farmer seeks woman), in which trough the special selection of participants I fear the first stereotype is encouraged" (Urban Youth Perceptions, 2013: 13).

In accordance with the research (Urban Youth Perceptions, 2013: 14) experts did pointed that youth is thinking of old stereotype about farmers that are not linked with modern life of the farmer. Also there where statement that the youth stereotypes hold one sight, only a bit of a truth and not fit "the farmers" in whole.

In accordance with Lipmann the term "stereotype" has journalistic origins. First of all, a stereotype was a kind of printing stamp to make multiple copies from a single model. Lipmann did used the term metaphorically in his book "Public Opinion" to describe the way as a society and as individuals categorize people – "stamping" human beings with a set of characteristics and creating a "picture" inside our heads. But these pictures don't necessarily correspond to the world outside our head (Galician, 2013: 26). The summary at some point could be applied to the youth perception of the farmers and agriculture covering all four characteristics of stereotypes by Lipmann because they are – simple (they are formulated in a simple manner and can be identified in some sentences); they are absorb from cultural mediators like mass media (work of journalists, TV shows, advertisements etc.); since stereotypes are described as possibilities they are more or less false. Overall stereotypes are resistant to change like stereotype about farmer in rubbery boots or unskilled and uneducated farmers.

Conclusion

1. Even from one side stereotypes are described as simplification tool that help people in their everyday life to make decisions faster while consequences of stereotype's dissemination could rise a wrong picture and opinion of farmers and their work, that could lead to the misunderstanding at a policy, economical and social basis.
2. Agriculture, for decades, had been associated with the production of basic food. Therefore agriculture plays a crucial role in the life of an economy. It is the backbone of our economic system. Agriculture not only provides food and raw material but also employment opportunities to a very large proportion of population.
3. Based on theory stereotypic categorization helps the human psyche to deal with uncertainties, to generalize from limited data, and to define the self and others. While problem is that a general stereotype influences the way we think and talk about individual members of a social group.
4. Mass media is not creating stereotypes as such while the main role of the media is to reinforce stereotypes.
5. In accordance to the research on Urban Youth Perceptions experts and youth did agreed that the media, notably entertainment industry and local television, print magazines, journals are the biggest sources of public information for youth that is disseminating various contexts also stereotypic view.
6. Stereotyping develops from information that youth choose to hear and remember from family, peers, religious establishments, teachers, community and the entertainment media.
7. Overall stereotypical youth views of agriculture prevail. Youth equated agriculture with farming, with old stereotypes (due to the reflection from experts some of the stereotypes were classified as "old", could be linked with the fairy tales or survived assumptions from older generations) that in some cases do not exist or do not correspond to situation in the modern farming. Some of the youth did made connection to the technical or research aspects of agriculture while youth do not see large potential that agriculture could bring for example via research, engineering, financial management etc.
8. On the basis of the research data, can be concluded that Latvian urban youth develop stereotyped view of the countryside and farming sector.
9. Since changing stereotypes is a difficult and time consuming it is advisable to disseminate not only information campaigns like "Back to Countryside" but also organize trips for school children to farms, arrange "green lessons" to discover work and main tasks in the organic farms to involve youth in the farm works.

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LIETUVOS IR LATVIJOS MIESTŲ JAUNIMO STEREOTIPAI, SUVOKIMAS APIE ŽEMDIRBIUS IR ŽEMĖS ŪKĮ

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Santrauka

Straipsnyje teoriškai nagrinėjami profesiniai stereotipai. Šis terminas sociologų ir ekonomistų darbuose, kuriuose nagrinėjama su žemės ūkiu susijusi tematika, retai aptinkamas. Straipsnyje naudojami W. Lipmann, R. Dyer, S. Oskamp, R. W. Schultz ir kt. aprašyti stereotipų elementai. Stereotipai – tai perdėti supaprastinimai ar apibendrinimai, kurie yra daug sudėtingesni, nei gali pasirodyti iš pirmo žvilgsnio. Šiame straipsnyje nagrinėjama, kaip stereotipai funkcionuoja socialinėje mintyje ir kaip veikia miestų jaunimo mąstymą. Skiriami neigiami, neutralūs ir teigiami stereotipai. Siekiant parodyti, kokie stereotipai būdingi Lietuvos ir Latvijos miestų jaunimui, kaip jie suvokia žemdirbius ir žemės ūkį, straipsnyje taikomi kiekybiniai ir kokybiniai tyrimo metodai.

PAGRINDINIAI ŽODŽIAI: *stereotipas, profesiniai stereotipai, miesto jaunimas.*

JEL KLASIFIKACIJA: Q18

EVALUATION OF ORGANIZATIONAL CULTURE OF SC "KLAIPĖDOS KARTONAS"

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ABSTRACT
The article presents the evaluation of organizational culture of SC „Klaipėdos kartonas". The employees' attitude towards the importance and influence of OK, values, symbols, history, heroes, traditions and communication is evaluated by questioner created by authors of article. The survey revealed that employees appreciate their OK positively. They are guided by the values of organization in their work. The employees know the values and their impact, the history of organization, and have their heroes-employees. Common traditions are prevalent in organization. The communication in organization is business-like. Statistically important difference was revealed: managers of all levels expressed more agreement for statements about all elements of OK; meanwhile employees without subordinates expressed less agreement or disagreement. It is suggested to involve employees without subordinates in processes of formation and implementation of OK more actively.
KEY WORDS: *organizational culture, values, evaluation.*

JEL CODES: M14, A13, D04.
DOI: http://dx.doi.org/10.15181/rfds.v14i3.872

Introduction

Organizational culture impacts organization's activity and it's results, relation with society and environment. It is stated, that organizational culture (later – OK), helps to maintain the market, to receive more profit, to ensure longtime success (Švagždienė, Čepienė, Bradauskienė, 2011; Uddin, Luva, Hossian, 2013), to meet consumer needs better, to coincide society concerns (Kaziliūnas, 2006; Rizescu, 2011), to reduce social tension between organization and society. Solid OK and it's separate elements impact on organization's employees is particularly highlighted. Employees work more effectively, feel better, distrust less, feel less stress and unsafety when concrete norms, rules and values are determined (Pikturnaitė, Paužuolienė, 2013). According to D. R. Denison (2006), it is quite difficult to survey OK. Every organization has developed specific values, communication, heroes, history, traditions. Scientist from outside is not familiar with OK and

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specifics. But employing of specific methods and means helps to evaluate OK (Šimanskienė, 2008). It is necessary to evaluate employees' attitude towards OK, to inquire their opinion about separate elements of culture. Such evaluation reveals possibilities to manage OK expediently and properly, and hereupon strengthen organization and its activity. Besides, diffusion of information of OK evaluation transfer good experience to other organizations and compose conditions to strengthen regions, in which they work.

Evaluation of OK of SC „Klaipėdos kartonas" is presented in this article. Referring on scientific literature analysis, there is a large group of articles which debate on methodologies of OK evaluation and create them. Significant works of D. R. Denison (2006), K. Cameron and R. Quinn (2001), C. A. O'Reilley, J. Chatman, D. F. Caldwell (1991), L. Šimanskienė (2008) and others are in this group. Scientists often use these methodologies while evaluating or analyzing OK of organizations. The other group is formed of articles, presenting evaluation of particular organizations OK. These evaluations are based of methodologies formulated by the authors of articles (mostly – questionnaire survey, interview). OK evaluation surveys were done in public organizations (for example, by Aleknienė, 2003; Katiliūtė, Stanikūnienė, 2009; Carney, 2011 and other), and in private organizations (for example, by Lesionis, Dilienė, 2012; Buble, 2012; Nango, Ikyanyon, 2012 and other). However, there is no united methodology for evaluation of OK in organization. OK of SC „Klaipėdos kartonas" is evaluated by questionnaire survey (created by authors), which study separate elements of OK, and explore organizational means, where OK can be entrenched.

The object of research – organizational culture of SC „Klaipėdos kartonas".

The goal of research: to evaluate the attitude of employees of SC "Kaipėdos kartonas" towards OK, values, symbols, history, heroes, traditions and communication.

The methods of research: the analysis and systemizing of scientific literature, questionnaire survey, data analysis with SPSS program (17.1 version) and interpretation.

1. Methodology of the research

The research was done in SC „Klaipedos kartonas" in order to evaluate employees' attitude towards OK in this organization. The employees' survey was chosen, because it gives possibility to evaluate their attitude towards organizations OK. Questioner survey is popular avenue to collect data for its reliability and simple application. Interview is more appropriate for investigation of organization's managers' attitude towards OK. But, in this way, employees' attitude would leave unknown. The attitude of employees often differ from attitude of managers and publically declared OK (Šimanskienė, Sandu 2013). Currently, the organization has 180 employees. 58 respondents participated in the survey. Test method – quantitative, writing survey, instrument – the questionnaire. The treatment group selection method was selection by chance. Such choice of the method was predestinated by the cause that the survey data will be used only in the present population (in the analyzed organization) but not the whole population in general. The study was conducted in March of 2014. The data collected in accordance with research ethics.

The questionnaire was formed of the list of 15 questions: nine questions present the rank scale where 1 – *means strongly agree*, 5 – *strongly disagree*; several open questions to assess the presence of elements of the OK and their entrenching in various organizational performance documentation and information measures. OK's elements (values, symbols, history, traditions, heroes, the closeness and intensiveness of communication) is evaluated by questionnaire. The employees of SC „Klaipėdos kartonas" attitude towards OK and it's impact on organization is evaluated by first question. The values of organization is the main force influencing processes in organization (restricting or stimulating) (Bunch, 2009). The employees' attitude towards organizations values (the constancy and sense of values, guidance by values in activity and decision making) is evaluated with the second question. Employees are asked to name the values of organization in the open question. The symbols are eloquent reflex of OK (Šimanskienė, Seilius, 2009; Šimanskienė, Sandu, 2013; Соломанидина, 2007), impacting organization's members' cognition about their organization, and external persons' cognition about organization (Pikčiūnas, 2002; Дафт, 2006). Therefore, employees are asked to name the symbols of organization and their understanding about the mean of these symbols. Employees' attitude towards symbols and their impact is assessed with the rank scale. The history of organization's foundation and activity, formed traditions and rituals introduce organization with employees (Šimanskienė, Seilius, 2009), transmit organization's values to employees (McShane, 2000), explain organizational and cultural change (Briody, Pester, Trotter, 2012), unionize people in to tight team (Šimanskienė, 2002). As scientist claim, the traditions and the rituals are socially necessary for organizations and employees (Дафт, 2006). Employees' attitude toward the cognition of organization's history and it's impact, the specific traditions and their impact on command of employees are evaluated with rank scale. Also there was request to name specific traditions. The heroes of organization personalize values of culture as real, tangible roles and models, which prescribe employees the way to behave (Šimanskienė, Seilius, 2009; Дафт, 2006). The heroism reveal the perspectives of organizational development and motivate employees. So respondents' attitude towards heroes is evaluated. There was a request to name heroes of organization. Whereas communication links (the net of cultural links) reveals the closeness and intensiveness of communication in organization, shows how often, close and open is the communication between (Šimanskienė, Sandu, 2013). Considerable, that specific speech (words, terms, slogans) form organization's image and determine organization's particularity as well. The closeness and intensity of communication between organization's employees is evaluated with rank scale. The open question request to name specific words, terms or sayings. The entrenching of OK's elements in different organizational means, which are detail analyzed by I. Pikturnaitė, J. Paužuolienė (2013), are evaluated in separate question. At the end of the questionnaire there are questions, about the respondent's demographic data (respondent's position and work experience in the organization).

Internal consistency of the scales of the questionnaire are assessed by the Cronbach alpha (Cronbach's alpha) coefficient. Cronbach's alpha known as an internal consistency estimate of reliability of test scores. Cronbach's alpha reliability coefficient normally ranges between 0 and 1. The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. The coefficient will generally increase as the intercorrelations among test items increase. George and Mallery (2003) (Gliem, Gliem 2003) provide the following rules of thumb: "_ >0.9 – *Excellent*; >0.8 – *Good*; > 0.7 – *Acceptable*, >0.6 – *Questionable*; >0.5 – *Poor*, and <0.5 – *Unacceptable.*

Table 1. Assessment of internal consistency of questionnaire's scales

Name of the scale	Cronbach'sa Alpha coefficient	Standardized item alpha	Number of the questions in the scale
Description of the organizational culture	0.9412	0.9448	9
Organization values assessment	0.9320	0.9341	8
Symbol impact to employees assessment	0.9395	0.9414	6
History assessment	0.9053	0.9069	5
Heroes assessment	0.9860	0.9863	5
Traditions assessment	0.9340	0.9329	6
Communication closeness and intensive assessment	0.8921	0.8974	7

Source: research data (2014)

The analysis of questioner of this survey revealed that Cronbach's alpha reliability coefficient of scales in the questionnaire is more than >0.9 what means that internal consistency of the statements in the scales are excellent. Spearman-Brown'o increased reliability coefficient named as standardized Cronbach's alpha coefficient. As seen in the table 1, its significance are close to Cronbach's alpha coefficient which means that the answers to individual questions variances are similar.

The data of the questionnaire was processed by *SPSS* (*Special Package for Social Science, 17.1 version*) program using descriptive statistics such as frequencies command to determine percentiles, measures of central tendency (mean, median and mode), measures of dispersion (range, standard deviation). The mode of a set of data values is the value(s) that occurs most often. Standard deviation shows how much variation or dispersion exists from the average (mean), or expected value. A low standard deviation indicates that the data points tend to be very close to the mean; high standard deviation indicates that the data points are spread out over a large range of values. Also, data was processed by one-factorial dispersal analysis (ANOVA). The one-way ANOVA compares the means between the interested groups and determines whether any of those means are significantly different from each other. If the significance level of $p \leq 0.05$, the variables affect each other if $p > 0.05$ – no. Analyzing the statistical significance of the difference between the averages of those statements for which are statistically related, are analyzed by ANOVA test, Turkey criteria.

2. Results of the research

In order to assess the OK of SC „Klaipėdos kartonas" there were selected respondents with different demographic characteristics (position and experience in the organization). Analysis of position held by respondents revealed that 3.4 percent respondents of top-level manager, 19.1 percent of mid-level manager, 5.2 percent of low-level manager, 29.3 percent administration personnel and 43.1 percent personnel without subordinates participated in the research. Most of the respondents in the organization has more than 9 years work experience (60.3 percent), 29.3 percent of respondents work in organization from 1 to 3 years, 3.4 percent – from 3 to 6 years, and 6.9 percent – up to 1 year. There were no employees with experience from 6 to 9 years in this survey.

Table 2. Assessment of employees' attitude towards the organizational culture
(1 – strongly agree, 5 – strongly disagree)

No.	Statements	Mean	Mode	Std. Deviation	Position held by the respondent Sig. p≤0.05	Respondents work experience Sig. p≤0.05
1.	OK affects the organization's results	2.17	2	.752	**.020**	.127
2.	OK affects the organization's relationship with society and the environment	2.19	2	.736	.084	.076
3.	OK contributes to the competitiveness of enterprises	2.10	2	.718	.115	.111
4.	OK helps to satisfy the needs of users better	2.31	2	.821	.261	.874
5.	OK reduces social tensions between the organization and the public	2.19	2	.945	**.017**	.446
6.	OK encourages teamwork, cooperation among employees.	2.24	2	.865	.215	.923
7.	OK educates loyalty and a sense of attachment towards	2.19	2	.847	.159	.916
8	OK provides standards of behavior and thinking	2.61	3	.959	**.044**	.383
9	OK encourage friendly and correct relations between the employees	2.21	2	.913	.437	.223

Source: research data (2014)

The respondents' attitudes towards the OK was assessed firstly. The survey data shows (2 table) that respondents agree with the most of the statements describing the organizational culture *(mode 2)*. Respondents partially accept only one statement, that organizational culture provides standards of behavior and thinking *(mode 3)*. According this data, it's possible to state that the most employees of the SC „Klaipėdos kartonas" welcomes organization's culture, and sees its positive impact.

An ANOVA test showed that the respondents' position influences some options (significant data in bold). The 2 table presents *p-value* by comparing the data with the position held by the respondent and respondents work experience. It is identified that the position influences such options as: organizational culture affects the organization's results ($p \leq 0.05 = 0.020$), reduces social tension between the organization and society (*p* ≤0.05 = 0.017), provides standards for behavior and thinking (*p* ≤0.05 = 0.044). An ANOVA test criteria Turkey has shown that employees holding lower position are less likely to agree with these statements than employees holding higher positions (top-level manager and mid-level managers). Such differences of opinion are common in various organizations, because more employees holding higher positions are more involved in shaping the organizational culture and the implementation of it and more aware of the importance and benefits of the organization. Work experience do not influence the analyzed statements.

While investigating the institutionalization of OK elements (entrenching in various organizational / managerial measures) respondents were asked to name organization measures (documents) where the elements of organizational culture can be found. The values, symbols and the history can be seen practically in all listed instruments (documents) (3 table). More detailed discussions of the institutionalization of the individual elements is submitted while analyzing each individual item.

Table 3. The entrenchment of OK elements in various organizational means

No.	Organizational / managerial measures and elements	Values	Symbols	History	Rituals	Traditions	Heroes	Communi-cation
1.	Organizations website	35.4	10.1	**50**	–	4.2	10.1	
2.	Organization establishing documents	37.5	28.1	21.9	–	–	–	12.5
3.	Long-term plans / planning documents	**60**	26.7	3.3	–	–	–	10
4.	Special / commemorative publications (jubilee books)	13.2	7.5	**43.4**	–	**30.2**	**30.2**	5.7
5.	Vision and / or mission	**86.5**	8.1	5.4	–	–	–	–
6.	Leaflets	29.6	16.7	**44.4**	–	5.6	3.7	3.7
7.	Co-workers sent letters / e-mails	17.1	39	2.4	2.4	14.6	–	24.4
8.	Code of ethics	30.3	6.1	6.1	**6.1**	**24.2**	**–**	**27.3**
9.	The adaptive program	23.3	3.3	20	–	16.7	**–**	**36.7**
10.	Various reports	34.4	**37.5**	12.5	–	6.3	–	9.4
11.	Internal rules of procedure	31.7	19.5	24.4	–	7.3	–	17.1
12.	Employees clothing / badges	11.8	**79.4**	8.8	–	–	–	–
13.	Message boards dedicated for workers	26.5	29.4	2.9	5.9	14.7	**44.4**	20.6

Source: research data (2014)

Respondents signified their opinion about the importance of the organization's values. The analysis of respondents' attitudes (Table 4) revealed that respondents agree partially with most of the statements *(mode 3)*. Respondents agree that organization's employees and management are guided by the organization values in their work *(mode 2)*, and respondents agree that values reduces the ambiguity of behavior *(mode 2)*. An ANOVA test showed that the position held influence majority of the choices. Most of the mid-level managers agree that values reduces the ambiguity of behavior (*p* ≤0.05 = 0.000), and believes that the organization is guided by the provided values in decision-making (*p* ≤0.05 = 0.007). Most of low-level managers agree that organization is guided by the organization values (*p* ≤0.05 = 0.007) and the organization provide constant values (*p* ≤0.05 = 0.015). Managers from different levels also tend to support the statement that organization's management encourages to follow the organization values (*p* ≤0.05 = 0,000) and that they are comprehensive (*p* ≤0.05 = 0.000). Meanwhile, employees without subordinates partially agree with these statements: that the organization provided for constant values, that organization is guided by the values, that values are comprehensive, and with some statements respondents did not agree: that the organization activity and decision-making are guided by the provided values and that values reduces the ambiguity of behavior. The interpretation of such difference of opinions between employees holding different positions can be explained this way: employees without subordinates are less relevant to decision-making, they are less involved in the formulation and implementation of the organizational culture, and therefore they support the statements less. However, these results also enable the proposal to involve all employees in the organizational culture formation and implementation processes actively. The analysis of the data by different work experience, revealed that respondents opinion separated on one statement: respondent who have more than 3 years' work experience agreed, that the organization provided for constant values ($p \leq 0.05 = 0.007$), meanwhile respondents having the lowest work experience disagreed with this statement ($p \leq 0.05 = 0.012$).

According to the respondent's opinion (Table 4), values are most institutionalized element of organizational culture, and can be found in various kinds of internal documents and organizations measures. According to the respondents, values most often are seen in the vision and mission (86.5 percent), long-term plans (60 percent), organization establishing documents (37.5 percent) and organization website (35.4 percent).

Table 4. Assessment of employees' attitude towards organization's values (1 – strongly agree, 5 – strongly disagree)

No.	Statements	Mean	Mode	Std. Deviation	Position held by the respondent Sig. $p \leq 0.05$	Respondents work experience Sig. $p \leq 0.05$
1.	The organization provide constant values	2.65	3	.921	**.015**	.235
2.	The organization's activity and decision-making are guided by the provided values	2.67	3	1.082	**.007**	**.012**
3.	The organization's management in their work guided by the organization values	2.42	2	.105	.520	.065
4.	You are guided the organization values in your work	2.59	2	.899	**.007**	.198
5.	Values reduces the ambiguity of behavior	2.60	2	.815	**.000**	.200
6.	For some values consumers prefer precisely this organization	2.98	3	.888	.514	.586
7.	Organization's management encourages to follow the organization values	2.78	3	.974	**.000**	.077
8.	You understand organizational values	2.71	3	.009	**.000**	.053

Source: research data (2014)

Respondents were asked to name a few values of the organization. In most cases, respondents mentioned social responsibility, environmental sustainability, as well as diligence, teamwork, continuous improvement, agility and professionalism.

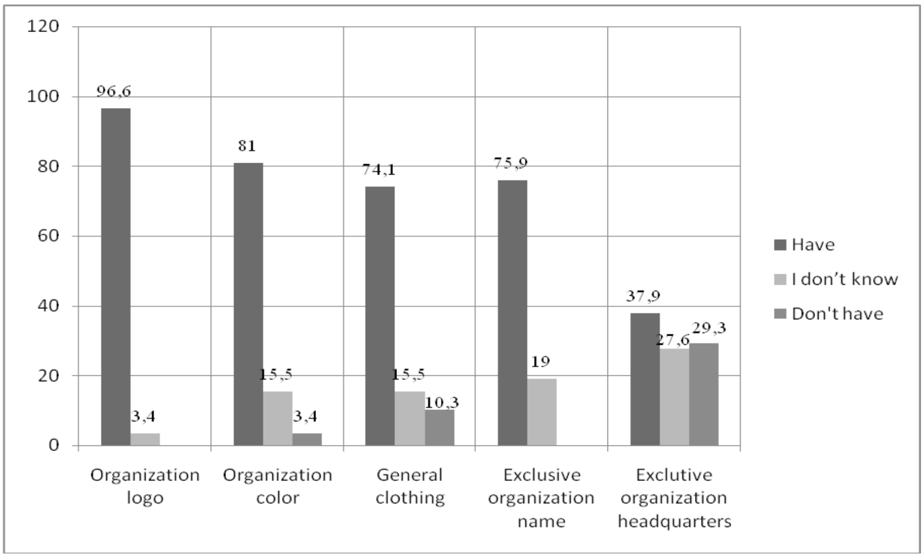

Figure 1. Exceptional organization symbols

Source: research data (2014)

Respondents were asked to identify what are the symbols of the organization (figure 1). 96.6 percent of the respondents identified organization's logo as an exquisite symbol, 81.0 percent of the respondents – organizations color, 74.1 percent of the respondents – general clothing (dress code), 75.1 percent of the respondents – exclusive organization name, and 37.9 percent of the respondents – exclusive organization headquarters (room furnishings, colors, etc.).

Respondents were asked to explain what the organization symbol means. Most of the respondents noted that the green color means that the company carries out environmentally-friendly activities, that companies activity is related to processing. Respondent also note, that company's name describes what is produced and where organization is located. It was also aimed to assess the effects of selected organizations symbols on the organization and employees (table 5). According to the respondents symbols improve the image of the organization in the eyes of consumers and society *(mode 2)*, apart the organization from other similar organizations *(mode 2)*, selected symbols draws attention to certain specific characteristics of the organization *(mode 2)*, and allow to understand organization better *(mode 2)*. The majority of respondents agree that the choice of the most important symbols inform about the values *(mode 3).* So, companies chosen symbols (logo, the color and the name of the organization), and their importance is relatively well-known to the members of the organization. The analysis of the data revealed some differences of opinion depending on the position held. ANOVA test showed that mid-level managers and administrative employees compared with employees without subordinates are more likely to agree that selected symbols draw attention to certain specific characteristics of the organization ($p \leq 0.05 = 0.023$). In addition, administrative employees think that selected symbols distinguishes the organization from other organizations ($p \leq 0.05 = 0.012$), while subordinates without employees only partially agree with this statement. So in this case, employees without subordinates have slightly less optimistic view of their organization's organizational culture. Work experience do not affected respondents' opinion on these statements.

According to the opinion of the respondents, the symbolism of the organization mainly entrenched in employees clothing (79.4 percent), sent letters / e-mails (39 percent), various reports (37.5 percent), message boards dedicated to workers (29.4 percent).

Table 5. Assessment of employees' attitude towards symbols impact (1 – strongly agree, 5 – strongly disagree)

No.	Statements	Mean	Mode	Std. Deviation	Position held by the respondent Sig. $p \leq 0.05$	Respondents work experience Sig. $p \leq 0.05$
1.	Selected symbols improve the image of the organization the eyes of consumers and society	2.33	2	1.049	.447	.853
2.	Selected symbols distinguish the organization from other similar organizations	2.17	2	.861	**.012**	.379
3.	Selected symbols draws attention to certain specific characteristics of the organization	2.29	2	.973	**.023**	.338
4.	It is pleasure to observe the symbolism of the organization in other non work environments.	2.03	2	.816	.504	.317
5.	Selected symbols inform about important values of the organization.	2.74	3	.928	.181	.134
6.	Organizations symbol meaning knowing allows better understand your organization	2.50	2	1.047	.943	.584

Source: research data (2014)

Submitting their approach to the organization's history respondents agree that there are various dramatic events, facts in the organizations history *(mode 2)*, also respondents agree that the organization's history is known to many employees of the organization *(mode 2).* Respondents partially agree that the organization history is told for organization's newcomers, organization history inspires employees to work, and when you know the history of the organization's organizational values becomes obvious and understandable *mode 3* (table 6).

Table 6. Assessment of employees' attitude towards organization history (1 – strongly agree, 5 – strongly disagree)

No.	Statements	Mean	Mode	Std. Deviation	Position held by the respondent Sig. $p \leq 0.05$	Respondents work experience Sig. $p \leq 0.05$
1.	There are various dramatic events, facts in the history of organization	2.02	2	.783	**.022**	.411
2.	The organization's history is known to many employees of the organization	2.28	2	.833	**.031**	**.025**
3.	The organization history is told for organization newcomers	2.53	3	.995	.209	.214
4.	Organization's history inspires employees to work	2.67	3	.033	.337	.084
5.	When you know the history of the organization's organizational values becomes obvious and understandable	2.66	3	.928	.153	.614

Source: research data (2014)

An ANOVA test (table 6) showed differences between employee attitudes: most managers compared with employees without subordinates tend to agree that there are various dramatic events, facts in the history of organization ($p \leq 0.05 = 0.022$), and it is known to many to many employees of the organization ($p \leq 0.05 = 0.031$). Also, the respondents with the least experience (up to one year), and more than nine years having work experience respondents agree that the organization history is known to many employees of the organization ($p \leq 0.05 = 0.025$). Meanwhile respondents from 3 to 6 years of work experience tend to disagree with these statement. So, once again employees without subordinates have more critical approach to the situation.

Most of the historical aspects of the organization can be found on the website (50 percent), leaflets (44.4 percent), special publications (43.4 percent). It also presented lots of information in the internal rules of procedure (24.4 percent).

The respondents' attitude towards organization's heroes was studied during survey (table 7). Respondents agree that communication with the heroes of the organization provides a positive emotions *(mode 2).* Respondents only partially agree *w*ith other statements describing heroes *(mode 3).* The respondents were asked to identify the persons they consider heroes. Persons were identified by names or by writing they position. The names can't be identified in the article for ethical reasons. However, it can be concluded that there are persons in the organization which employees consider as a heroes. According respondents opinion heroes of organization can be seen in commemorative publications (30.2 percent) and message boards dedicated to workers (44.4 percent) (Table 3). An ANOVA test showed that mid-level managers tend to agree that there are heroes in the organization, with whom other employees try to match ($p \leq 0.05 = 0.006$), that heroes are known for their works performed ($p \leq 0.05 = 0.005$), communication with the heroes of the organization provides positive emotions ($p \leq 0.05 = 0.013$), while the administrative employees more tend to disagree with these statements. It should be noted that the mid-level managers who take part in this study have more than six years work experience, and probably they are well aware of individuals.

Table 7. Assessment of respondents' attitude towards organization's heroes (1 – strongly agree, 5 – strongly disagree)

No.	Statements	Mean	Mode	Std. Deviation	Position held by the respondent Sig. $p \leq 0.05$	Respondents work experience Sig. $p \leq 0.05$
1.	There are heroes in the organization, with whom other employees try to mach	2.34	3	.069	**.006**	**.001**
2.	Heroes are known for their works performed for many employees	2.45	3	.187	**.005**	**.000**
3.	Heroes are an example for other employees	2.48	3	.112	.537	**.019**
4.	Heroes' behavior / work comply with the values	2.45	3	.127	.051	**.022**
5.	Communication with the heroes of the organization provides a positive emotions	2.41	2	.109	**.013**	.527

Source: research data (2014)

The analysis of the data by work experience revealed that, employees with up to one year work experience agree that there are heroes in the organization ($p \leq 0.05 = 0.001$), that they are known for works performed ($p \leq 0.05 = 0.000$), that they are an example to other workers ($p \leq 0.05 = 0.019$), in comparison with the higher work experience of employees. They have also identified specific heroes. Besides less work experience having respondents are tend to agree that heroes' behavior / work comply with the values ($p \leq 0.05 = 0.022$), while higher work experience respondents tend to disagree with this statement. It is assumed that these individuals have a positive view of their organization.

The respondents were asked to assess statements about organization's traditions (table 8). The respondents agree that organization have a certain traditions common to most organizations *(mode 2).* This is confirmed by assessment of another statement: respondents agree partially *(mode 3)* with statement that organization has a specific tradition. Respondents were asked to identify the specific organization's or collective's traditions. Most of the respondents mentioned the birthday celebrations, Christmas parties and summer feast. The yearly forest feast which is held in August was mentioned as specific. Respondents agree that the organizations traditions are acceptable and provide positive emotions *(mode 2).* Respondents only partially agree that specific traditions encourage loyalty to the organization, open communication between employees, and that photos, memories of the traditional event brings collective together *(mode 3).* Mostly specific tradition encourage low-level management's loyalty to the organization ($p \leq 0.05 = 0.009$). Meanwhile, administrative employees and employees without subordinates do not agree with statement. Analysis revealed that traditions, rituals are most visible in the commemorative publications (30.2 percent) and the code of ethics (24.2 percent). According to respondents rituals are least visible: they can be seen only in sent letters / e-mails, the code of ethics and message boards dedicated to workers.

The analysis of communication closeness and intensiveness (table 9) showed that the respondents agree that employees constantly are communicating on operational questions and that it is possible to refer to higher level employees while solving various work questions (mode 2). An ANOVA test showed that all levels of managers and administrative employees agrees that it's possible to refer to higher level employees while solving various work questions ($p \leq 0.05 = 0.000$), while employees without subordinates only partially agree with this statement. It is assumed that the communication in the organization is quite businesslike, because respondents only partially agree that employees often communicate on personal questions, and that communication in the organization is close *(mode 3).*

Analyzing the data according to work experience revealed that between 1 and 3 years of work experience the respondents tend to agree that it's possible to refer to higher level employees while solving various work questions ($p \leq 0.05 = 0.012$). Meanwhile, more than 9 years of work experience the respondents tend to agree only partially with this statement. It is possible that the highly experienced employees makes the decisions themselves, or they are just the people who advice to others. The respondents who have up to one year work experience agree that information in the organization transmitted correct and the information is enough for work proceeding smoothly ($p \leq 0.05 = 0.002$), while respondents having from 3 to 6 years work experience tend to disagree with this statement (table 9).

Table 8. Assessment of employees' attitude towards organization traditions (rituals, ceremonies) (1 – strongly agree, 5 – strongly disagree)

No.	Statements	Mean	Mode	Std. Deviation	Position held by the respondent Sig. $p \leq 0.05$	Respondents work experience Sig. $p \leq 0.05$
1.	There are certain traditions common to most organizations (birthday celebration, new year celebration)	2.02	2	.761	.427	.968
2.	There are specific traditions (sports events, group trips, Friday dress code or the adoption of new arrivals) of organization	2.75	3	.958	.092	.155
3.	The organization's traditions are acceptable for employees and provides positive emotions	2.36	2	.021	.099	.237
4.	Organization's tradition encourage employees to communicate openly	2.65	3	.921	.055	.478
5.	Photos, memories of the traditional events bring collective together	2.87	3	.799	.287	.752
6.	Specific traditions encourage loyalty to the organization	2.79	3	.918	**.009**	.311

Source: research data (2014)

Table 9. Assessment of employees' attitude towards closeness and intensiveness of communication (1 – strongly agree, 5 – strongly disagree)

No.	Statements	Mean	Mode	Std. Deviation	Position held by the respondent Sig. $p \leq 0.05$	Respondents work experience Sig. $p \leq 0.05$
1.	Employees are constantly communicating on operational questions	2.26	2	.807	.630	.125
2	It's possible to refer to higher level employees while solving various work questions	2.50	2	1.030	**.000**	**.012**
3	Employees often communicate on personal questions	2.60	3	.917	.165	.117
4	While talking with each other collaborators uses specific words, expressions, phrases	2.77	3	.821	**.034**	.337
5	Communication in the organization is close	2.72	3	1.073	.072	.217
6	At least a few employees of the organization know various personal facts of your life (eg. about family, children, and parents)	2.78	3	.988	.611	.526
7	Information in the organization is transmitted correct and it's enough for work proceeding smoothly	2.85	3	.940	.462	**.002**

Source: research data (2014)

The analysis of communication specifics revealed that workers use specific words, expressions, phrases while communicating with each other, but such expressions are not used much *(mode 3)*. Employees without subordinates use specific words, expressions and phrases more frequently ($p \leq 0.05 = 0.034$), while managers of various levels use normative Lithuanian language while communicating with each other. Respondents were asked to identify few specific words or phrases typical to the organization. Respondent mentioned these phrases: what is missing ?, why ?, "maklaške" (waste paper), "piglet", "termination", "walking radio" and so on. Analysis of communication institutionalization revealed that communication (cultural communications network) features mostly reflected in the sent letters / e-mails (24.4 percent), in the adaptive program (27.3 percent), in the code of Ethics (36.7 percent) and in the message boards dedicated to workers (20.6 percent) (table 3).

Conclusions

In order to evaluate the OK of SC „Klaipėdos kartonas" there was formulated questioner, which measures employees attitude towards the importance and influence of OK, values, symbols, history, heroes, traditions and the closeness and intensity of communication. In general employees appreciate their OK as beneficial and see its' positive impact. Respondents agree that organization's management and employees are guided by the organization values in their work. Such values as social responsibility, environmental sustainability, as well as diligence, teamwork, continuous improvement, agility and professionalism were mentioned mostly. The values can be found in different documents and organizational means. The symbols chosen by company (logo, the color and the name of the organization), and their importance is relatively well-known to members of the organization. According to the surveyed employees, these symbols improve the image of the organization in the eyes of consumers and society, draw attention to specific characteristics of the organization, allows better understanding of organization's activity. The symbolic of the organization mainly enshrined in employees clothing, sent letters / e-mails, various reports, message boards. Respondents agree that there are various dramatic events and facts in the history of organization, and that the organization's history is known to many employees. But there is only partial agreement that history inspires employees to work, and that values becomes obvious and understandable when the history is known. Most of historical aspects can be found on website, leaflets, and special publications. It can be stated that there are distinguishing persons, who are perceived as a heroes by employees. Respondents agree that communication with the heroes of the organization provides a positive emotions. The survey revealed that there are traditions common to most organizations. A yearly forest feast is named as a specific tradition. Respondents agree that the organizations tradition are acceptable and provides positive emotions. Less agreement receive statements, that specific traditions encourage loyalty to the organization, open communication between employees, and brings collective together. The traditions are most visible in commemorative publications and the code of ethics. The analysis showed that communication in organization is businesslike: employees constantly communicate about business deals; it is possible to refer to higher level employees while solving various work questions; communication on personal questions is uncommon. The peculiarities of communication are reflected in e-mails, adaptation program, code of ethics and message boards. Statistically important difference was revealed while comparing opinion of respondents of different status: managers of all levels expressed more agreement for statements about all elements of OK; meanwhile employees without subordinates expressed less agreement, and sometimes – disagreement with given statements. Such difference of opinions is frequent in various organizations, because employees with higher position more participate in formation and implementation of OK, therefore better understand its importance and benefit. It is suggested to involve employees without subordinates in processes of formation and implementation of OK more actively.

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AB „KLAIPĖDOS KARTONAS“ ORGANIZACINĖS KULTŪROS VERTINIMAS

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Santrauka

Organizacinė kultūra yra vadybos priemonė, daranti įtaką organizacijos veiklai, jos rezultatams, santykiams su visuomene ir aplinka. Ypač akcentuojamas svarus organizacinės kultūros (toliau – OK) ir paskirų jos elementų poveikis organizacijos darbuotojams. Darbuotojų požiūrio į OK vertinimas atskleidžia, kaip tikslingai ir kryptingai valdyti organizacinę kultūrą ir taip stiprinti organizaciją. Šiame straipsnyje pristatomas AB „Klaipėdos kartonas“ organizacinės kultūros vertinimas.

Tyrimo tikslas – įvertinti AB „Klaipėdos kartonas“ organizacinę kultūrą, vertybes, simbolius, istoriją, herojus, tradicijas ir bendravimą darbuotojų požiūriu.

Tyrimo metodai: mokslinės literatūros analizė, anketinė apklausa, gautų duomenų apdorojimas SPSS programos 17.1 versija ir interpretavimas. Vertinimo klausimynas sudarytas straipsnio autorių. Apklausti 58 respondentai, atrinkti atsitiktinės atrankos būdu.

Remiantis tyrimo duomenimis, galima teigti, kad apskritai AB „Klaipėdos kartonas“ darbuotojai palankiai vertina savo organizacijos kultūrą, įžvelgia jos teigiamą poveikį. Respondentai sutinka, kad organizacijos vadovybė ir patys darbuotojai savo veikloje vadovaujasi organizacijos vertybėmis. Įvardytos vertybės: socialinis atsakingumas, gamtos tausojimas, darbštumas, komandinis darbas, nuolatinis tobulėjimas, veržlumas, profesionalumas. Organizacijos simboliai (logotipas, jo spalva ir organizacijos vardas) ir jų svarba organizacijos nariams puikiai žinomi. Apklaustųjų teigimu, šie simboliai gerina organizacijos įvaizdį vartotojų ir visuomenės akyse, atkreipia dėmesį į specifines charakteristikas, leidžia geriau suprasti organizacijos veiklą. Organizacijos istorija yra žinoma daugeliui darbuotojų, tačiau tik iš dalies sutinkama, kad ji įkvepia darbuotojus darbui, t. y. sužinojus istoriją organizacijos vertybės tampa akivaizdžios ir suprantamos. Organizacijoje esama pasižymėjusių asmenų, kuriuos darbuotojai laiko herojais. Apklaustieji sutinka, kad bendravimas su organizacijos herojais suteikia teigiamų emocijų. Organizacijoje puoselėjamos tradicijos, būdingos daugeliui organizacijų, įvardyta specifinė kasmetinė miško šventė. Respondentai pritaria, kad organizacijos tradicijos yra priimtinos ir sukelia teigiamų emocijų. Mažiau pritariama tam, kad tradicijos lemia lojalumą, atviresnį darbuotojų bendravimą, kolektyvo sutelkimą. Analizė atskleidė, kad organizacijoje bendraujama dalykiškai: darbuotojai nuolat bendrauja darbo klausimais; įvairiais darbo klausimais galima kreiptis į aukštesnio lygio darbuotojus; asmeniniais klausimais bendraujama rečiau. Atskleistas statistiškai reikšmingas skirtumas lyginant skirtingas pareigas užimančių respondentų nuomones daugeliu klausimų: visų lygių vadovai labiau pritarė teiginiams apie visus organizacinės kultūros elementus, tuo tarpu pavaldinių neturintys darbuotojai sutiko rečiau, kartais – nesutiko su pateiktais teiginiais. Siūlytina aktyviau įtraukti pavaldinių neturinčius darbuotojus į organizacinės kultūros kūrimo bei įgyvendinimo procesus.

PAGRINDINIAI ŽODŽIAI: *organizacinė kultūra, vertybės, vertinimas.*

JEL KLASIFIKACIJA: M14, A13, D04.

SUSTAINABLE TOURISM DEVELOPMENT IMPLICATIONS TO LOCAL ECONOMY

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ABSTRACT
Tourism is a sophisticated activity of any national economy. The originality of regional tourism impacts the application of special mix of means concerning insufficient professional knowledge and competences of enterpreneurs in the frame of providence of high quality services, hence, the regional tourism development interferens with specific problems. By current driven factors in regional tourism, such as high entrepreneurship, investments, variety of serviness, warrant a new era of local economy and serve for the strategic tourism development as tools and specific scenario. Sustainable tourism sector accesses new stock of acitivities concerning competitiveness amplification and popularization or implication of new resources. The current task of research is to identify the impacts of sustainable tourism development in the frame of amplification of new tourism resources concerning business range and sustainability of regional development.
KEY WORDS: *sustainable tourism development concept, tourism industry, local economy, tourism cluster.*

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Introduction

Sustainable tourism development concept is connected with specific issues for identification tourism development strategic tools upon sustainable regional development. By the UNESCO World Heritage Study (Sustainable tourism (...), 1999), the concept of sustainable tourism development is related to principles such as intra- and inter- generational equity, has been widely applied to economic sectors, mainly and sustainable tourism.

Sustainable tourism development means the optimal use of social, natural, cultural and financial resources for national development on an equitable and self-sustaining basis to provide a unique visitor experience and an improved quality of life through partnerships among local government, private sector and communities.

Problem. The necessity of wider explanation about the sustainable tourism development impacts to local economy is fitted to the new challanges for it, especially in remoted regions of EU.

Purpose. Scientific research is oriented on formulation of introductive information for the stakeholders about the impacts of sustainable tourism development.

Object. Sustainable tourism development dimensions.

Tasks:

- investigate the sustainable tourism environment and to induct transversal dimension of sustainable tourism development concept;

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- identify the impacting factors of sustainable tourism development;
- reveal the conceptual means for enchance the sustainable tourism development model.

Methods. The research methods are applied: monograph method, desk and integral method, systematic and content analysis of the refered scientific studies and reports.

The scientific article is compounded and structured as follows:

- firstly, the implication of the sustainable tourism development concept is presented;
- secondly, the survey is oriented on carrying out a review of sustainable tourism development by some dimensions: tourism infrastructure improvement, local tourism resources, mainly cultural, with its impact on local business development, that allows to clarify a number of related tourism development strategies and creation of regional tourism cluster for making evidence about the peculiarities of local economy upon tourism as a streamline factor for regional development;
- thirdly, the survey serves for proposition a conceptual model of regional competitiveness by clustering tourism ans aiming it to help filling the existent gap within this field as a tool for future researches in the sustainable tourism development.

The investigation of the transversal dimmension of sustainable tourism development is based on systematic analysis of theoretical aspects of sustainable tourism model as EU tourism environment and infrastructure. For the investigation of preconditions for building cluster scenario for tourism sector, the research is contributed with the preconditions positively acting on tourism infrastructure and innovative processes insight, facilitating global markets with the new tourism products, tourism institutions, canalizing knowledge and information for tourism industry as technological dissemination.

1. Implications of sustainable tourism development concept

Tourism industry takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities (UNWTO, 2011). The most clearly declaration about sustainable tourism development concept was explained in 1997 (Sustainable (...) by Naturopa, 1997). Over 170 states agreed to pursue at the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, and possesed new challenges for environmental policy at both European and global level. The European Union and the Council of Europe have developed specific activities in this area. In 1995, the United Nations Environment Programme by UNEP in Paris published for the first time a collection of the environmental guidelines in existence throughout the world for the tourist sector. In April 1995, UNESCO held a World Conference on Sustainable Tourism in Lanzarote in co-operation with the Spanish Government. The participants adopted an 18-point Charter for Sustainable Tourism, which had a significant impact. The first example of an international legal instrument can be found in the implementing Protocol on Tourism of the Convention for the Protection of the Alps, which commits the eight Alpine states to the goal of sustainable tourism in the Alpine region.

The greatest interest in sustainable tourism development model in EU appeared at 1992, and splitted toward the concepts, programmes and practical studies.

The final considerations and research results are important to stakeholders in application the cluster scenario for tourism sector of any EU region. Implications of the sustainable tourism development concept is based on the tourism sector could be characterized as one of the activities with great potential for expansion on a more global scale. For its growth potential and particular focus on a regional level is significant (Sharpley, 2002; Jackson et al., 2005) and a full view to small business (local economy) development opportunities even in rural areas.

There are several inherent challenges in applying the concept of sustainable tourism development by tourism industry and local business (Berno, Bricker, 2001), international tourism development with the international cooperation and assistance; and tourism development towards a green economy (UNWTO, 2011) with the new funding tools and programmes.

Tourism academics and practitioners openly consider about the implications of sustainable tourism development concept and declare their positive attitude about the necessity to special tourism funding programmes, which help to conduct the tourism sector in the less developed EU countries (Berno, Bricker, 2001; Peric, Mujacevic, Šimunic, 2011). Obviously, the tourism development under sustainable regional policy and institutional EU initiatives (Torres-Delgado, Palomeque, 2012) is important for local economy and population directly acting in this sector.

According to United Nations World Toursim Organization (UNWTO, 2011) tourism sector needs to strengthen alliances with other international and regional organizations, including some from the private sector as well as to build the institutional framework to better equip the Organization with policies, tools and knowledge in order to enhance results. The traditional resources and economic activities have stabilized and declined over the past few years the development of global tourism. The great need for activation it in new scenario is more relevant than ever.

The Roadmap to the Earth Summit RIO+20 in June 2012 (Earth Summit, 2012) was proposed by UNWTO, and linked to a unique milestone for the World Tourism Organization to position tourism in the Global Agenda (UNWTO, 2011). The OECD Development Assistance Committee (DAC) is a unique International Forum, where donor governments and multilateral organizations (ex., World Bank, United Nations) work together to reduce poverty and achieve the Millennium development goals. Forum is seeking of the new ways of implementation of DAC's objectives (UNWTO, 2011). The transversal dimension of tourism development is represented as a unique opportunity for UNWTO to act as the umbrella organization with other UN entities. For tourism development it coveres all public and private sector – actors and stakeholders, and pull resources for common global market interests. By co-branding UNWTO with other institutions from public and private sectors, build the tourism scenario, which are available as a visible and brand equity of any country with a strong emphasis on economic development, employment, poverty reduction within the new paradigm of climate change and the recent crisis.

Consequently, the regional tourism sector is so significant at national levels, that it could be presented as mainstreaming tool in regional development and economic growth of any EU country, especially in remoted regions of the Baltic States, believing to be one of the shifts to avoid desertification and regional economic stagnation. The importance of tourism sector development is mentioned by local action groups (LAGs) and non-governmental organizations (NGOs), and this activity is becomming important more in rural areas, than in urban.

Finally, tourism activities bring much-needed foreign exchange, which allows the regional economic development and diversification. So, in regional development context, the tourism is a powerful instrument (Opperman, 1993; Engelstoft et al., 2006) for creation tourism value chain, which is relevant to discuss the role of clusters and networking tourism organizations with local stakeholders (Peric et al., 2011).

In nowadays the tourism industry is developmeng by using some sustainable tools – the global partnership networking, green economy pillars, green pasport campaign (UNEP, 2014).

The tourism industry can have adverse environmental, economic and social effects. These impacts are mostly linked with the construction and management of tourism infrastructures such as roads and airports, and of tourism facilities, including resorts, hotels, restaurants, shops, golf courses and marinas. All managed tourism can put enormous pressure on an area and lead to soil erosion, increased air, soil and marine pollution, natural habitat loss, increased pressure on endangered species and heightened vulnerability to forest fires (UNEP, 2014). On the other hand, tourism has the potential to contribute to environmental protection and poverty reduction by capitalising on biodiversity assets; to increase public appreciation of the environment and to spread awareness of environmental problems bringing people into closer contact with nature and the environment. Because of tourism potential, many natural areas are now legally protected. Finally, sustainable tourism businesses can be promoted as sustainable alternative livelihood opportunities in areas where current economic activities have detrimental effects on the host environment, but, where biodiversity and cultural assets could be a source of income. If efficiently planned and managed, tourism could become an ally and a supportive economic and political force for conservation. That is the aim of promoting sustainable tourism development (STD) concept or tourism that is compatible with sustainable development.

The goals of STD concept could be arised from several sides of it implementation results, such as mentioned in the mission of UNEP (UNEP, 2014):

- to mainstream a sustainability into tourism development by demonstrating the economic, environmental and socio-cultural benefits;
- to contribute with biodiversity conservation;
- to sustaine of the well being local people;
- to support peopel and organizational with learning experience;
- to involve the responsible actions on the part of tourists and the tourism industry;
- to deliver the products/services primarily to small groups by small-scale businesses;
- to require the lowest consumption of non-renewable resources;
- to stress-up the local participation, ownership and business opportunities, particularly for rural people.

Simple framework of sustainable tourism development model needs three elements: target market, desired experience and place with it identity, locality, site and facilities. The main shifts of such scenario could be the handling of regional resources, which are so important for domestic and international tourism development.

In last decade, in Lithuania tourism sector is based on investigation of new opportunities and findings of the atractive cultural resources. This tendency is obviously great for all tourism industry. Finally, the integral approach is needful at a new period of Rural Development Programe 2014–2020 for Lithuania's local economy by further solutions to improve the socio-economic situation in rural areas. The interaction of main instruments in identification of cluster scenario for Lithuanian tourism development is important for encourage it regional competitiveness.

Sustainable tourism development concept includes the environmental physical and human issues, employment and financial leakages, business development and entrepreneurial activities, social impacts in business and consumer behavior, and environmental aspects (Miller, 2001). Finally, descriptive and general indicators are pointing to the difficulties to investigate properly the sectoral impacts for sustainable tourism development.

2. Analysis of dimensions of sustainable tourism development

World Trade Organization (WTO) suggests the definition such as the sustainable tourism development concept could include the regional development dimension in host regions while protecting and enhancing opportunities for it in the future (Cernat, Gourdon, 2007). It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes and biological diversity and life support systems.

In UNEP Programme sustainability of a tourism sector development is fixed on the strategic goals with pointed dimensions (UNEP, 2014):

- support the integration of sustainability in tourism development policies;
- support to governments and other institutional stakeholders in the local regional and international level;
- promotion of sustainable production patterns in the tourism value chain;
- co-operation with the tourism industry (hotels, tour operators, transportation industry, etc.);
- encourage demand for sustainable tourism services and consumer based activities;
- co-operation with NGOs having programmes on sustainable tourism.

Sustainable tourism development definitely includes the issues connected to the rural development, environmental impacts, cultural and natural heritage, services and infrastructure for tourism as ethnotourism or ecotourism, or agrotourism, and alternative activities in countryside.

Consequently, in the scientific publications sustainable tourism surveys are focused on the development of indicators measuring tourism sustainability in a complex way, or covered several indicators of the physical and human environment (Miller, 2001).

Seven dimensions are proposed for construction full view benchmarks of sustainable tourism: tourism assets (natural resources and cultural assets); tourism activity; tourism-related linkages; tourism-related leakage effects; environmental and social sustainability; overall infrastructure and regional attractiveness (UNWTO, 1998; Cernat, Gourdon, 2007).

The key pillars of sustainable tourism development are suitable for a balance between these dimensions to guarantee its long-term sustainability: environmental, socio-cultural and economic. In case of the aims of sustainable tourism development: economic viability, local prosperity, employment quality, social equity, visitor fulfillment, local control, community wellbeing, cultural richness, physical integrity, biological diversity, resource efficiency, environmental purity, the future investigations are appropriate.

UNWTO Guide for local authorities on developing sustainable tourism provides a good description of the type of tourism resources that need to be considered and assessed. The Tourism Satellite Account, for instance, also analyses the supply side of tourism, but that only concerns the producer of goods and services in tourism activity (UNWTO, 2011).

More impacts on sustainable tourism development are presented in 1 table.

Table 1. Types of impacts in sustainable tourism development model

Positive impacts of sustainable tourism development	**Negative impacts of sustainable tourism development**
Building community pride	Commodification and cheapening of culture and traditions
Enhancing the sense of identity of a community or region	Alienation and loss of cultural identity
Promoting intercultural/international understanding	Undermining of local traditions and ways of life
Encouraging revival or maintenance of traditional crafts	Displacement of traditional residents
Enhancing external support for minority groups and preservation of their culture	Increased division between those who do and do not benefit from tourism
Broadening community horizons	Conflict over (and at times loss of) land rights and access to resources (including the attractions themselves
Providing funding for site preservation and management	Damage to attractions and facilities
Enhancing local and external appreciation	Loss of authenticity and historical accuracy in interpretation
Support for cultural heritage	Selectivity in which heritage attractions are developed

Source: author's elaboration

Such diversity of activities in regional level leads on findings on different sustainable tourism impacts, and makes the concept so complex (Middleton, Hawkins, 1998). Identification of positive and negative impacts is required for maintenance the framework of national tourism industry with new findings for improving it by clustering.

3. Clustering of National tourism industry

The scientific and practical discussion about tourism clusters is still in primal level in EU (Rosenfeld, 1997; Nordin, 2003; Capone, 2004) and Lithuania, too. For investigating the possibilities to improve the economic situation of local residents in the rural areas, arises a great necessity to create a conceptual model for local stakeholders to act in networking upon the scenario of sustainable tourism development (STD) (Torres-Delgado, Palomeque, 2012).

The major potential of clusters in tourism sector stands on geographical location and natural environment (including landscape), historical and cultural heritage, nature watch, thematic routes, museums, crafts and food, local lifestyle, tourist accommodation and facilities. Clusters are emerging spontaneously based on market forces on a variety of activities. Such process of clusters formation occurs naturally as local business entities are more active, investment to infrastructure is quite available, logistics and transport system is working. Clusters are responding of local needs, organized in cluster concentrations and global markets.

The existence of geographical concentrations (Porter, 1994) is available, where growth is strong and sustained by the interactions among private, public and institutional entities.

Clusters are functioning through the famous points of M. Porter "diamond":

- factorial conditions or structural environment of business;
- demand conditions, which disclose the demand conditions for products / services in the internal market where innovation impacts is greater along the value chain;
- related industries, which offer other products/services, and synergy to a similar demand is higher, interacting the client and business cluster;
- strategy, structure and rivalry is needful for the existence of local competitors as a powerful stimulant to innovation and performance improvement up to cooperation among firms;
- historical hazards;
- public policy.

M. Porter (Porter, 1994) sugested "diamond model" and applied to sustainable tourism development that shows the system of interactions inside the cluster, which are mainly informal, enticing coherence, all actors in cluster need co-operation, but keep their freedom of choice in all business opportunities by competition.

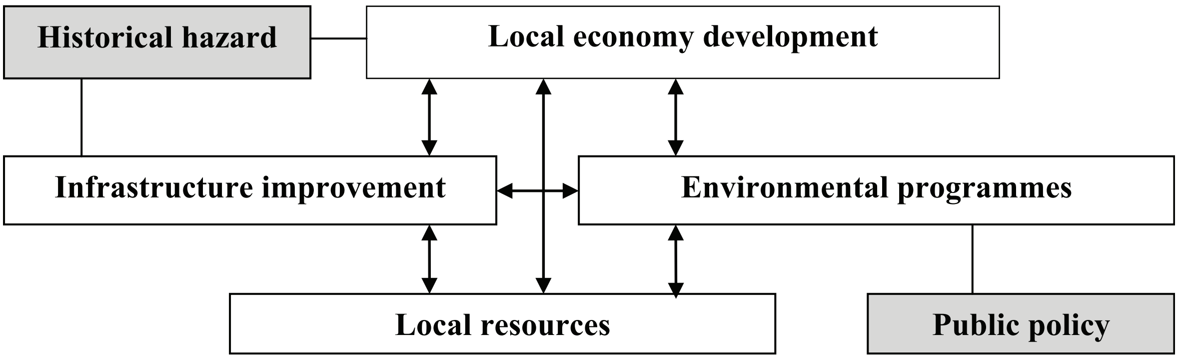

Figure 1. Conceptual model of sustainable tourism development

Source: author's elaboration

The tourism cluster is importnat in adoption of the specific characteristics of tourism activity, those product is linked to its local base and to the common activity of enterprises involved in the regional tourism product in the frame of horizontal or vertical business relations (Cunha, Cunha, 2005). Strategic alliances or strategic networks are rewarding the regional tourism infrastructure. Tourism clustering helps to guarantee high quality tourism, with tourist attractions and sustainable economic activity.

Public policy or governance has an important role in assembling information about cluster composition, membership, employment and performance. Such information allows public investments to be better aligned with business needs, based on the cluster composition in any region. This will make public policy more effective. Cluster information will also increase the efficiency of private sector investment and foster the start-ups with new business. Cluster-based tourism sector should face with the higher economic activity, spillovers productivity and prosperity increase, providing superior levels of territorial competitiveness.

Thus, landscape and natural environment, cultural heritage and local infrastructure have to be adequate to regional development goals.

Conclusions

Research provides a long-term priority areas of tourism sector and regional tourism industry for promoting the most accessible tourism resources – natural, cultural, recreational, business and human. The analysis of strategic objectives and actions serves for identification of capabilities for private business to implement sustainable tourism development concept and it's tools, mastering a rational use of EU Structural Funds in the national tourism sector competitiveness. Landscape, natural environment and heritage could be the answer to regional development by clusters formation for tourism sector.

The investigation results about sustainable tourism environment are focused on several inherent challenges in applying the concept of sustainable tourism development to regional tourism industry. Nowadays the regional tourism industry is developing by using some sustainable tools – the global partnership networking, green economy pillars, green pasport campaign, which makes easire way to manage tourism information and reveal structural market changes. Tourism environment serves also for contribution to sustainable regional development bringing people into closer contact with nature.

Seven dimensions are proposed for construction full view benchmarks of sustainable tourism, which includes the environmental physical and human issues, employment and financial leakages, business development and entrepreneurial activities, social impacts in business and consumer behavior, and environmental aspects.

Finally, descriptive and general indicators are pointing to the difficulties to investigate properly the sectoral impacts for sustainable tourism development.

Such diversity of activities in regional level leads on findings on different sustainable tourism impacts, with the identification of positive and negative impacts. Their evaluation is required for maintenance the framework of national tourism industry with new findings for improving it by clustering.

Clusters in tourism industry are making geographical concentration of available regional/local businesses with interactions among private, public and institutional entities. Clustering occurs naturally as the local business entities are becomming more active. Clusters are spontaneously based on market forces on a variety of their activities. Cluster-based tourism sector should face with the higher economic activity and territorial competitiveness.

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TVARIOS TURIZMO PLĖTROS POVEIKIS VIETOS EKONOMIKAI

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Santrauka

Mokslinių tyrimų gausa verčia analizuoti darnios turizmo plėtros koncepcijos turinį ir suprasti septynių jos dimensijų poveikį. Straipsnyje akcentuojamos naujos dimensijos: fizinės infrastruktūros ir apinkosaugos, darbo rinkos ir verslumo, finansinės paramos bei socialinės priemonės, kurios svarbios ir sparčiai diegiamos versle bei vartotojų elgsenoje. Aptariamos kylančios problemos.

Turizmas yra sudėtinga veikla, daranti didelį poveikį regiono ar vietovės ekonomikai. ES šalių regionų vystymo strategijoje turizmo plėtros poveikis vertinamas teigiamai. Vykdant įvairią ekonominę veiklą ar įgyvendinant specialias verslumo priemones, siekiama konkretaus regiono gyventojų gerovės. Menkai ekonomiškai išvystytuose regionuose, kur ryškus verslumo ar verslo žinių bei ekonominės veiklos patirties trūkumas, svarbu atrasti būdų, kaip teikti aukštos pridėtinės vertės turizmo produktus ir paslaugas. Darniai turizmo plėtrai reikia naujų išteklių, naujos veiklos siekiant didesnio regiono konkurencingumo, todėl būtina skatinti verslumo, investicijų ar paslaugų įvairovę, sudarant prielaidas įgyvendinti specialius turizmo plėtros scenarijus.

Pagrindinė šiuo moksliniu tyrimu identifikuota problema yra vietovės gamtos, kultūros, poilsio, verslo ir žmonių išteklių sutelkimas kuriant pridėtinę vertę turizmo klasteriuose.

PAGRINDINIAI ŽODŽIAI: *darnios turizmo plėtros koncepcija, turizmo sektorius, vietos ekonomika, turizmo klasteris*.

JEL KLASIFIKACIJA: R11, R58.

ACTUAL PROBLEMS OF ENTERPRISES' MARKETING MANAGEMENT

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ABSTRACT
The purpose of this paper is to provide an overview of the most current problems and issues in marketing management. As all enterprises deal with various difficulties in their business planning, implementation and control, these issues and problems have to be recognized, dealt with, and solved. Most of the business strains will have a lot to do with diverse marketing aspects, as marketing is the main link between enterprises and their markets and customers; strategically mappedand implemented marketing helps to create competitive advantage and pave the way for success, but different problems can endanger firms' marketing process, thus in today's volatile business environment marketing executives have to bear in mind and deal with various facets of the marketing in rapidly changing world.
KEY WORDS: *marketing management, current marketing management problems, actual marketing management issues, marketing management changes.*

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Introduction

Marketing management has to be responsive and adaptive to ever-changing business environment. Over the past couple decades increasingly more companies have strived to deal with various shifts in marketing management processes, stemming from the growth of global competition and global markets, changes in marketing communication channel usage, the influence of social media and social networks, customer empowerment in digital age, effects left by technology usage, and necessity to make marketing more accountable by measuring the marketing management performance and success. Therefore various aspects that nowadays are leaving an impact on marketing management have to be identified within businesses in order to overcome the obstacles or grasp the possibilities and new chances that the current state of business, market, and social environment offers.

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Problem. The marketing management is being kept high in the agenda as a process that drives the business growth in regard to building relationships with consumers and various stakeholders. As the current business environment is global, competitive, volatile, and dynamic, but marketing management must meet the new and shifting demands, there arise various issues, problems, and challenges which must be recognised and considered.

Purpose. The purpose of this research is to cover the main issues of marketing management that have gained attention in scientific literature, to highlight core problems and to reveal the directions for marketing management improvement at enterprises in Latvia in the conditions of ever-changing and dynamic business and marketing environment.

Object. The object of this article is the concept of changing marketing management and issues, problems, and topics that are linked with marketing management shifts as companies today have to deal with these strives in order to gain and retain competitive advantage and overall business success in the market.

Tasks:

- To consider the various aspects in today's world, such as media, technology, markets, etc., that leave a significant impact on marketing management process;
- To offer comprehensive review of problem analysis and link this information with situation in Latvian companies, based on findings from two separate surveys of enterprises' representatives in Latvia;
- To develop the directions for improvement of enterprises' marketing management process in changing marketing environment.

Methods. For the theoretical base of this article scientific literature review was done in order to explore the current topics and to identify the most important changes in marketing management over the last decades. Two scientific research reports from 2010 (Gartner research 2010) and 2013 (The State of Marketing 2013, IBM's Global Survey of Marketers) were examined. Data from two separate quantitative surveys of Latvian enterprises' representatives, conducted by authors in 2013 and 2014, are analysed in this article; for data analysis descriptive comparisons of statistical data were applied.

1. Ever-changing marketing management

Nowadays marketing management – a business discipline that is focused on the practical application of marketing techniques and the management of an enterprise's marketing resources and activities – faces many challenges, starting with the growth of global competition and global markets (Verhoef, Leeflang, 2009: 18), the shift in the marketing communications and media business (Zarantonello, Schmitt, 2013: 255), the major influence of social media and social networks on firms' success (Groeger, Taylor, 2012; Flores, Struyk, 2012), the rise of the need to measure and evaluate the financial and even more – the nonfinancial impact of marketing activities on business (Bonoma, Clark, 1988; Ambler, 2000; Kumar, 2004: 235; Rust et al., 2004; Moeller, Landry, 2008; Gao, 2010; Chain, 2011), acknowledging that businesses have to measure not only financial cash flow, generated from sales, as it concentrates only on past performance, but processes as well (Rust et al., 2004; Jeffrey, 2010: 148). Furthermore, as information technologies leaves effects on business in form of databases, information warehouses, various customer loyalty management systems (Moutinho, Chien, 2008: 308), marketing organizations should think integrated when making marketing technology investments (Collins, 2010; Wright, Franks, 2013). A focus on integrating the areas of planning, performance management, financial management, online and offline channels, people, processes, content, and data analytics tend to lead to a higher return on marketing investment or ROMI (Collins, 2010), as this type of return on investment is considered one of the main options, how marketing executives can make marketing more accountable (Bauer Marshall, 2013; McDermott, 2013) – capable to link marketing strategies and actions to financial performance measures.

In the shifting environment of marketing, marketing executives have to deal with many issues and tasks. As rapidly emerging local and global competition leaves great impact on firms' marketplace – many companies market outside their home countries, thus international marketing strategies are becoming more and more significant for enterprises of all sizes and from various industries (Kumar, 2004). These changes have greatly affected marketing management as marketing managers nowadays must increasingly consider global competition, environmental problems, ethical, legal and political issues, income gaps, various customer preferences, beliefs and attitudes stemming from cultural differences, infrastructure capabilities and other hot topics (Moutinho, Chien, 2008). Therefore enterprises must possess an objective and comprehensive understanding of their businesses and the markets in which they operate in order to create an effective and efficient marketing management strategy and gain competitive advantage.

These marketing management changes during the recent years have forced marketing managers to be responsive and adaptive to the volatile business environment. Adaptability today is one of the key elements for successful marketing management planning and implementation (Ambler, 2000; Ambler, Barwise, Higson, 2002; Jeffrey, 2010). The importance of global marketplace connected economy, merging and consolidating industries, demanding customers and customer empowered behaviour are those topics that are especially relevant to markets and marketing nowadays (Moutinho, Chien, 2008: 309).

One of the main concerns for marketing management is increasing and providing return on investment or ROI, more specifically – return on marketing investment ROMI (Ambler, 2000), or return on marketing expenditure ROME (Shaw, Merrick, 2005: 46). For many businesses it is no longer enough to simply do marketing; marketing has to be measured, evaluated, and value of marketing efforts has to be understood in terms of revenue, customers, and leads (Ambler, 2000; Ambler, Barwise, Higson, 2002: 62; Moeller, Landry, 2008). Nowadays increasingly advanced marketing analytics tools and ways of presenting analytical information are available (Jeffrey, 2010: 125; Farris et al., 2010), thus marketing executives must meet the higher standards of marketing control and evaluation process and prove that their return on investment is reasonable for the money, effort, and time spent on marketing implementation. Marketing efficiency, effectiveness and performance are the key elements to many enterprises, as marketing managers must be able to link new or retained customers, inbound cash flow, and overall value created with the marketing activities that produced them (Ambler, 2000; Kumar, 2004: 236; Jeffrey, 2010). Challenge for marketing executives is to prove that not only tangible value must be measured and evaluated, but intangible merits and assets as well, as for today's enterprises the creation of overall value more and more depend on data, systems, knowledge, intellectual property, brands, and market relationships (Ambler, Barwise, Higson, 2002: 5). Therefore various marketing metrics are gaining more and more attention in academic literature, as well as many companies are investing resources into selecting and using the most appropriate sets of marketing performance measurement methods (Bonoma, Clark, 1988; Ambler, 2000; Rust et al., 2004: 77; Chain, 2011; McDermott, 2013).

Studies show that marketing managers are concerned with creating and sustaining growth through the acquisition of new customers and superior loyalty, as well as raising and keeping customer satisfaction at sustainable level (Farris et al., 2010; Wright, Franks, IBM, 2013), hence authors conclude, that in today's consumer-empowered and highly competitive world, marketing managers increasingly need to take hold every opportunity to start successful relationship, generate favour, and earn the trust of prospective customers. One of the chances to do so is to understand how to reach the audience more effectively. In many cases traditional marketing channels, tools, and messages are not enough anymore. This generates the necessity for synergy between integrated marketing communication tools, content of messages, and advanced marketing analytics to track and measure the impact of marketing communication (Collins, 2010; Wright, Franks, 2013). Before company can start converting leads into customers, it needs to get the attention of the audience and get new prospects interested in its product, service, or brand. Therefore current marketing management more than ever needs to choose and focus on the right channels in order to generate more awareness among consumers in the right markets; enterprises might need to evaluate various aspects of communication – are they using the right social networks, are they employing the right technologies, is the created content valuable for target audience, and so on. Rather than spreading all the possible information about a company in every direction, marketing managers must focus on right technologies, right channels, and right messages (Moeller, Landry, 2008; Flores, Struyk, 2012). Also they should use properly chosen analytics to determine which channels are performing best by measuring the impact on target market, and concentrate efforts on elaborating those tools and channels of communication. By measuring the economic efficiency of marketing communications marketing managers can better understand and translate the link between growth rate in sales and marketing communication expenditures (Praude, Šalkovska, 2006: 420).

More often enterprises choose various social media platforms to ensure social presence and raise awareness among potential and existing customers about their products, services, brands, corporate identity, and other aspects of their business. Using social media to generate revenue and attract customers once was one of the priority "must do" on every marketing managers' list, but they hardly knew what to do with these powerful communication tools (Warncke, 2012; Flores, Struyk, 2012; Whiteside, 2013). Nowadays enterprises know the value and influence of social media marketing, but they strive with converting social engagement into highly valued financial terms – money. As now it is not enough to just be present on social media, specific and individually tailored targeting and engaging models must be used to generate new leads for the business from social media (Moutinho, Chien, 2008; Warncke, 2012; Flores, Struyk, 2012). Therefore various marketing metrics and marketing techniques should be used to manage potential and/or existing customers in social environment. By recognizing the influencers, measuring and assessing the impact of electronic word-of-mouth (eWOM), evaluating the value of social fans and friends (Warncke, 2012; Whiteside, 2013), segmenting groups of users based on their social interests and activities, and properly managing appropriate follow-up communication companies can ensure greater social engagement between the business and consumers.

These new possibilities for marketing goes hand in hand with privacy issues on Internet, therefore companies might need to follow some ground rules. Nevertheless, intelligence about leads and customers that stems from information shared on social media, gives companies good possibilities to personalize messages and interact with people on more individual level. For example, if a consumer has shared an opinion about theatrical performance via online social networking and microblogging service *Twitter*, this information will allow a marketing representative from theatre to engage the consumer into the conversation with the information that is relevant to him/her. Such communication, if managed and executed with great consideration helps to generate more favourable and positive attitude. Much deeper bond with the digital audience in social media can be established through well-considered engagement in customer conversations – at the beginning marketing managers must be smart listeners and constantly analyse which customer conversations are the most significant for the business (Whiteside, 2013).

Keeping in mind that during the last 10−20 years marketing management has shifted focus from print media to online and social media, from direct "snail" mail and cold calling to more efficient and effective communication tools, it can be concluded that evolving technologies enable marketing managers to communicate and engage with customers in more appropriate and convenient ways. Modern marketing managers must know where their target audience is, how to provide the best value for them, and which tools can be used for achieving this marketing goal (Collins, 2010; Wright, Franks, IBM, 2013). As marketing management is evolving, marketing managers must know how to link knowledge from the past with current situation and to keep strategic focus on the future. As mentioned before, social media has become a dominant platform for two-way communication, as well as a feedback collection tool. But this technology progress does not stop here – more and more technologies and marketing techniques arise, different marketing strategies are developed and new trends form, therefore nowadays marketing managers must follow what aspects of marketing are changing and emerging in order to keep up with the new possibilities these technologies and techniques can offer to their businesses.

As an example for the shifting views of marketing management process authors highlight integrated marketing management concept. As one of the emerging marketing technologies, integrated marketing management (IMM; Figure 1) is a "closed loop" marketing process which represents an opportunity for enterprises to create better customer experiences, and to do so more efficiently (Collins, 2010). As many changes in markets today are driven by the rise of social and mobile channels and demands for marketing accountability and for measurement of marketing performance are dominant, IMM emphasizes the focus on integration of people, processes and technology to drive overall ROMI. Marketing processes are complex across the marketing mix and the growing number of accessible channels, for example, traditional media, direct mail, e-mail, Internet, call centre, store, office, social media and mobile, increases the need to manage the marketing mix. Many of these new channels are not integrated into the traditional marketing processes, creating internal competition for resources and external competition for customers' attention, leading to customer exhaustion and poor customer experiences. With continued pressure on marketing budgets and accountability, marketing leaders need a foundation that enables them to integrate people and processes across the marketing ecosystem for planning, financial management and performance management, as well as to balance the online and offline channels, traditional and social media channels.

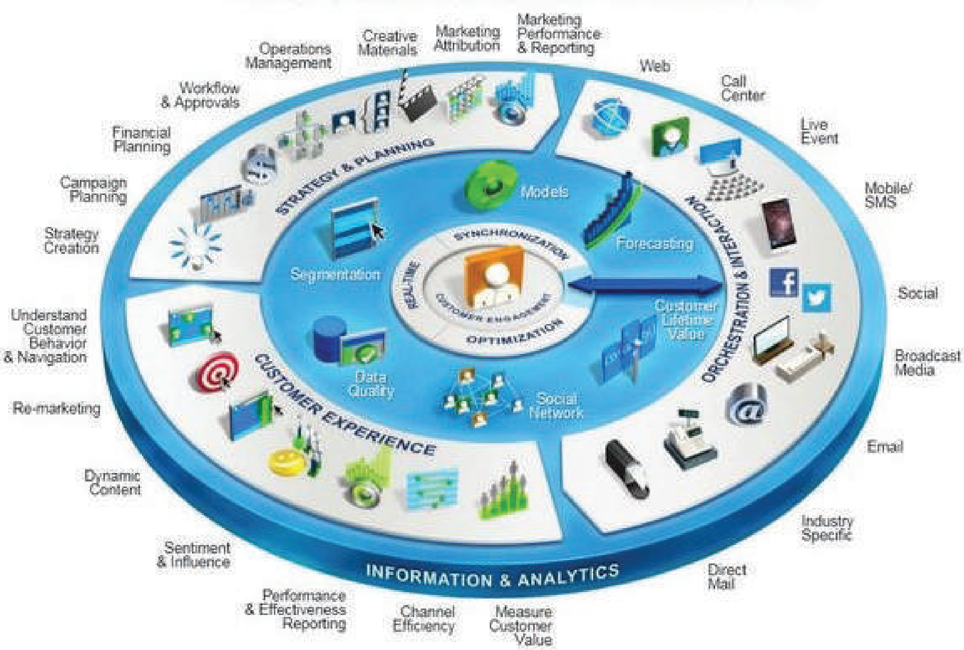

Figure 1. Integrated marketing management process

Source: Collins, Gartner research, 2010: 3

The principles of integrity and synergy are close to modern marketing management, therefore IMM helps companies to create synergy with richer analytics and enables marketing managers to execute customer-oriented strategies and improve overall marketing performance as a better understanding of customers and greater channel visibility as customer orientation is when customer needs and satisfaction are the priority of an organization. It focuses on dynamic interactions between the organization, customers, stakeholders, as well as competitors in the market. Principles of integrated marketing management help to reach the right targets with the right message, in the right places and at the right times (Collins, 2010; Wright, Franks, IBM, 2013). Integrated channel execution helps to create order in digital marketing and gives marketers a precise overall view of their customer.

Marketing management constantly changes and evolves; the marketing management process may contain different problems and questions in enterprises, regarding various industries, target market segments, used marketing channels, tools and techniques, etc., therefore authors will analyse the actual problems of marketing management at companies in Latvia.

2. The current issues of marketing management at enterprises

In year 2013 in Latvia was conducted a quantitative survey, which incorporated 286 marketing representatives from Latvian enterprises. They were asked to evaluate various aspects of business that enterprises should focus on and which they consider as most worrying issues within marketing management process. As study showed, most of the enterprises' marketing representatives are concerned with following "dark spots" in their knowledge – are their customers satisfied with the firm's offer (19 %), how to establish effective communication on the Internet (18 %), as well as marketing communication effectiveness research (14 %) – the main findings of this research are shown in Figure 2.

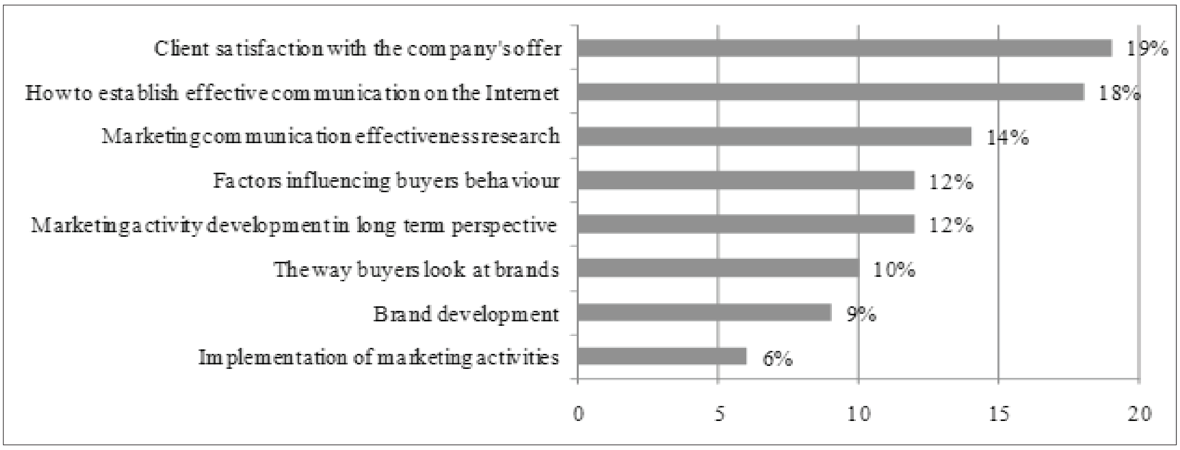

Figure 2. Current marketing management issues regarding the level of knowledge for Latvian enterprises

Source: developed by the authors.

These problems and strives are closely linked to the theoretical background covered in academic literature of today's marketing challenges in changing business environment authors illustrated in previous section. The knowledge about consumer satisfaction and behaviour is important for enterprises as it helps to forecast and understand consumer demand for products as well as brand preferences. By using the Internet and various search possibilities, consumers can obtain considerable information on the qualities of products / services, as well as on prices and optional products; markets today are becoming more and more transparent (Moutinho, Chien, 2008: 35) and accessible. As mentioned, consumers are more empowered today, they can search for any information, their word-of-mouth is more valuable for the companies than ever; consumers can take the initiative to communicate and leave feedback or comment, therefore companies strive to become more attractive to customers and to communicate with them better and more effective via Internet channels.

Also research findings in Figure 2 show that Latvian marketing managers are feeling anxious about their level of knowledge about those factors that are influencing consumers' behaviour, marketing activity development possibilities in long term perspective etc. These findings indicate that most of the enterprises understand the importance of the customers as the source of the business success, and this point of view is nothing new to marketing management, as the whole marketing mix model evolves around offering the best, most appealing and required products/services for the target market segments, thus acquiring competitive advantage and gaining better positions in market, in customer minds, and in customer hearts.

Recently in 2014 another research was conducted – it incorporated marketing managers and marketing representatives form 106 Latvian companies and it was focused on marketing performance measurement in practice. They were asked to evaluate the importance of 57 marketing metrics in the context of their company and strategic marketing orientation. The main findings of this research were that most of the Latvian eneterprises evaluate their marketing success by financial metrics – as Figure 3 shows, from all 57 offered marketing metrics, 25 of them in 65 % and up to 90 % responses were indicated as "Very important" or "Important" for companys' marketing management and business management process, the main financial metrics are net profit (90 %), profit (90 %), annual growth rate (85 %), return on sales (83 %), market share (78 %), return on investment ROI (77 %), etc. These findings are not surprising as different authors and researchers have indicated the same patterns in companies all around the globe (Ambler, Barwise, Higson, 2002; Rust et al., 2004; Jeffrey, 2010; Farris et al., 2010).

Figure 3. Most important marketing metrics for enterprises in Latvia

Source: developed by the authors.

The danger of this situation when financial measures in marketing management context are appraised higher than those metrics which are concerned with analysis of external data, such as customer behaviour analysis, consumer attitude measurement etc., lies within the fact that financial and sales metrics measure only what has happened in the past and they have very little to do with companies' success in the future (Jeffrey, 2010: 125). Authors agree that balanced set of metrics is needed in order to gain better view on the business processes, to get insight into consumer and market dynamics (Kumar, 2004; Jeffrey, 2010: 127; Gao, 2010; McDermott, 2013), as well as the results, insights into market trends and dynamics, attained from these marketing performance measurement methods, must be presented in understandable and clear way, for example, in a marketing information dashboard (Jeffrey, 2010: 126; Maex, 2013). If companies, as study from 2013 shows (Figure 2), are concerned how is their communication perceived among their customers, how effective this communication is, these aspects have to be measured and evaluated, but enterprises in Latvia in most cases even do not know how to do that by indicating that their level of knowledge is not sufficient for this purpose. Therefore authors conclude that one of the biggest challenges in today's marketing management for companies is to be open to new marketing trends and tools, for example, scorecards and dashboards, to put bigger emphasis on other marketing performance indicators, not only financial ones; as companies strive to be successful in increasingly competitive global marketplace, at the beginning they might need to change the common mind set in order to be more adaptive and rely not only on financial balance sheets and sales rates to substantiate and evaluate their marketing management performance.

Figure 4 depicts another current marketing management problem in Latvian enterprises. As it was indicated in previous research from 2013, 12 % of surveyed Latvian companies would like to develop marketing activities with a long-term perspective – with a long-term orientation, but survey data form 2014 shows that most of the enterprises do not plan marketing activities for longer period of time as most common answers stated that businesses tend to set marketing activity plans for up to 1 year period; the luxury of being able to plan ahead for mid-term 1–3 year period can be seen at mid-sized firms (50–249 employees) and large companies (more than 250 employees), therefore authors conclude, larger companies might have better knowledge as well as other necessary resources that substantiate the capability to analyse future and predict some trends, thus they are able to make long-term marketing activity plans.

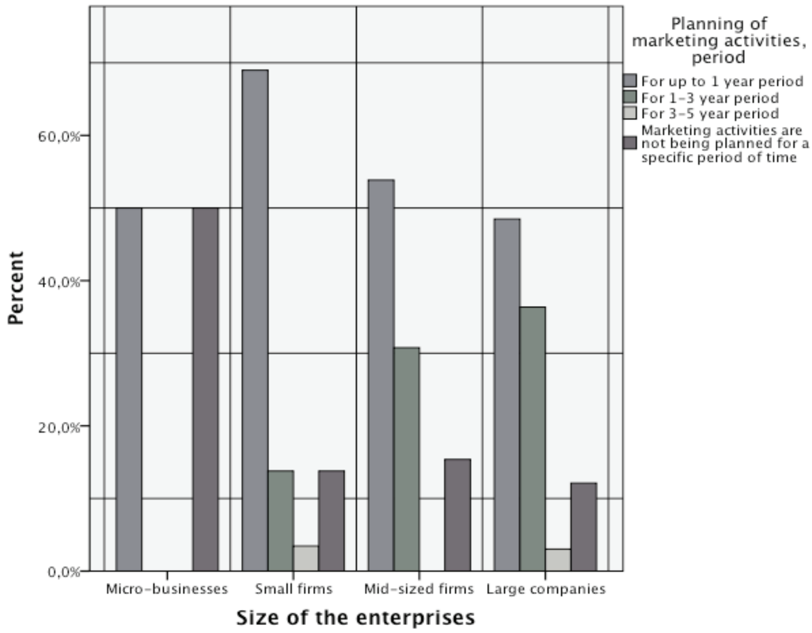

Figure 4. Planning of marketing activities practice at enterprises in Latvia

Source: developed by the authors.

As one of the most current marketing management problems that can be recognised, is the lack of development of integrated approach towards marketing activities. Integrated marketing communications are crucial for businesses as the integrated approach ensures that precise and strong impression about the company and its products / services / brands is given with various types of marketing communication tools, at the same time coordination with marketing mix elements is highly important (Praude, Šalkovska, 2006). But in practice Latvian companies strive to ensure integrated marketing management and integrated marketing communication process as on average 55 % of enterprises (data from Figure 4) plan their marketing activities for up to 1 year period and this indicate that businesses have a short term perspective which does not correspond to the integrated marketing communication principles about marketing communication planning. Authors conclude that such situation is connected with the perceived unpredictability of the business environment – firms commonly decide that situations in market are changing too fast, thus it is not possible to make sustainable marketing plans for longer time periods. Also one of the drawbacks is the company's management attitude and level of knowledge towards marketing planning process with long-term orientation.

The following Figure 5 indicates those marketing metrics which enterprises in Latvia do not use at all, do not useful and important for their businesses, or do not know how important these metrics could be for their marketing management process.

Authors would like to point out that 62 % of the companies that took part in recent survey (in 2014) on multiple choice question about usage of various Internet communication channels indicated that they are using social media platform *Facebook* to present themselves and communicate with existing and potential customers, 38 % use social microblogging platform *Twitter*, 16 % are presenting themselves via *LinkedIn*, as well as 88 % of all marketing representatives answered that their companies use web home page for this purpose. Therefore, by analysing the data represented in Figure 5, authors conclude that one of the mentioned marketing management problems remain – companies use social media as one of the top media channels in digital marketing age, but they do not run comprehensive evaluation of their social presence, nor do they know the impact of social media on their businesses as companies do not measure the cost per social friend, total reach, cost per click, as well as other media and communication evaluation methods are not being widely used at enterprises in Latvia.

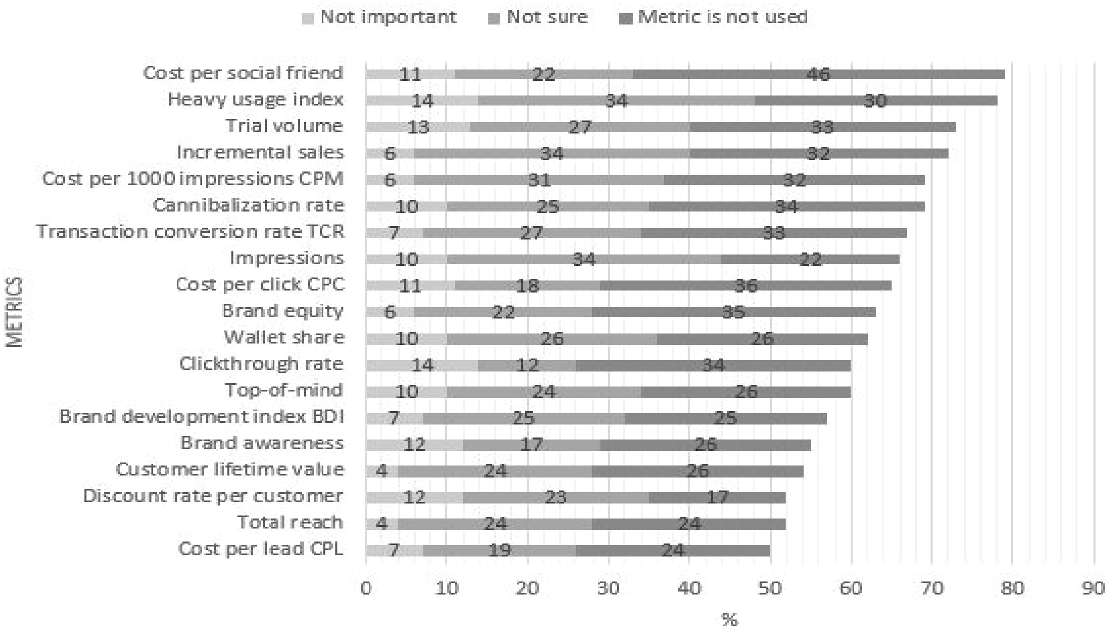

Figure 5. Least important marketing metrics for enterprises in Latvia

Source: developed by the authors.

Although over the time many authors and marketing researchers emphasize the growing significance of brand equity (Aaker, 1991; Ambler, 2000; Reynolds, Phillips, 2005: 176; Farris et al., 2010; Zarantonello, Schmitt, 2013), the data from enterprise marketing manager survey shows that brand equity, brand development index, and brand awareness are among those marketing performance measurements whish are evaluated quite seldom and not many companies in Latvia tend to evaluate the strength of their brands. Therefore authors conclude that enterprises still have to learn how to evaluate their overall business and marketing performance as today brand and customer equity are the most highly appreciated assets a firm can possess. It is advisable for each enterprise to give to the above-mentioned aspects a careful consideration and to tend to think in more integratet marketing management terms.

Conclusions

As for today, some of the most influential marketing management problems, issues, and challenges can be recognised that are closely linked with various changes in today's marketing environment – shifted importance of marketing communication channels and media, the growing impact of social media, the customer-empowered communication and impact of word-of-mouth WOM, the need for marketing accountability, the changes in technologies and marketing techniques.

In increasingly global business setting markets expand, therefore effective and efficient marketing management nowadays is characterised as able to adapt to the changes between the proportions within marketing mix model.

Existing technological solutions change and new technologies emerge, therefore this perplexity may confuse marketing executives, but at the same time marketing management has more opportunities to choose and use the best and most suitable for the business technologies and solutions;

Marketing performance measurement today is the main possibility for successful and respected marketing managers how to demonstrate the link between marketing and return on investment. Marketing has to be constantly measured and evaluated in order to follow the actuality of marketing strategies and marketing tools.

In Latvian enterprises the lack of long-term marketing orientation in marketing management planning and implementation can be observed, although many enterprises have apprehended the importance of social media influence on business well-being and customer attitudes and behaviour, but more specific and future oriented marketing evaluation techniques must be applied.

As studies show, enterprises in Latvia are more concerned with their financial success as it is easier to be measured, but at the same time companies do worry about satisfaction level among their customers, development of effective communication on Internet, brand development and other issues, but they strive with finding solutions to these problems, acknowledging that these aspects still have to be researched and the overall level of knowledge must be elevated.

Based on the conducted research, the authors draw the following recommendations for enterprises in order to improve their marketing strategies in volatile business and marketing environment:

1. It is necessary for marketing managers to measure the value of marketing tools and channels that are being used in marketing management process and in communication with target audiences in order to use the most appropriate, effective, and efficient tools and channels.
2. It is advisable for companies to follow the generative learning principles and constantly set for themselves benchmarks in order to gain better competitive advantages through continuous learning process.
3. Marketing management programs, plans, and strategies need time to time be reestimated and adapted to the changes that might have emerged in external and internal environment.
4. As marketing management implementation in the most appropriate manner often is endangered by top-management's myopic view and lack of knowledge, marketing managers must substantiate their marketing activity planning with precise and actual measurement and evaluation methods.
5. The short term perspective on marketing activity planning should be replaced with a long-term planning approach in order to gain integrated marketing management.
6. It is necessary to continue further research – conduct qualitative in-depth interviews with marketing represenatives in companies in order to gain more comprehensive insight into marketing management issues and problems in Latvia.

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AKTUALIOS ORGANIZACIJŲ RINKODAROS VALDYMO PROBLEMOS

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Santrauka

Šio straipsnio tikslas – apžvelgti pagrindines rinkodaros valdymo problemas, kurios turi būti atpažįstamos ir sprendžiamos organizacijose. Dauguma organizacijoms kylančių sunkumų susiję su įvairiais rinkodaros aspektais. Strategiškai pagrįsta ir įgyvendinta rinkodara padeda sukurti konkurencinį pranašumą ir padeda pagrindus sėkmingai veiklai, tačiau kylančios įvairios problemos gali kelti pavojų organizacijos rinkodaros procesui, todėl šiandieninėje nepastovioje verslo aplinkoje vadovai turi įvertinti įvairius rinkodaros aspektus.

PAGRINDINIAI ŽODŽIAI: *rinkodaros valdymas, šiuolaikinės rinkodaros valdymo problemos, aktualios rinkodaros valdymo temos, rinkodaros valdymo pokyčiai.*

JEL KLASIFIKACIJA: M31

CHANGE OF LIVING STANDARDS IN LITHUANIA, LATVIA AND ESTONIA AFTER JOINING THE EUROPEAN UNION

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ABSTRACT
This article aims to compare the change of living standard in Lithuania, Latvia and Estonia after joining the European Union. The characteristics of living standard are analyzing before joining the EU and after 2004. It is also compared changes of living standard characteristics after the economic crisis. Indicators of living standard, such as the average monthly gross wages, consumer price index, purchasing power, unemployment rate, at-risk-of-poverty rate and others are calculated and compared. The three Baltic states are not only compared with each other, but are also analyzed in the context of the EU. Thus, it can be stated that among the three Baltic States, Estonia is distinguished by highest living standard. Although before the integration Lithuania was ahead of Latvia, but now Lithuania was lower than Latvia by particular characteristics of living standard.
KEY WORDS: *living standard, Lithuania, Latvia, Estonia, European Union.*

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Introduction

In 2004 Lithuania, Latvia and Estonia joined the European Union, and many new opportunities opened up for these nations. Membership of the EU has led the investment, economic growth, and living standards also had to grow up. What is the difference of living standard of these three countries? Which country is the best for living of population and which are faced with major challenges?

Problem. Among the three Baltic States, Estonia is distinguished by economic development. Estonia's transition process is internally seen a success story. Estonian transition choices have been quite specific, including a radical currency reform, fast privatisation and "shock therapy" during the pension reform. As a result, Estonia is in the top of most scoreboards of Baltic countries (Veebel at al., 2012: 181).

Lithuania and Latvia have also been rapid development, however, these two countries according to economic indicators are below Estonia. What is the difference in living standards between the three countries and in the EU context? This study did not aim to determine the EU's influence in the Baltic economies. These studies are carried out and this influence is undeniable.

All three countries have survived the economic crisis and its impact on the living standards is strong (Experiencing (...), 2012; Krusell, 2012; Maslauskaite at al., 2013; Gerstberger at al., 2013). Therefore, studies of living standard is also important to determine how quickly the country is recovering from the economic crisis. All of these issues led to formulate research purpose and objectives.

Research object – the standard of living.

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The research purpose – to compare the living standard of population in Lithuania, Latvia and Estonia after joining the European Union.

Tasks of the study:

- To analyze the dynamics of characteristics of living standard between Lithuania, Latvia and Estonia after joining the EU.
- Identify the differences of characteristics of living standard between Lithuania, Latvia and Estonia in the EU context.

To compare actual living standards, the European Commission, International Monetary Fund, OECD and United Nations convert GDP per capita at purchasing power parities GDP per capita adjusted for purchasing power parities (PPP) as the indicator is used to determine the dfe of living standards between countries (Kammourieh, 2010: 3).

Gross national income per capita (GNI) and PPP Gross national income per capita measures are used for evaluate and compare the Living standard.

T. Tiusanen (2004) compare living standard in the three Baltic States with that in Scandinavia countries. Author state, that Denmark is almost nine times richer than Latvia with the lowest marking. Finland and Sweden are almost six times wealthier than Estonia. At the same time in 2002 price levels in the Baltic States was below 50 % of the Euro area average price level (Tiusanen, 2004: 13, 15). Thus, the Baltic States before accession to the EU differed significantly from the old EU member states according to economic indicators.

Dealing with one dimension of time to separate the impact of the integration of the general structural change is very difficult. In order to accurately identify the impact of integration, panel data models is using. It was found, that the integration has been a significant on economic indicators during the period 2004–2006 of Lithuania and other countries which accessed to the EU in 2004 (LR Vyriausybės kanceliarijos (...), 2007: 69).

Methods. In order to implement the purpose and tasks of this research, data from the statistics authorities of Lithuania, Latvia and Estonia were used, which were systemized, grouped and analyzed. Pearson's correlation coefficient was calculated and the relationship between the various characteristics of living standard was determined. The comparative analysis is also used. To visually show the distribution of different values, a graphical method was applied.

1. Macroeconomic changes after accession to the EU

When Baltic countries joined the European Union, the possibilities opened up to European Union funding. Part of the funds associated with the improvement of living standards and conditions of living awarded by Quality Employment and Social Inclusion priority. For the period 2007–2013 from the EU funds (European Social Fund, the European Regional Development Fund and Cohesion Fund) the maximum amount of funds have been earmarked for Lithuania. EU funds for Latvia accounted for 66.3 % and Estonia – 50.2 % of the amount provided for in Lithuania (Fig. 1). Thus, the EU funding commensurate with the size of country and number of population. However, at the end of 2013, the interim payments of the European Union to Lithuania and Estonia was 67 %, while to Latvia – only 55.8 %. Lack of funding and uptake of funds affected the Baltic countries for further economic and social development.

Since 2004 the export flows increased to the EU. After accession to the EU, foreign direct investment (FDI) growth rates increased substantially during the first three years. FDI in Lithuania increased by more than two times prior to accession to the EU (2001–2003) (LR Vyriausybės kanceliarijos (...), 2007: 9–11).

Thus, since the join to EU, economic reforms and large-scale foreign direct investment, together with EU funds, led to grow economic development (Experiencing the economic (...), 2012: 3–4).

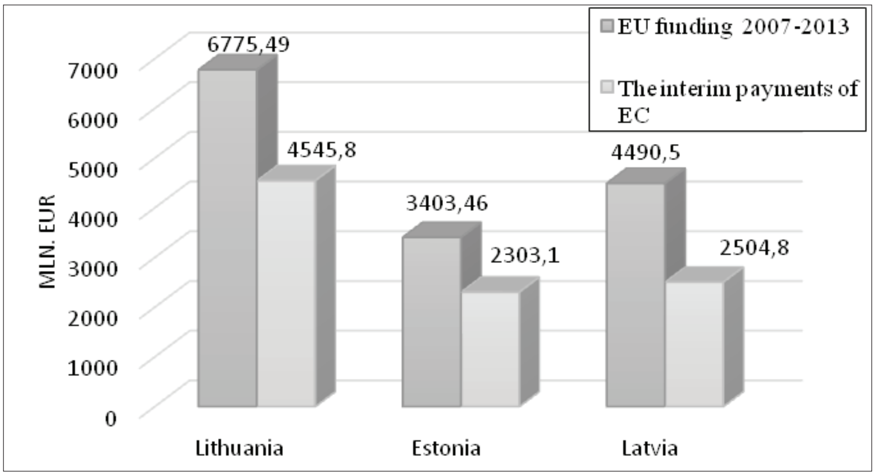


Fig. 1. EU funding and the interim payments of European Commission to 01-12-2013 in Lithuania, Latvia and Estonia (mln. EUR)

Source: ES struktūrinė parama, 2013

EU financial support had a significant direct and positive impact on GDP growth and changes in the structure of labor productivity. When the EU financial support as a proportion of GDP increased by one percentage point, the GDP growth increased in average about 1 percentage point in the eight new EU countries (LR Vyriausybės kanceliarijos (...), 2007: 69).

From the point of view of economic change, these three Baltic states was the best new members of EU – the high grow of GDP between 1995 and 2002 found in Latvia (42.6 %), Estonia (40.5 %) and Lithuania (31.9 %) (Tiusanen, 2004: 18).

Living standards in the New Member States of the European Union converged very rapidly towards the average European standard of living over the first decade of the new century. After accession to the EU economy is constantly growing. The beginning of the membership (2004) GDP per capita in Estonia, Latvia and Lithuania were accordingly 55 %, 44 % and 50 % of the EU average. In 2007 economic growth in Latvia, Lithuania and Estonia was very high and these countries was between leaders together with Slovakia. But the financial crisis may have hampered the convergence process and in 2009 GDP shrank by more than 10 % in Baltic countries (Estonia, Latvia and Lithuania) (Kammourieh, 2010: 1; Experiencing the economic (...), 2012: 3–4). Year from 2007 to 2010 marks the transition from economic prosperity to economic downturn and depression due to the crisis (Experiencing the economic (...), 2012: 6).

Nevertheless, in 2012 GDP per capita in Estonia and Lithuania have accounted for more than 70 % of the EU average, but in Latvia it was lower – 64 %. GDP per capita in the Baltic countries increased by an average 46 % in 2004–2013.

Table 1. GDP per capita in Latvia and Lithuania in relation to the Estonia average (Estonia = 100) in 1995, 2004, 2008 and 2013, %

Countries	1995	2004	2008	2013
Lithuania	74.5	75.3	83.7	84.9
Latvia	78.0	65.0	86.8	84.0

Source: Eesti statistics, 2014; Latvijas statistika, 2014; Lietuvos statistikos departamentas, 2014

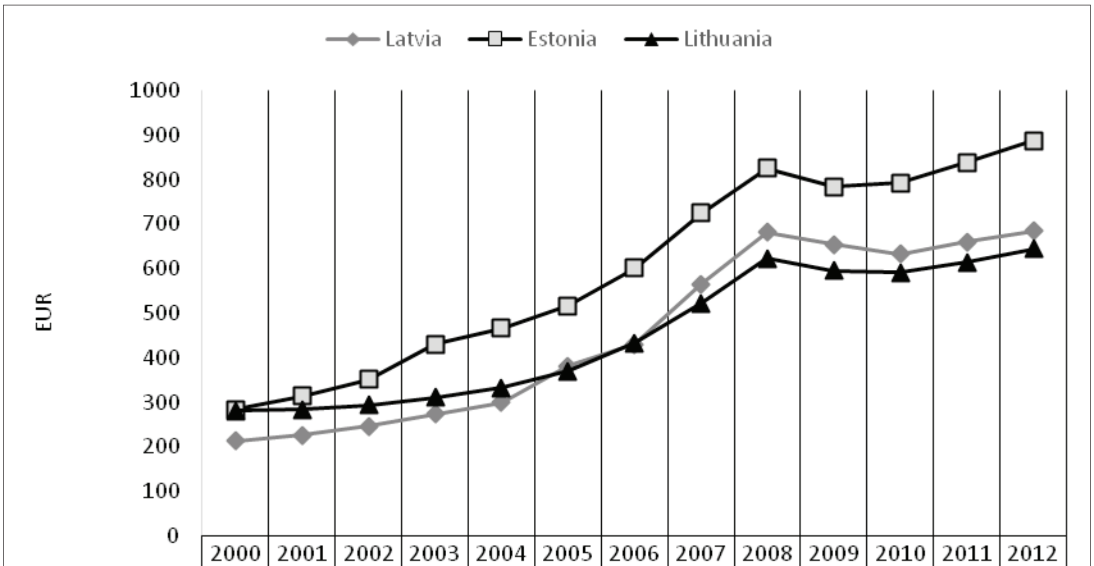
GDP per capita in Lithuania and Latvia in 2013 accounted for 84 % of the Estonian average (1 table).

Of course, the gross domestic product still does not reflect the individual's standard of living. Therefore, the following indicators will be analyzed to describe the standard of living of Lithuanian, Latvian and Estonian people.

2. Comparison of individual indicators of living standard

Economic growth determines the increase of labor income. Between GDP per capita and the average monthly gross wage established a strong direct correlation (Lithuania $R = 0.92$, Estonia $R = 0.88$ and Latvia $R = 0.82$, as $p < 0.05$).

It should be noted that wages and salaries have grown in the Baltic countries before accession to the EU. The monthly gross wage in Lithuania three years before the accession to the EU grew by an average of 3.4 % a year, but from 2004 to 2006 the average growth rate was 11.8 % (LR Vyriausybės kanceliarijos (...), 2007: 15). However the biggest problem was (especially in Latvia economy) labor shortage as a result of which wage growth outpaces the increase in productivity (Akule: 13).



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Latvia	213	226	246	274	300	381	430	566	682	655	633	660	685
Estonia	284	314	352	430	466	516	601	725	825	784	792	839	887
Lithuania	281	284	294	311	333	370	433	522	623	595	592	615	645

Fig. 2. Average of gross wages and salaries of the employed in Latvia, Estonia and Lithuania in 2000–2012, EUR

Sources: Eesti statistics, 2014; Latvijas statistika, 2014; Lietuvos statistikos departamentas, 2014

The average monthly gross wages and salaries in Estonia and Lithuania since the accession to the European Union increased by 51–52 %, in Latvia – 44 %. Now Estonia remains the leader, although in 2000 the wage in Lithuania was almost the same as in Estonia (Fig. 2). However, since 2006 wages and salaries in Latvia started to grow rapidly, and now Lithuania according to the monthly gross wage average remains in the last position in the Baltic States (72.7 % of Estonian average).

When analysing the income sources, it is necessary to focus on the old-age pension, which is one of indicators of living standard of retirement age. Since 2009, residents of Lithuania received the lowest pensions among the Baltic States population. Average old-age pension in Lithuania is 27 % lower than in Estonia and 8 % lower than in Latvia.

Gini coefficient expresses the inequality in income distribution, which is also sometimes considered as index of living standard. In 2006 Latvia, Portugal, and Lithuania has the highest level of income inequality (Zaidi, 2009: 8). In 2010 the Lithuania has the highest income inequality among the Baltic States – Gini coefficient of equalized disposable income was 37 (Eurostat, 2014). Around one third of Lithuania population is at risk of poverty or social exclusion since they live in households with very low work intensity or are materially deprived. As the European Commission notes, the causes of such developments have not received the required policy attention (Masso, 2012: 12). However, in 2011 in Latvia Gini coefficient was already higher than in Lithuania and in 2012 between the three countries Lithuania has the lowest Gini coefficient (32) (Eurostat, 2014). Estonia has even established a strong negative correlation between the average monthly gross wages and the Gini coefficient (R = -0.75), as $p < 0.05$.

The income growth and the rise of prices affected the increasing of consumption expenditure. In 2004-2012 the household consumption expenditure grew by an average of 67.7% in all three countries. The largest increasing of consumption expenditure was on housing, water, electricity, gas, other fuels (120.1 %) and health services (107.1 %). This is a very important group of goods and services, and the opportunity to reduce the consumption to households is very low. As a result, people have less money to purchase the clothing and footwear or go to restaurants, cafes and hotels. In Lithuania consumption expenditure grew mainly on housing, water, electricity, gas and other fuels (144.8 %), furnishings, household equipment and routine household maintenance (77.6 %), miscellaneous goods and services (85.0 %) and education (73.9 %). Meanwhile in Estonia consumption expenditure decreased on education (32.4 %), but has increased on recreation and culture (122.5%). Among the three Baltic countries, consumption expenditure rose mostly in Latvia (73.7 %). Compared to other countries, mainly in Latvia increased consumption expenditure on health (163 %), transport (105.5 %), food and non – alcoholic beverages (59 %).

Since, according to the household consumption expenditure judged on the standard of living, it can be said that the highest standard of living is in Estonia – in 2012 one member of the household spent on average 284.6 EUR per month. Meanwhile, the lowest household consumption expenditure per capita in 2012 was in Lithuania – 247.3 EUR in Latvia – 282 EUR. Lithuanian households on average spend 5.6 % more on food and non-alcoholic beverages, but 36 % less on transport and 38.5 % fewer on restaurants, cafes and hotels than Latvian households. These consumption rates do not reflect the differences between cities and villages. Urban residents may pay more money for various goods and services. The largest differences of consumption expenditure in Lithuania between urban and rural households was on housing, water, electricity, gas and other fuels (77.2 %), recreation and culture (88.5 %). Latvian urban population spend 2.2 times more than rural residents on restaurants, cafes and hotel. Consumption expenditure differences in Estonia between urban and rural households is lowest (average 8.2 %), but there are also urban residents spend more on housing, water, electricity, gas, other fuels and education (45 %).

Share of households having (great) difficulty making ends meet increased 4 % in 2007–2010. Change of share of households having (great) difficulty making ends meet in Lithuania increased enormously – 15 % in 2007–2010 period. This was the highest growth in the European Union. Some of these households in Latvia increased by 6 %, while in Estonia decreased even by 1 % (Experiencing the economic (...), 2012: 7–8).

Consumer price index shows the average change in the price level of consumer goods and services purchased and used by households over a period of time to satisfy their needs. Starting with 2004 rise in prices is accelerating Lithuania (LR Vyriausybės kanceliarijos (...), 2007: 14).

In general consumer prices in all three countries has been growing, but at different levels. Growth of consumer prices in Lithuania and Estonia were similar (in 2012 increased to 139–140, where 2005 = 100), while consumer prices in Latvia grew faster, and in 2012 compared to 2005 increased by 147.9 (Eesti statistics, 2014; Latvijas statistika, 2014; Lietuvos statistikos departamentas, 2014).

It is very important for residents the change of consumer prices in Estonia and Latvia, when the euro was introduced. In Estonia, the euro was introduced on 1 January 2011. 2011 compared to 2010, the prices increased by 5 %, but in later years, the consumer price index declined – 2012 was 3.9 %, and in 2013 was 2.8 %. Latvia adopted the euro on 1 January 2013. In 2013 consumer prices over the previous year has been to 0. Consumer price index in Lithuania for several years has the downward trend. In 2012 the consumer price index was 2.8 % over the previous year, and in 2013 it was only 0.4.

After joining the European Union, prices of various goods and services increased in all Baltic countries. By 2012, consumer prices mostly increased by housing, water, electricity, gas, other fuels, recreation and tourism, and food compared to the index base period (2005 = 100). This is not good, because costs of food and utilities account for a large share of total household spending. This reduces the availability of revenue for recreation, leisure, and other goods and services. At the same time communications costs in all countries declined. In Latvia prices increased for housing and utilities, food, hotels, restaurants and educational services.

The purchasing power of the residents at comparable prices is one of the main indicators of the standard of living, which shows the amount of goods and services can be purchased for revenues. Since joining the European Union, with increasing wages, the purchasing power of population has increased. However, the received wages of workers in Lithuania provided the opportunity to buy more milk, butter or Petrol A-95 than in other countries. In Latvia mostly increased purchasing power for the meat products. Unfortunately, the economic crisis reduced the purchasing power: wages and pensions decreased, but prices increased. As a result, in 2012, people were able to buy less Petrol A-95, sugar, bread and other products (Table 2).

Table 2. Change of purchasing power of employed by commodity in Lithuania and Latvia in 2005–2008 and 2008–2012

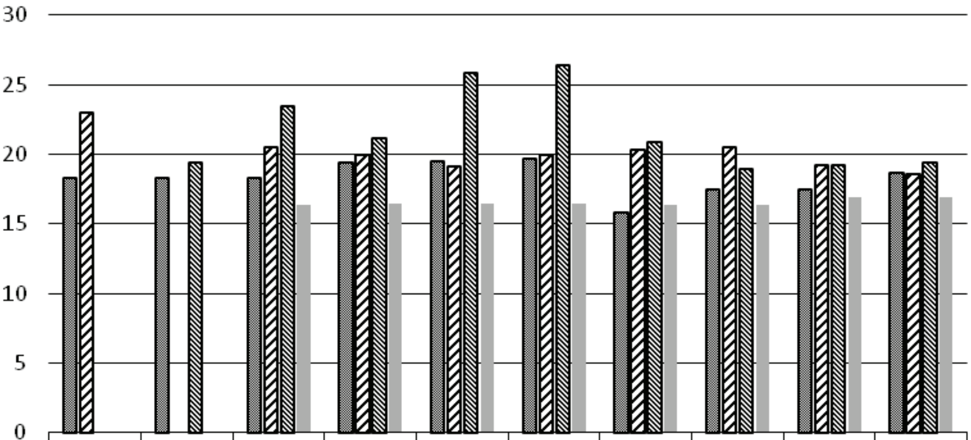
Commodity	Lithuania		Latvia	
	2005–2008	2008–2012	2005–2008	2008–2012
Sausage, boiled, kg	21	-6	54	-6
Petrol A-95, liters	246	-232	176	-141
Rye bread, kg	-23	-60	1	-44
Beef, kg	3	-3	40	-27
Pork, kg	21	-2	48	-7
Vodka plain, liters	13	-7	18	-10
Milk, liters	147	-50	91	-11
Sugar, kg	204	-119	207	-64
Butter, kg	31	-21	5	-13

Source: Latvijas statistika, 2014; Lietuvos statistikos departamentas, 2014

The purchasing power of Estonian residents was 67 % of the EU average in 2011, being significantly higher than in 2001 (46 %). Estonia is currently in the same group with countries like Hungary and Poland, with the Czech Republic not too far ahead. The purchasing power considerable increased in Latvia and Lithuania, but they are slightly behind Estonia (Krusell, 2012: 41).

Unemployment rate does not determine directly the standard of living, but rising of unemployment declining the availability of human labor income and improve their living standards. In this study, the unemployment rate is analyzed as an indirect indicator and the growth or decline of unemployment is analyzed in the context of the overall standard of living, as one of the factors.

We can distinguish three stages in the unemployment rate change in the Baltic countries. The first stage covers the period between 2004 and lasted until 2007, when the unemployment rate declined in all countries. Decreasing the number of unemployed suggests that the state needs to allocate less spending on social benefits. In 2007 the unemployment rate reached its lowest level in Lithuania and Estonia was from 4.2 % to 4.6 %, while in Latvia was 6.2 %. A huge contraction in economic output in the Baltic countries and in Ireland caused serious problems in their labour markets. Since 2007, over three years due to the economic crisis, the unemployment rate increases of 12–13 percentage points and reach the maximum. In 2009–2010 the unemployment in Baltic countries was highest in EU (only in Spain unemployment rate was higher – 20.1 %) (Experiencing the economic (...), 2012: 5).



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Estonia	18,3	18,3	18,3	19,4	19,5	19,7	15,8	17,5	17,5	18,7
Lithuania	23		20,5	20	19,1	20	20,3	20,5	19,2	18,6
Latvia		19,4	23,5	21,2	25,9	26,4	20,9	19	19,2	19,4
EU			16,4	16,5	16,5	16,5	16,4	16,4	16,9	16,9

Estonia Lithuania Latvia EU

Fig. 3. At-risk-of-poverty rate in Estonia, Lithuania and Latvia in 2003–2012, %

Sources: Eesti statistics, 2014; Latvijas statistika, 2014; Lietuvos statistikos departamentas, 2014

Unemployment rate in Latvia in 2010 even reached 19.8 %. Since 2010 the unemployment rate begins to fall, and the fastest falling observed in Estonia, and the slowest – Lithuania. In 2013 the unemployment rate in Lithuania and Latvia have become almost equal. Despite the low unemployment rate, the largest regional differences in 2013 was observed in Estonia – from 5.3 % (Hiiu county) to 17.2 (Võru county).

Worse-than-expected developments on the labour market are undoubtedly one of the most important reasons of increasing poverty (Maslauskaite at al., 2013: 58). However, a strong negative correlation between unemployment rate and at-risk-of-poverty rate has established in Estonia and Latvia (accordingly R = (-0.82) and (-0.80), as p <0.05). This means, that although the unemployment rate declined, the at-risk-of-poverty rate before the economic crisis remained high. Such correlation has not been established Lithuania.

Despite a growing economy and wages and salaries, in the Baltic countries at-risk-of-poverty rate remained almost unchanged, while in 2007–2008 even increased, especially in Latvia. In 2012 at-risk-of-poverty rate in all three countries have tended to converge (Fig. 3). However, there are still large regional differences of at-risk-of-poverty rate. At-risk-of-poverty rate difference between the regions in Estonia (Tallinn exception) 18.7 percent point.

Social Climate Assessment (Special Eurobarometer (...), 2013) is associated with socio-economic phenomena analyzed in this study – variation of the unemployment rate and wages. In the Baltic States residents evaluate the social climate more negatively than positively, but Estonia’s population believes, that the overall social climate assessment even better than the EU average (Fig. 4). Meanwhile, residents of Latvia and Lithuania in particular, evaluate the social climate negatively. Extremely badly social climate was assessed in 2010, when many of the socio-economic indicators also deteriorated sharply. Evaluations of social climate in 2011–2013 in all countries is improving.

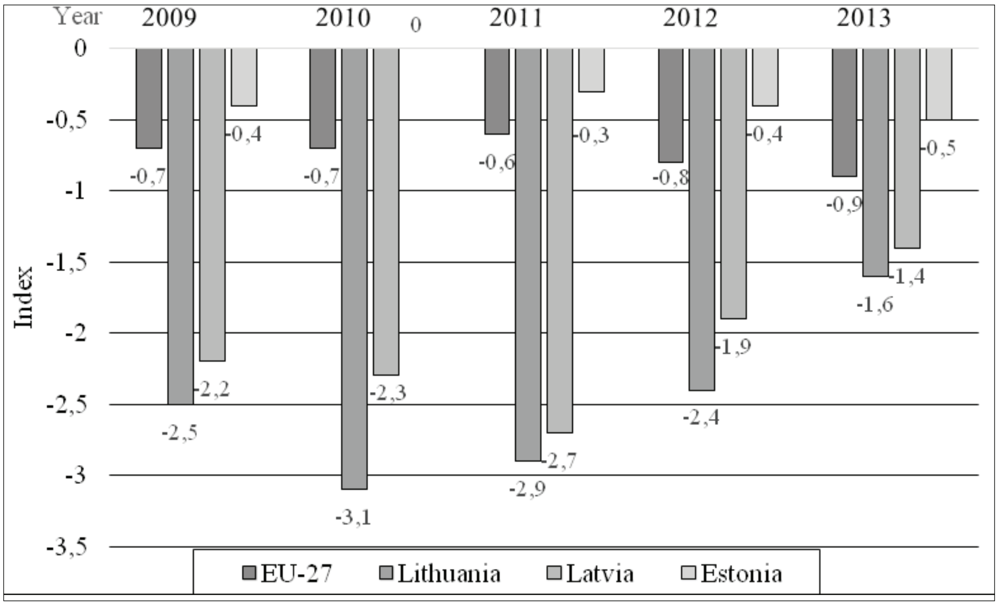


Fig. 4. The overall social climate index for the EU-27, Lithuania, Latvia and Estonia in 2009–2013 (evaluation of the current situation in scale from +10 to -10)
Source: Special Eurobarometer, 2013: 10

Conclusion

Membership of the EU has led the investment, economic growth, and therefore the standard of living in the Baltic countries also grew.

GDP per capita in the Baltic countries increased by an average 46% in 2004–2013. However, GDP per capita has grown rapidly in Estonia, while Lithuania GDP per capita growth was slower compared with Latvia, and now these two countries by GDP per capita almost equal. A similar trend occurred in the average monthly gross wage growth. In this time, workers of Lithuania get the lowest monthly gross wages (72.7 % of Estonian average) and pensioners of Lithuania receive lowest old-age pension.

Since, according to the household consumption expenditure judged on the standard of living, it can be said that the highest standard of living is in Estonia – in 2012 one member of the household spent on average 284.6 EUR per month. Meanwhile, the lowest household consumption expenditure per capita in 2012 was in Lithuania – 247.3 EUR in Latvia – 282 EUR.

Before the economic crisis the unemployment rate reached its lowest level in Lithuania and Estonia was from 4.2 % to 4.6 %, while in Latvia was 6.2 %. Since 2007, over three years due to the economic crisis, the unemployment rate increases of 12–13 percentage points and reach the maximum. Since 2010 the fastest falling of unemployment rate observed in Estonia, and the slowest – Lithuania. In 2013 the unemployment rate in Lithuania and Latvia have become almost equal.

Despite a growing economy and wages and salaries, in the Baltic countries at-risk-of-poverty rate remained almost unchanged, while in 2007–2008 even increased, especially in Latvia. In 2012 at-risk-of-poverty rate in all three countries have tended to converge.

In the Baltic States residents evaluate the social climate more negatively than positively, but stands Estonia – Estonia's population believes, that the overall social climate assessment even better than the EU average. Meanwhile, residents of Latvia and Lithuania in particular, evaluate the social climate negatively.

Thus, it can be stated that among the three Baltic States, Estonia is distinguished by highest living standard. Although before the integration Lithuania was ahead of Latvia, but now Lithuania was lower than Latvia by number of characteristics of living standard.

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GYVENIMO LYGIO KAITA LIETUVOJE, LATVIJOJE IR ESTIJOJE, ĮSTOJUS Į EUROPOS SĄJUNGĄ

Daiva Verkulevičiūtė-Kriukienė
Klaipėdos universitetas (Lietuva)

Santrauka

2004 m. Lietuvai, Latvijai ir Estijai įstojus į Europos Sąjungą, šių valstybių gyventojams atsivėrė daug naujų galimybių. Narystė ES paskatino investicijas, ekonomikos augimą, todėl turėjo kilti ir gyvenimo lygis. ES finansinė parama darė reikšmingą tiesioginį ir teigiamą poveikį BVP augimui. Iš ES fondų 2007–2013 m. daugiausia lėšų numatyta skirti Lietuvai. ES fondų lėšos, skirtos Latvijai, sudarė 66,3 %, Estijai – 50,2 % nuo Lietuvai numatytų lėšų sumos. Nepakankamas finansavimas, lėšų išnaudojimas ir finansavimo skirtumai turėjo įtakos valstybių ekonominei bei socialinei raidai.

Įstojus į Europos Sąjungą, visose Baltijos valstybėse augo įvairių prekių ir paslaugų kainos. Iki 2012 m. labiausiai išaugo būsto, poilsio ir turizmo, taip pat maisto produktų kainos. Tai nėra gerai, nes išlaidos maisto produktams ir komunalinėms paslaugoms sudaro didelę dalį visų namų išlaidų. Dėl to mažėja galimybių skirti pinigų poilsiui, laisvalaikiui, kitoms prekėms ir paslaugoms.

Vidutinis mėnesinis bruto darbo užmokestis Lietuvoje ir Estijoje nuo įstojimo į Europos Sąjungą išaugo daugiau kaip 51–52 %, Latvijoje – 44 %. Nuo 2006 m. Latvijoje gyventojų darbo užmokestis pradėjo augti sparčiau ir dabar pagal vidutinį mėnesinį bruto darbo užmokestį Lietuva lieka paskutinė tarp Baltijos valstybių (72,7 % Estijos vidurkio). Tarp Baltijos valstybių žemiausias pensijas gauna Lietuvos gyventojai. Lietuvoje senatvės pensijos dydis yra 27 % mažesnis nei Estijoje ir 8 % nei Latvijoje.

Nuo įstojimo į Europos Sąjungą, didėjant darbo užmokesčiui, augo gyventojų perkamoji galia. Už gautą darbo užmokestį pieno, sviesto ar benzino A-95 daugiau galima buvo įsigyti Lietuvoje, tuo tarpu Latvijoje labiau išaugo perkamoji galia mėsos produktams. Deja, ekonominė krizė pakoregavo gyventojų perkamąją galią: nors darbo užmokestis ir pensijos sumažėjo, kainos kilo. Dėl to gyventojų perkamoji galia taip pat sumažėjo.

Kadangi pagal namų ūkių vartojimo išlaidų dydį sprendžiama apie gyvenimo lygį, galima teigti, kad aukščiausias gyvenimo lygis yra Estijoje: 2012 m. vienas namų ūkio narys vidutiniškai išleido 284,6 EUR per mėnesį. Žemiausios namų ūkių vartojimo išlaidos vienam nariui 2012 m. buvo Lietuvoje – 247,3 EUR, Latvijoje – 282 EUR.

Baltijos valstybėse galima skirti tris nedarbo lygio kitimo etapus. Pirmasis apima laikotarpį nuo 2004 m. iki 2007 m., kai visose valstybėse nedarbo lygis mažėjo. Mažėjantis bedarbių skaičius rodo, kad valstybei mažiau išlaidų reikia skirti socialinėms pašalpoms. 2007 m. nedarbo lygis pasiekė žemiausią ribą ir Lietuvoje bei Estijoje siekė 4,2–4,6 %, tuo tarpu Latvijoje – 6,2 %. Nuo 2007 m. per trejus metus dėl ekonominės krizės nedarbo lygis išaugo 12–13 procentinių punktų ir pasiekė maksimumą. Latvijoje nedarbo lygis 2010 m. pasiekė 19,8 %. Nuo 2010 m. jis pradėjo kristi, labiausiai tai pastebima Estijoje, lėčiausiai krito Lietuvoje. 2013 m. nedarbo lygis Lietuvoje ir Latvijoje beveik susilygino.

Nepaisant augančios ekonomikos ir darbo užmokesčio dydžio, Baltijos valsybėse skurdo rizikos lygis beveik nepakito, o 2007–2008 m. netgi išaugo, ypač Latvijoje. 2012 m. skurdo rizikos lygis visose trijose valstybėse beveik susilygino.

Socialinio klimato įvertinimas siejamas su tyrime analizuojamais socialiniais ekonominiais reiškiniais – nedarbo lygio ir darbo užmokesčio kitimu. Visų Baltijos valstybių gyventojai socialinį klimatą labiau vertina neigiamai, o ne teigiamai, tačiau čia išsiskiria Estija: jos gyventojų nuomone, bendras socialinio klimato vertinimas net geresnis nei ES vidurkis. Tuo tarpu Latvijos ir ypač Lietuvos gyventojai socialinį klimatą vertina labai žemu balu. Labai blogai socialinis klimatas vertintas 2010 m., kai pablogėjo daugelis socialinių ekonominių rodiklių. 2011–2013 m. socialinio klimato vertinimai visose valstybėse gerėja.

PAGRINDINIAI ŽODŽIAI: *gyvenimo lygis, Lietuva, Latvija, Estija, Europos Sąjunga.*

JEL KLASIFIKACIJA: I31, J31, J64, R13, R 23

DEVELOPMENT OF HEMP INDUSTRY IN THE EUROPEAN UNION AND LATVIA

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ABSTRACT
Hemp is a very valuable plant because each part of it can be used in many ways. It can be used to produce innovative products for building construction, chemical industry, medicine, textile production, consumption, and agriculture. In the article, the authors have aggregated the information about hemp cultivation and processing sector development in the European Union and Latvia and have described its cultivation possibilities, technological processes, and processing capabilities. The aim of the present article was to reveal the topicalities of hemp industry development in the European Union and Latvia. The tasks of the research were to present an overall description of hemp industry development trends in the European Union and to characterize hemp industry development in Latvia focusing on the national support activities and hemp cultivation and processing opportunities. The authors of the article have performed an extensive secondary data analysis to summarize the most important activities that should be done at the national scale to further enhance the development of hemp industry in Latvia.
KEY WORDS: *hemp, industry, production, Latvia.*

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Introduction

In nowadays, depletion of non-renewable resources has become a question of the day determining the need for solutions how to replace these resources in the future. At the same time, last but not the least substantial is the necessity to enhance the diversity of agricultural crops both in Latvia and in the European Union (EU). Agriculture is one of the national economy industries that are closely connected not only with the development of a particular country, but also with rural areas as a whole, therefore it is an important factor of the EU rural development as well as stabilising factor of the EU economy.

Hemp is one of the fastest growing crops, and it has a huge potential in different spheres of production. Important is the fact that it is possible to use any part of this plant. Moreover, it is possible to use hemp in

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many different ways to create innovative products. Therefore, it is topical to evaluate possibilities of industrial hemp cultivation and processing in Latvia.

Although climate conditions in Latvia are suitable for hemp cultivation, hemp cultivation in Latvia has not reached large volumes so far, and hemp is mainly grown in backyard farms. Hemp cultivation and processing is a relatively new area of activity in the traditional grain cultivation. In Latvia, this sector from an economic point of view is comparatively little studied and analysed; however, owing to the increasing demand for natural fibres, lately the development of Latvian hemp fields has been noticed, which should be given a significant role not only in the development of the national economy, but also at the European level.

The aim of the present paper is to reveal the topicalities of hemp industry development in the EU and Latvia and determine the most important activities necessary for enhancing hemp industry growth in Latvia. The tasks of the research are: 1) to present an overall description of hemp industry development trends in the European Union; 2) to characterize hemp industry development in Latvia focusing on the national support activities and hemp cultivation and processing opportunities in Latvia.

In scope of the paper development, the following economic research methods were applied: analysis and synthesis; induction and deduction; monographic method and graphic method. For secondary data analysis, the author has used the publications of European Commission documents, various Internet sources as well as scientific publications and sources of Latvian press.

In the global context, hemp is described as one of the oldest and most diverse crops that humanity has ever known (Clarke, 1999: 272). In Europe, hemp emerged owing to trade connections with Asia. The oldest samples of hemp fabric are found in Germany and are attributed to age 400 years BC. The first hemp paper factory of Spain in the European territory was created in 1150 BC by Spanish moors. Renaissance painters used hemp canvas for their works, and their paint was hemp oil-based (Roulac, 1997: 211).

The most significant changes in the world began after 1937 when the United States (US) Government adopted Marihuana Tax Act, according to which sowing hemp (*Cannabis sativa L.*) was included in the so-called marihuana plant list. The US Department of Drug Enforcement Activities aimed at strict monitoring of hemp cultivation practically destroyed hemp plantations in North America. Following the practice applied in America, in many European countries, hemp was found to be illegal crop immediately after the Second World War (Inverson, 2000: 302).

By 1990, hemp cultivation in Europe had remained only within 6000 ha in France and some little areas in Spain for producing industrial hemp cigarette paper, which was practiced by using a windmill. However, in the coming years, hemp cultivation volumes gradually grew, in 1997 and 1998 reaching to a record level of 20 000 ha, and from 2001 to 2006 retained a stable performance. In 2007 and 2009, its price reached the highest point, which was mainly due to the price compared with the main competing crops such as wheat. Such situation refers to so-called niche crops of high dependency on the current rivalry with agricultural land use. Because in 2010 and 2011 there has again been a sharp rise in prices of agricultural produce, nowadays it becomes more and more difficult to convince farmers to grow hemp (Poitrowski, Carus, 2011).

The main reasons why hemp is regarded as a high-productivity, multi-dimensional use non-food crop with an increasing importance in the agricultural and industrial production are as follows.

1) Hemp can be used as a raw material for industrial and energy production; 30–40 % of its stem can be used for high-quality production of fibre (paper, composite materials, and car manufacturing).
2) Hemp is potentially suitable crop for development according to the principles of sustainable agriculture providing an alternative land use as well as being considered as a rotation exchange plant. Moreover, hemp offers a variety of advantages such as reducing the use of pesticides while increasing the yield of the next crop rotation programme.
3) Hemp produces yield each year, thus farmers do not require investment in the long term as hemp brings profits in the same year; besides, hemp has similar production technology to already widely grown traditional crops.
4) It is possible to use hemp in pharmacy, and it already now has such market.

5) In the future, hemp could play a role in the land remediation of heavy metals (Rannali, Venturi, 2004: 1−6).

Consequently, hemp cultivation and processing in scope of agricultural production can promote the manufacturing of special high value added products.

1. Hemp cultivation in Europe

In nowadays, hemp seed is grown worldwide, and by increasing people's concern for the ecological situation and preservation of the environment, the demand for natural fibres (including hemp) increases. The largest hemp producing countries in the world are China, North Korea, and Canada. In China and North Korea, hemp is annually sown within approximately 80 000 hectares, in Canada − about 10 000 hectares. Among the European Union countries, most hemp is grown in France, Germany, the United Kingdom, and the Netherlands. Overall, in Europe 22,000 to 24,000 tons of hemp fibre and 44,000 to 48,000 tons of hemp sheaves are annually produced (Hemp and its cultivation, 2011).

In 2013, hemp volumes in Europe increased and reached about 16 000 ha (in 2012 hemp volume accounted for 14 000 ha). Average planned fibre extraction is 2.0 to 2.2 tons per ha. The largest areas of hemp are grown in France, which provides about 80 % of all the EU hemp fibre. Hemp fibre sales in 2012 accounted for 30 000 tonnes, including technical fibre paper industry − 20, 000 tons and technical (short) fibre in other areas − 10 000 tonnes (used mainly in the manufacture of insulation materials and bio-composites production). Market experts have found out that France, the Czech Republic, and Germany in 2014 are planning to increase their hemp areas. The study of hemp market prices in 2012−2013 shows that the price of technical hemp fibres is approximately 600−800 EUR/t, whereas the price of technical fibre of hemp used for paper production is 350−400 EUR/t, but the price of hemp sheaves – 200 EUR/t (stable price with upward trend), and the price of hemp seed is approximately 1200 EUR/t (in 2002, the price was 250 EUR/t, but in 2012 – already 1000 EUR/t). The hemp fibre price studies show that there has been a 15 % increase in average prices compared with 2011. Moreover, next year experts predict flax and hemp area increase by 7−10 % in the EU countries, and increase in the demand for hemp seed for food and cosmetics in the EU countries will grow by 10−20 %, for organically grown seeds – even up to 100 % (Tomsone, 2013; European Industrial Hemp Association, 2014).

2. Hemp cultivation in Latvia

Hemp cultivation in Latvia has historical parallels with Europe. Similar to the EU, interest in hemp cultivation in Latvia has increased during the last years alongside with hemp-cropped areas. In the past, hemp was more prevalent among farmers. They occasionally sowed it in old orchards abandoned with weeds. Nowadays, when a large area of agricultural land is weed infected with degraded and compacted soil, it would be worth again start paying attention to the cultivation of hemp. The rich foliage of hemp suppresses weeds and forms a good soil structure. In Latvian farms, there are many suitable places for hemp cultivation − both in the backyard crop areas and in cultivated fens (Antonijs, Drikis, 2000: 16).

Beginning with 2015, the EU provides that 95 % (currently 85 %) of passenger car parts must be manufactured of such materials that can be recycled and reused repeatedly. Each car requires about 30 kg of natural fibres. Based on the estimates, each year Germany releases five million cars, and for only this purpose already 150 thousand tons of hemp fibre is needed annually, thus increasing market opportunities of hemp. Hemp natural products could be very useful also for house insulation, which is a very topical issue in Latvia, but there is a problem that building regulations regarding technical standards for hemp fibre-based materials have not yet been established in Latvia. Unfortunately, hemp is not included in the catalogue of varieties cultivated in Latvia. Nevertheless, Latvian energy guidelines adopted for 2007–2016 stipulate that in the period up to 2020 it is intended to reduce the specific heat consumption of buildings from 220 kW/m^2 to 150 kW/

m^2. Consequently, it will be necessary to bring clarity in this sphere to be able to use the financing of the EU structural funds (Bumane, 2010: 32−36).

It is also important to emphasise that hemp production not only enhances biologic diversity, but also helps to retain landscape diversity and natural heritage of rural areas of Latvia. By providing the manufacturing of previously mentioned renewable resources, it would be possible to maintain and perhaps even increase the number of workplaces in Latvia regions. Considering the specific characteristics of the fibre, it is necessary to search for ways to adapt them to other spheres. As technology evolves, new applications of the material can emerge. Today, hemp is processed to manufacture thousand kinds of products that are both cheaper and environmentally cleaner. Hemp is used in textile, food, pharmaceutical, furniture, construction, oil and gas, pulp-paper, ore mining, energy, steel, radio and ship manufacturing, communications, and medical industries. Moreover, fibre is used to manufacture twisted rope, cables, technical fabrics (canvas, tarpaulin cloth bag) and packaging materials in the fishery sector. Hemp fibre materials as well are used in furniture and footwear, special clothes, bags, curtains and accessories for the manufacture of fire-fighting, car covers, medical and perfume products. Fine hemp a fabric is used to manufacture summer clothes and denim, but hemp pulp can be used for manufacturing of valuable and high-quality paper (Freivalde, Ulme, 2009: 5).

3. National support for hemp cultivation in Latvia

For the coming years in Latvia, the intention that has a national importance is to use each hectare of agricultural and forest land productively, in particular, to achieve more efficient agricultural production providing that 2 million ha of agricultural land are used alongside with increasing the efficiency of farms, which would bring more value added and higher income for farmers, thus increasing the amount of taxes paid and stimulating economic growth. Latvian Rural Development Programme for 2014−2020 strategy solution is subordinated to the medium-period planning document − Latvian National Development Plan 2014−2020 (NAP 2020). Whereas National Development Plan 2020 (NDP 2020) is hierarchically highest national level of medium-term planning document. This document also ensures a transparent link with the European Union planning documents and their set priorities and thematic objectives. In the directions of the NDP 2020 activities are:

- manufacturing of high-performance export production and internationally competitive services;
- ensuring outstanding business environment.

According to the legal enactments, in Latvia the producer groups that have obtained the status of compliance to the EU requirements are co-operative societies of agricultural and forestry services. Owing to the favourable EU and national support policy regarding the development of cooperation, at the end of 2012 in Latvia 122 agricultural services' cooperatives in dairy and grain sectors operated. At this period, of the previously mentioned 122 agricultural services' cooperative societies, 42 operated in the grain sector. One of the strongest cooperatives can be observed in the grain industry, in which 32.7 % of the total Latvian output is marketed through cooperative societies. Currently, not only hemp can be associated with unexploited potential, but is also flax, fruit, vegetables and beekeeping industry cooperation. In the future, along with general cooperative development, it is also necessary to motivate cooperatives for processing activities, which would enable them producing the products with higher value, added as well as increased the sales and profits of cooperative societies. By implementing vertical cooperation model, it would be necessary to focus on acquisition of sales markets, searching for marketing and sales opportunities for goods produced by cooperative members (Latvian Rural Development (…), 2014) (Regulations on the State (…), 2010).

According to the Latvian Rural Development Programme for 2007−2013, the representatives of the hemp sector could apply for such support measures as "Support for semi-subsistence farms undergoing restructuring", "Support for young farmers" and "Modernisation of farms". These programmes provided an opportunity for young entrepreneurs, representatives of hemp sector to start or expand their business, which in this case is directly related to hemp cultivation and processing (Lielbarde, 2012).

Last but not the least issue in scope of the Common Agricultural Policy reform is equalisation of direct payments (DP) because, both now and in the future (after 2013), Latvia is going to receive the least DP per one hectare of agricultural land among all the EU member states. According to the EC legislative proposal, Latvia starting with 2017 would receive only 54 % of the average EU level or approximately 141 EUR/ha. Whereas, according to the project proposal prepared by the European Parliament, Latvia starting with 2017 would receive 65 % of the average EU level or approximately 172 EUR/ha. It is important to emphasise that income and competitiveness of Latvian farmers in the EU market largely depend on the amount of direct payments. The future trends of DP also directly affect the development of hemp sector, which, in the case of positive indicators, would result in more incentives for hemp cultivation in agricultural land areas (Description of agricultural situation (...), 2013; Granting National Subsidies (…), 2013).

4. Opportunities for hemp cultivation and processing in Latvia

Although Latvia does not cover all hemp supply possibilities, its vision of the future is marked in a number of ways − insulation materials, polymer composite materials used in the construction and automotive industry; and Latvian hemp fibre is already now used in the manufacturing of threads and ropes. It is also possible to use hemp sheaves which, when mixed with lime, can be used in building construction. Now the tests of such material conductivity and resistance are being carried out in Latvia. Sheaves can also be applied as a bedding material in horse breeding and poultry farming. In Latvia, such use of sheaves is not popular yet, but in Europe, especially in England, sheaves' beddings are used in large amounts. Moreover, in some countries today there is even sophisticated nanotechnology used to manufacture so-called intelligent materials − those that are bullet-proof and fire-resistant, which is another challenge for Latvian manufacturers to aspire to (Zalane, 2012: 28−29).

It is envisaged that at the global scale in the next years the amount of fossil raw materials and synthetic fibre production volumes will gradually decrease. Nevertheless, the demand for fibre materials is growing as they are more and more used for new product production. Therefore, it is vitally important to increase the use of Latvian natural renewable resources, i.e. flax and hemp fibre, oil and sheaves in manufacturing such products as fibres, yarns, rope, felt, fabric, knitting, thermal insulation and composite materials. Hemp fibre and its products fictionalization is a new trend in the world, which forms the basis for sustainable economic growth on the renewable natural resource base, because hemp is eco-crop. In order to obtain a competitive product quality, it is vital to both have appropriate environmental conditions, production technology, and genetic potential. In Latvia, complex scientific research on hemp production facilities, technology and utilization prospects in various sectors of the economy have not been conducted so far. Therefore, it is necessary to activate research to find out Latvia' s perspectives in hemp cultivation and use as well as evaluate its potential contribution to sustainable agriculture and environment interaction (Strazds etc., 2012: 52).

As shown in Figure 1, hemp cultivation can become a perspective industry owing to the fact that it is possible to use both seeds of the plant and its fibre, thus providing potential for its growing and processing. In the conclusion, the authors have aggregated the most common possibilities for hemp use. *In food industry* – oil, margarine, food additives, canned fish, confectionery, hemp beer, leaf juice drink hemp milk. *Industrial products* − varnishes and paints, inks, solvents, coatings. *In medicine* − medical cosmetics. *In cosmetology* − soaps, shampoos, creams. *In bio-energy extraction* – bio-diesel production. *In animal feed* − poultry, fish food. *In oil industry* – animal nutrition (for livestock as feed additive). *In construction and insulation materials* − panels, sheave concrete blocks, plastering. *In heat and energy* − production of briquettes and granules, bio-ethanol and methanol production, the use of biomass bio-oils extraction, biogas, and fuel compressed (round) form. *In the paper industry* − filter paper, writing paper, bonds, cash, packaging paper. *In agriculture* – beddings, substrates, mulch. *In chemical industry* – for plastic improvement. *In textile* − threads, cords, ropes, mats, tarpaulins, geo-textiles, agro-textiles, brake pads, gaskets, filter material, denim fabrics, sails, tarpaulins, bags, curtains, belts, table linen, and bed linen.

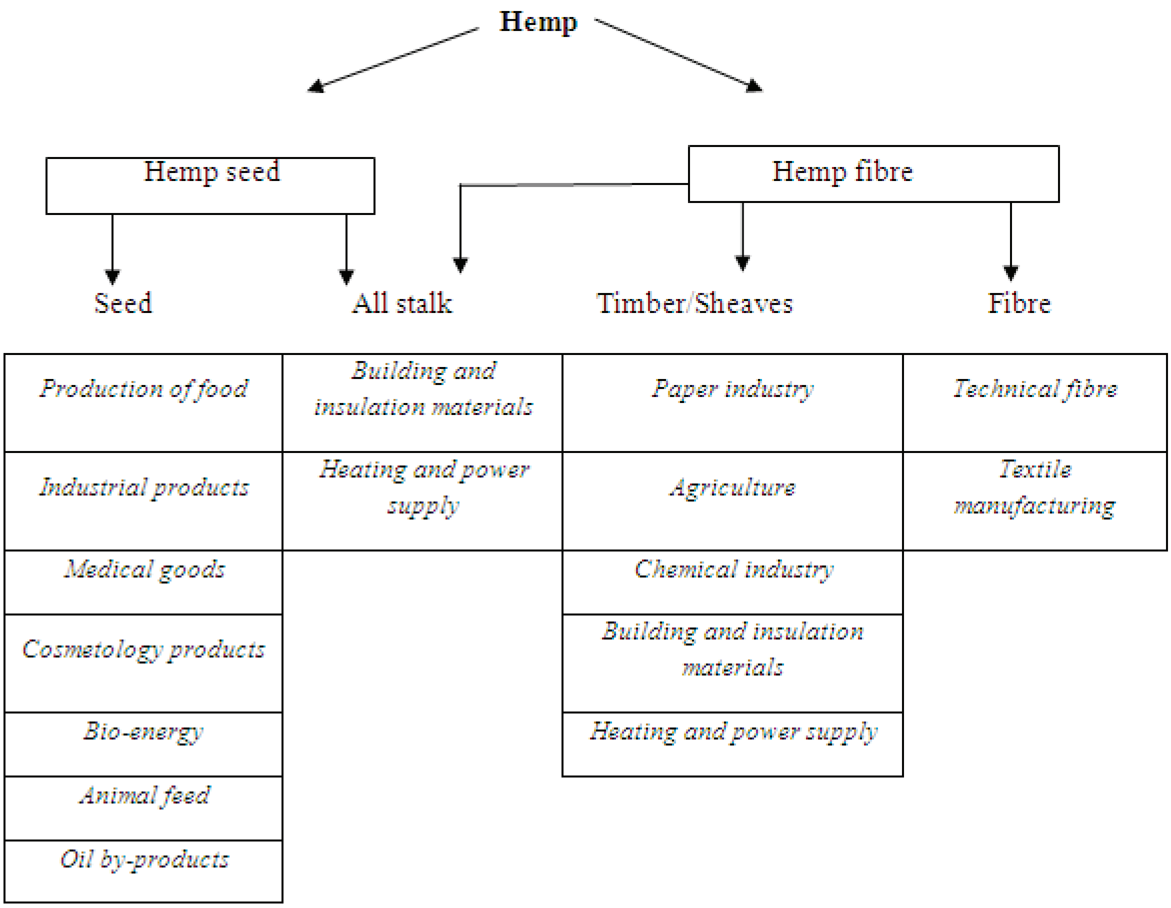

Figure 1. Opportunities for hemp use

Source: Makovska, 2014: 61

The diverse use of hemp in different areas may be the reason for many young entrepreneurs to choose hemp cultivation as one of its core activities. This is evidenced by the fact that although hemp direction in Latvian is only beginning to trigger, some of the businesses have already found their niche in the hemp sector and are successfully developing.

Latvian enterprises that are currently active in hemp industry are *Ltd. "Hemp Eco Systems Latvia"*(ecological materials like hemp lightweight concrete, used for building construction); *Ltd. "Kichi"* (textiles), *Ltd. "Sativa Fibris"* (pre-treatment factory), *Ltd. "Remember Brothers"* (houses of hemp sheaves' concrete panels); *Ltd. "Transhemp"* (pre-treatment factory), *Ltd. "Zalers", Ltd. "Baltiks East", Ltd. "Larelini", Ltd. "L.N.A.", Ltd. "Iecavnieks"* (produce hemp spread); *farm "Adzelviesi"* (pure hemp butter), Latvian hemp breed "Purini"), *farm "Kalnakalvi", farm "Raudoviski", Ltd. "Limbazu tine"* (weaving of hemp fabric), Ltd. *"Straupe"* and *farm "Sidrabi"* – hemp butter (Association of Latvian hemp Growers and Processors, 2014).

Conclusions

In nowadays, the necessity for hemp cultivation in the EU is determined by the need to enhance the diversity of agricultural crops as well as by the fact that hemp is one of the fastest growing crops and it has a huge potential in different spheres of production. The authors' study revealed that it is possible to use hemp in many different ways to create innovative products. Therefore, hemp industry development can be favourable both for the EU rural development and as a stabilising factor of the EU economy.

Authors' study gives evidence that although climate conditions in Latvia are suitable for hemp cultivation, hemp cultivation in Latvia has not reached large volumes so far and can be regarded as a relatively new area of activity in the traditional grain cultivation. Moreover, from an economic point of view, hemp industry development possibilities have been comparatively little studied and analysed so far. Therefore, it is topical to evaluate possibilities of industrial hemp cultivation and processing in Latvia, which could be done by involving alongside with the representatives of the Ministry of Agriculture also researchers from Latvia scientific institutions. Accordingly, hemp sector development should be promoted, based on deep research work and economic evaluation. As analysis of hemp use in different sectors of economy revealed, state bureaucracy currently could be mentioned as a hindering factor in Latvia, nevertheless it is evident that the new sector's acquisition could give to Latvia plenty of opportunities to promote business directly and possibly provide new workplaces, especially in the regions of Latvia.

Economic evaluation of hemp sphere, significance of its support tools significance, and assessment of hemp cultivation and processing capabilities are the basis for identifying the value and importance of hemp in Latvian industrial production.

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KANAPIŲ PRAMONĖS VYSTYMAS EUROPOS SĄJUNGOJE IR LATVIJOJE

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Santrauka

Kanapės yra labai vertingas augalas, nes įvairiais būdais galima panaudoti visas jo dalis. Jos gali būti naudojamos novatoriškų produktų statybos pramonei gamyboje, chemijos pramonėje, medicinoje, tekstilėje, žemės ūkyje. Šiame straipsnyje autoriai apibendrino informaciją apie kanapių auginimo ir apdirbimo sektorių plėtrą Europos Sąjungoje ir Latvijoje, apibūdino jų kultivavimo galimybes, technologinius procesus ir apdirbimo pajėgumus. Šio straipsnio tikslas – atskleisti kanapių pramonės vystymo aktualumą Europos Sąjungoje ir Latvijoje. Straipsnio uždaviniai: pateikti bendras kanapių pramonės vystymosi Europos Sąjungoje tendencijas ir apibūdinti kanapių pramonės vystymąsi Latvijoje, atkreipiant dėmesį į valstybės paramą ir kanapių auginimo bei apdirbimo galimybes. Autoriai atliko išsamią antrinių duomenų analizę ir apibendrino pagrindines veiklas, kurios turi būti įgyvendinamos valstybiniame lygmenyje, kad kanapių pramonė Latvijoje būtų intensyviai vystoma.

PAGRINDINIAI ŽODŽIAI: *kanapės, pramonė, gamyba, Latvija.*

JEL KLASIFIKACIJA: O18, Q16

EMPLOYER BRANDING TRAINING DEVELOPMENT FOR PUBLIC ORGANISATIONS

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ABSTRACT
In the condition of demographic issues in Europe and competition for specialist between public and private sector on the labour market public organisations' as employers' image is an important aspect of development. The research aim is to identify principles of Employer Branding (EB) and ways public organisations can organize and develop employees' education on this topic. There are EB activities examined in ten socially responsible (SR) organisations from public sector in Latvia. Authors prepare theoretical bases for the research analysing scientific literature to explain the main point of the approaches framework and define the main terms in depth implementing qualitative and quantitative research methods. In the result proposals for the EB training development for public organisations were developed. Training programs on EB for the public sector organisations should consist of blocks connected to marketing and HRM. Managers should decide whom to train and why and develop different training tracks for each employees level. Training should be implemented periodically reflecting on the changes in external and internal organisational environment.
KEY WORDS: *employer branding, training, public administration.*

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Introduction

Current research is an advanced continues research that is based on the results presented on the 22nd Annual The Network of Institutes and Schools of Public Administration in Central and Eastern Europe (NISPAcee) conference in Budapest, Hungary in May 2014 (Voronchuk, Stariņeca, 2014: 1–15). Based also on other previous authors' researches, they can conclude that there is an issue on attraction of young specialist for administrative work in the public sector organisations. Young generation of specialists are more attracted by dynamical work for private sector organisations rather than conservative and non-creative job in public sector organisations (Stariņeca, 2014: 1).

Problem. Unemployment among young people is a challenge in many European countries. Attraction and recruitment of new employees for the public sector organisations has several difficulties. Young specialists that are mainly Generation Y representatives have special requirement to the potential employers. One of

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the important for young specialists criteria choosing a potential employer is a possibility for further professional development provided by the employer (Stariņeca, 2014: 1).

Public sector employees, managers, executives should be educated on Employer Branding (EB), however, education programmes for the public sector specialists and employers sometimes are not developed good enough. Informal education opportunities are not so popular in Latvia in public sector (Vorončuka, Stariņeca, 2014: 1).

Purpose. The research aims to identify principles of EB and ways how public organisations can organize and develop employees' education on the topic.

Object. Public sector organisations included in Sustainability Index (SI) in Latvia in 2014.

Tasks:

- make theoretical research outlining the meaning and essence of the terms EB, SI, etc.;
- review possible approaches of EB;
- examinee few examples of public organisations EB in Latvia;
- observe learning concepts and some human peculiarities on learning process;
- propose the possible scheme of the main EB training program development steps and content of such training.

Methods. The research is mainly based on qualitative research methods, synthesis, comparison, monographic research, literature overview.

The main terms and practices discussed in the article are compared based on different sources. SR public organisations were chosen based on Sustainability Index (SI) results for the year 2014.

1. Employer Branding principles

A term Corporate Brand is clear enough for organisation managers and executives, however such a term as Employer Brand has appeared not so long time ago among practitioners in Latvia. Private sector, especially middle and large international companies on Latvian market implement the EB practices, however, in terms of retention and new employees attraction EB is an important strategic activity. Authors analysed some literature sources to identify the term Employer Brand and outline known Employer Branding practices defined by theoreticians to compare them with that implemented by practitioners in public sector organisations in Latvia (Voronchuk, Stariņeca, 2014: 3).

Employer Brand is a specific term that has been created in 1990s (Ambler, Barrow, 1996: 185). Minchington and Thorne (2007: 15) outlined that 'every organisation has an employer brand. Whether you own it or not, your organisation is influencing its employer brand 24 x 7 x 365'. Pahor and Franca (2012: 94‒95) describe their developed in 2007 the conceptual model of the EB pyramid. It consists of three parts. Recognition of the employer lays at the basis of the pyramid. Consideration is the middle part of the pyramid. The higher point of EB meaning is the idea that employer become an 'employer of choice'.

According to the quantitative analysis the most frequently used words in the definitions analysed are 'employment' (at 3 % of cases), 'employer', 'identity', 'directed', 'external' and 'employees' (by 2 % each word). Summing them up and reflecting the content of the sorted definitions it is possible to consider that generally Employer Brand is an identity of employer that is directed to the external and internal stakeholders and speaks about employment image by several criteria provided by this employer.

Creation and development of the EB usually is called 'Employer Branding' as it reflects the process. Employer Branding (further EB) is one of the Human Resource Management (HRM) activities (Backhaus, Tikoo, 2004: 501). Backhaus and Tikoo (2004: 502, 506) describe it as the process of developing and communicating organizational information that is 'specific and enduring for a firm as an employer and differentiates it from its competitors'. According to Edwards (2010: 5) employer branding, 'in its full scope, cuts across many traditional HR specialisms and becomes an umbrella programme that provides structure to previously separate policies and practices'. Aggerholm et al. (2011: 113) made the more specific definition that states that employer branding is 'a strategic branding process which creates, negotiates and enacts sustainable relationships between an organisation and its potential and existing employees under the influence of the varying corporate contexts with the purpose of co-creating sustainable values for the individual, the organisation and society as a whole'. Some authors see the EB throw HRM and marketing (Ambler, Barrow, 1996: 186; Lievens et al., 2007: 52; Bondarouk et al., 2012: 10, 16), however, authors of this paper assume that Employer Branding is mostly concentrated on Public Relations activities, i.e., relationship establishment and maintenance with the organisations' stakeholders – 'external stakeholder groups' and 'internal stakeholder groups' (Bondarouk et al., 2012: 17). Supporting this, Aggerholm et al. (2011: 106) state that 'there is a need to apply more stakeholder and relationship thinking to employer branding in support of the paradigmatic understanding of the concept within a social constructivist tradition'. So, it is could be considered that EB is a process of relationships creation with stakeholders (current and past and potential employees) through some specific HRM activities (Voronchuk, Stariņeca, 2014: 3−4).

To highlight that it is benedictional for an organisation to work on EB authors list Jain's and Pal's (2012: 70) identified EB benefits:

- increase in productivity and profitability; employee retention; and employer attractiveness;
- decrease in recruitment costs; and period of time when new employed specialist give real benefits to the organisation;
- minimize of loss of talented employees;
- employees committed to organizational goals;
- improvement in employee relations.

The next question is how to reach these benefits. There are several approaches that describe EB process by steps, components, elements, dimensions and disciplines (Table 1) that help to understand what should be done to implement EB activities in the organisation daily life. EB framework (Backhaus, Tikoo, 2004: 504–511) consists of two main tracks. The first track essence: employer branding affects EB associations that creates employer image and its attraction. The second track reflects the employer branding interaction with organisational culture. EB outcome is organisational identity. Organisational identity and organisational culture affect EB loyalty that's outcome is employee productivity (Backhaus, Tikoo, 2004: 505).

EB is a mix of disciplines, i.e., interaction of organisational culture, marketing, the psychological contract and employer branding (Barrow, Mosley, 2005: 9; Edwards, 2010: 5; Aggerholm et al., 2011: 113–115). Kudret (2014: 13–17) describes the EB mix that consists of three main dimensions that supports Backhaus's and Tikoo's (2004: 505) framework and a mix of disciplines of employer branding. Backhaus and Tikoo (2004: 503) state that 'employer branding is based on the assumption that human capital brings value to the organization'. Lievens' (2007: 51−52) three sequent steps (1, 2, 3.1., and 3.2.) are related to the others above mentioned authors' components, elements dimensions that are reflected in Table 1.

EB also reflects such areas as employer knowledge, consideration, and employer of choice (Pahor and Franca, 2012: 94, 100). The main words connected to the EB practices or disciplines that are mentioned more frequently by several authors in mentioned above descriptions are: culture, employer, employees, job, employment, organisation/ organisational, marketing, environment, benefits, opportunities. All these words are mentioned for at least four times. They characterize the core meaning of the term, i.e., the description of Employer Branding could be summarized as *an activity that suppose employer interaction with their employees through marketing and some employment circumstances* (organisational environment and culture of the organisation, job opportunities, benefits, etc.). Employees here are mostly current employees. However, as it was defined before, within EB activities, employer force their activities on past, current and potential employees (i.e., current and future potential employees, where future potential employees are those, who are not labour market participants under some circumstances, e.g. people who are under the economically active age or underqualified yet – students, or people who have age of economically active people, but are not searching for the job now, etc.) (Voronchuk, Stariņeca, 2014: 5).

Table 1. EB characteristics

Lievens (2007)	**Jain and Pal (2012)**	**Bondarouk et al. (2012)**	**Pahor and Franca (2012)**	**Kudret (2014)**
Three-steps processes of EB	EB components	EB elements/EB mix dimensions	EB main characteristics	EB mix dimensions
3.2. EB transition to the organizational culture	1. Culture and Environment (‘work practices, value system, behaviour and attitude of the people working in the organization’)	1. People and culture (What kind of employees employed, What is expected of employees; Employment conditions and treatment of employees, Current culture and ethics in the organization)	1. Good leadership and job-life balance	1. Culture (Internal communication, Rewards and recognition, Learning and development, Service support, Measurement system)
1. The value proposition of an EB development 2. The EB external marketing	2. Employment Experience (Tangibles (salary and benefits), Intangibles (company’s culture and values, opportunities for learning and career progression, reward and recognition and management style))	2. Organizational characteristics (What the organization is and what it offers, How organisation is offered, Organizational processes (vision, mission, future goals)) 3. Employer reputation (Past achievements, Social activities, sponsorship etc., Products and services ratings)	2. Reputation of company and its products and/or services	2. Purpose (Senior leadership, Values/ Corporate Social Responsibility (CSR), External marketing)
3.1. The EB internal marketing	3. Integrity 4. Employment Package (Financial Compensation, Job Roles and Responsibilities, Work Environment, Career Development Plan)	4. Job characteristics (Job opportunities; Job learning opportunities, Key functions and specific characteristics, Introduction program) 5. Remuneration and advancement (Advancement opportunities, Career programs; Benefits and compensation system)	3. Possibilities for personal development 4. Security of employment	3. Employment (Working environment, Recruitment and induction, Team management, Performance appraisal)

Source: Lievens, 2007: 51−52; Jain, Pal, 2012: 70−72; Bondarouk et al., 2012: 41−43; Pahor, Franca, 2012: 100; Kudret, 2014: 13−17.

Under various authors’ consideration the main areas to pay attention on creating or developing EB are: *culture and environment of the organisation, job content, features and benefits that employees can get working for the employer* (benefits, professional development opportunities etc.). Culture and environment of the organisation in external and internal organisation environment also influences employer image, therefore authors propose to pay attention on such activities implementing Employer Branding: manage, measure / evaluate EB, work on EB in internal and external environment (Voronchuk, Stariņeca, 2014: 5). EB has quite the same principles as usual corporate branding, e.g., there are three laws of branding: Neuroscientific foundations of effective brand building (Walvis, 2008: 186−188):

- the higher the distinctive relevance of branding efforts;
- the higher the coherence of branding efforts across time and space;

- the more engaging the branding environment that is created;
- the more likely the brand will be chosen.

When the action plan and rules for EB is set it should be reflected on the whole organisation management cultural and strategic principles. If EB activities are new for the organisation, employees, i.e., managers, need to be educated on this topic to provide better/ qualitative implementations (Voronchuk, Stariņeca, 2014: 6).

The research is based on public organisations experience of EB. The sample of the research consists of socially responsible (SR) public organisations in Latvia that are included into the SI in 2014. The next section provides the outcomes of the Latvian Sustainability Index initiative exploration.

2. Sustainability Index in Latvia

Social responsible behaviour of the organisations has definitely a positive effect on EB of the organisation. However, current and potential employees wish to know how good organisation is at SR. There are several ratings of employers by different criteria in Latvia, one of them are popular for last 5 years Sustainability Index (SI). SI initiative 'is a strategic management tool developed on the grounds of global methodology, in order to help Latvian enterprises to establish the level of sustainability and corporate responsibility. It also sets objective criteria for the community as well as public and non-governmental organisations. Another purpose of the initiative is to praise and support the enterprises contributing to the long-term sustainability of Latvian economy, environment, and society' (Sustainability Index, 2010–2014; Voronchuk, Stariņeca, 2014: 2).

When organisation has a status of SR organisation, it becomes more attractive for job seekers and current employees. It is important aspect, because it brings an additional meaning to the organisation, it speaks about organisation possible positive image and comfortable working environment, special, interesting and trendy culture (when employees have an opportunity to do sport during working day or proposed to eat ecological and healthy food in the organisation's restaurant, etc.) (Voronchuk, Stariņeca, 2014: 6).

SR principles are quite the same as values or principles of some European and American public sector institutions. They are (ISO 26000 2010):

- accountability;
- transparency;
- ethical behaviour;
- respect for stakeholder interests;
- respect for the rule of law;
- respect for international norms of behaviour;
- respect for human rights.

All mentioned principles are directly connected to the positive EB principles. For example, transparency essence: stakeholders as the direct or indirect collaborators or integrators with the organization may know about the main ideas and objectives of the directors, executives and managers. This will help to avoid the organisational anarchy and give an opportunity to control the impartiality, fairness and avoid corruption of the top managers. Transparency gives the feeling of trust, truth and responsibility, which is vital in order to the sustainable organisation establishment.

SR organisation is an organisation that implements SR as a tool for the contribution to sustainable development of the organisation. The top management should be accountable in their decisions in case to fulfil the sustainability of the organisation and help the organisation to succeed in the reaching the goals. Each decision has the influence on future of the company, on organisation image and strength of the relationships with the organisation stakeholder, on internal organisation environment. All these statements are important for reaching good financial, social and human results as well as organisation performance.

It is important to maintain good relationships with organisation stakeholders; therefore it is important to be fair to each shareholder – with small and big weight for the organisation. Responsibility in each action of the executives, board members and directors can also influence relationships maintenance with internal as well as external stakeholders. The decision makers are responsible for the future of the organisation, its development and existence as well as *image*.

People should understand that their action has the results. Nowadays especially large organisations should recognize that right action can bring more benefits than that one which is spontaneous, emotional, selfish and sometimes immoral or illegal (Voronchuk, Stariņeca, 2014: 7−8).

To asses, how good the SR organisation has been contributed to the sustainable development, some specific tools were developed. For example, based on mentioned ISO 26000 standard, Global Reporting Initiative (GRI) guidelines, Dow Jones Sustainability Index and other the Sustainability Index in Latvia was developed. Since 2010 more and more organisations in Latvia participate in the competition competing on SR best practices to be included in the list of organisations with the higher score in contribution to the sustainable development. However, it is important to remark that in 2014 in SI were included less public sector organisations than previous years. 'The index has been adapted to the local audience evaluating the local performance of enterprises as regards to economic, social and environmental issues'. The areas that are assessed in each organisation are (Sustainability Index, 2010−2014):

- strategy (15 % of the total score weight);
- society (15 %);
- work environment (25 %);
- market relations (20 %);
- environment (25 %).

To be included into the SI lowest (Bronze) group the organisation's SI should be equal to at least 40 % (others groups are: Silver with total SI 60–79.9 %, Gold − 80–89.9 %, and Platinum − above 90 %). Comparing to the three main dimensions of Dow Jones SI – economic (≈33 % of the total score weight), environmental (≈33 %) and social (≈33 %) (Sustainability Indexes, 2014), SI basic evaluation areas are more specific. Of course, all SR and SI has been developed focusing on private sector organisations, however, there are some public organisation in Latvia that take part in SI initiative and also are included into the SI (Sustainability Index, 2010−2014).

Dimensions and areas of assessment of the SI organisations contribution to the sustainable development corresponds to the SR core subjects (Human rights and Labour practices – Work environment; The environment – Environment; Fair operating practices – Strategy and Market relations; Consumer issues – Market relations; Community involvement and development – Society) (Voronchuk, Stariņeca, 2014: 8−9).

Next section is devoted to some Latvian public organisations examples of EB expression in public environment (in Internet).

3. Examples of EB expression in public SR organisations in Latvia

For the empirical analysis authors chose ten out of twelve public organisations included into Sustainability Index in 2014. Generally the number of public organisations included into SI in 2014 is low; however, they have quite high results. Chosen organisations are (Sustainability Index 2010−2014):

- platinum group representative State Joint Stock Company (SJSC) "Latvenergo";
- golden group representative SJSC "Latvijas loto";
- silver groups representatives:
  - Joint Stock Company "Rīgas siltums";
  - Municipal Joint Stock Company "Daugavpils siltumtīkli";
  - Municipal Limited Liability Company "Ventspils reiss";
  - State High School "Riga Technical University";
  - SJSC "Road Traffic Safety Directorate of the Republic of Latvia";
  - SJSC "Riga Internationl airport";
  - SJSC "Latvijas dzelzceļš"; and
  - SJSC "Latvijas autoceļu uzturētājs".

All ten organisations are examined by some elements of EB (organizational characteristics, culture, remuneration and advancement, employer reputation, employment, people and job characteristics). Organisations WEB pages and all provided there documents are used as a source of information (date of information collection is June 15, 2014); some internal factors are not evaluated, if the information on them is not published on the WEB pages. Some EB elements (characteristics groups) that are implemented by the organisations has been explored, however, some elements are not fully explored as organisations do not publish enough information on their WEB pages to explore these elements.

Characterising current employees almost all organisations mention only managers or executives' profiles, however they do not offer a description of their employees. Totally there is a weak public expression of EB activities on the SR public organisations in Latvia. Even they have high value of SI they do not express the results of their activities publicly much enough. Examined organisations mostly focus on their products description and their WEB pages are mostly a communication tool for their clients and partners not employees or potential employees. These aspects have not been changed comparing with the previous authors' results exploring seven SR public organisations included in SI in 2013 (Voronchuk, Stariņeca, 2014: 13). They write about their employer reputation and organisational characteristic rather than on remuneration and advancement for employees or culture of the organisation. They might have internal communication tools to spread information among their current employees, some organisations are city level small organisations (e.g. *Daugavpils siltumtīkli* (2013) employs only 20 people), therefore they do not use external environment to positioning them as employers.

There are a lot of terms, principles and practices connected to the SR. Tools that can be implemented require particular knowledge and skills. Taking into consideration a fact that SR organisational governance influence EB it should be assumed that organisation managers as well as employees should be educated on this, they need to realize the essence of the strategy, organisation culture, values and goals (Voronchuk, Stariņeca, 2014: 8−9). Therefore authors propose to examine several useful approaches to develop appropriate training on EB by the teaching technics and content for public sector employees. Therefore the next section is devoted to some education and learning peculiarities.

4. Education and learning peculiarities

Those who develop training programs need to know human learning principles. Authors propose developed guidelines creating training in this section. Some important facts about learning process should be assumed educating employees.

Developing or choosing education program for employees it should be clear that employees and their learning abilities need to be examined. Each person has his/her own approach learning something. Thus, some core aspects should be taken into consideration: the type of new information, employees learning abilities (e.g., remembering this type of information), and appropriate teaching technics that can be used for the defined employees as learners and learning program content.

Most probably public sector administrative employees will need explicit knowledge. 'Explicit knowledge is academic knowledge or 'know-what' that is described in formal language, print or electronic media, often based on established work processes, use people-to-documents approach' (Smith, 2001: 314). Educating employees on EB, explicit knowledge is a basis. Employees need to be aware of some HR recruitment technics, some norms and labour legislative aspects, branding creation itself, etc.

In terms of employees' as learners' assessment it would be valuable to pay attention on two main aspects: group learning and individual learning. Most probably employees will be educated in groups especially in terms of getting tacit knowledge. In this case employees should be evaluated as group learners. Grasha-Reichmann Students Learning Styles shows different people learning preferences depending on their collaboration with other people. This is a cognitive approach to learning styles. These styles are split to (Grasha, 1996: 176−177):

- avoidant style – people prefer to learn alone that together with other learners or do not have any motivation for learning at all;
- collaborative style – it is essential to collaborate with other learners and teacher during learning process, be involved into the process directly;
- competitive style – learner prefer to learn through some competitions or games, to show that he/she have learned something better that others, it motivates them to learn things;
- dependent style – learner is dependent on teachers requirements and learning group leader, he/she learns only required information;
- independent style – learner prefer to work independently, deciding hem / herself what should be learned, prefer to work alone, not in groups;
- participative style – learner is opened to new information, active in class participation, try to do him/her best during the learning process.

It would be valuable to explore employees during learning process to evaluate what kind of learning style they use, or give a test to find it out. Splitting people into learning groups or choosing some learning technics, it could be valuable to consider employees as learners from the 'world' perception view. Fleming's VARK model proposes to split learning styles based on senses (Fleming 2001: 70):

- auditory – learner better remember information that he/she has listened to;
- kinesthetic – learner better learn things through touching, smells, movements and taste;
- reading-writing preference – learner better remember characterized in written form information, when he/she is offered a logical explanation and via language expresses information;
- visual – learner better remember and learn things by seeing them.

Learners with auditory learning style get better explicit knowledge through listening to the information. Merging learning styles and knowledge that is needed to get authors created a Table 2 that shows which learning style could be more appropriate to get explicit knowledge.

Table 2. Learning styles and explicit knowledge

Learning style/Knowledge type	Explicit knowledge
Avoidant	Type of thinking: Primarily convergent thinking
Participative	Learning: Trial-and-error approach
Competitive	Work process: Assumes a predictable environment
Collaborative	–
Dependent	Learning: Meet work goals and objectives set by trainer
Independent	Learning: Self-directed in areas of greatest expertise
Auditory	Sharing knowledge: Extract knowledge from person
Kinesthetic	–
Reading-writing preference	Sharing knowledge: E-mail Electronic discussions Forums
Visual	Learning: On the job

Source: Grasha, 1996: 176−177; Fleming, 2001: 70; Smith, 2001: 314−315.

It should be outlined that a person has rarely the representative only of one learning style implementer. Therefore the group of employees most probably will be miscellaneous.

Considering the appropriate training technic Benjamin Bloom's thinking behaviours domains should be outlined (Anderson, Krathwohl, 2001: 54):

- cognitive (based on knowledge);
- affective (based on attitude);
- psychomotor (based on skills).

Cognitive is a knowledge based domain, consisting of six levels. These six levels of thinking skills according to the revised Bloom's Taxonomy are (Anderson, Krathwohl, 2001: 58):

- remembering (Can the learner recall or remember the information?);
- understanding (Can the learner explain ideas or concepts?);
- applying (Can the learner use the information in a new way?);
- analysing (Can the learner distinguish between the different parts?);
- evaluating (Can the learner justify a stand or decision?);
- creating (Can the learner create new product or point of view?).

Revised Bloom's Taxonomy helps to construct the training activities in the logical way to persuade the learning process of the employees. This also illustrates the process of EB itself. First people remember it, then understand the essence of the employer getting more information on it, then use the EB (e.g. current employees), analyse it, evaluate finding out possible disadvantages and advantages and become a part of it. Participating and identifying him/herself with the employer, employees consciously or unconsciously create the EB. Thus, it is so important to evaluate employees as learners before giving them training. Organisation needs to be aware of it as it brings the idea of further actions to apply the appropriate idea and create EB that is desired.

Organisation should create or find the appropriate employees to create and develop the desired EB. This could be fulfilled through giving employees the appropriate education on the topic (Voronchuk, Stariņeca, 2014: 9−11, 13−14). Some examples and possible content of training programmes are observed in the next section.

5. Training development on employer branding

One more activity that needs to be implemented would be a choice of the appropriate education technics. However, here this activity is overviewed in conceptual way. Choosing the right approach for the teaching on EB it should be considered that the programme should be adapted to the organisation needs and specifications. Thus, most probably it will be an internal training or set of training on specific topic. Training is 'a planned process to modify attitude, knowledge or skill behaviour through learning experience to achieve effective performance in an activity or range of activates. Its purpose, in the work situation, is to develop the abilities of the individual and to satisfy the current and future needs of the organisation' (Wilson, 1999: 4). Training could be considered as non-formal education (Zaki Dib, 1987: 2−6). It could be group, individual (e.g. coaching) training or mix of them (Wilson, 1999: 4−10). The design and type, form of training depends on the outcomes of the previous steps.

Summing up all possible activities that are purposed above is possible to split them into three main steps (Figure 1): identify type of information that is planned to give as a training material; assess employees; learning abilities (e.g. by learning types and way of thinking); and finally choose appropriate teaching/ training technic(s) based on collected information. Authors leave training technics step unpractised as it depends on previously collected information and can be various. This scheme is one of the possible various approaches for training creation (Voronchuk, Stariņeca, 2014: 11).

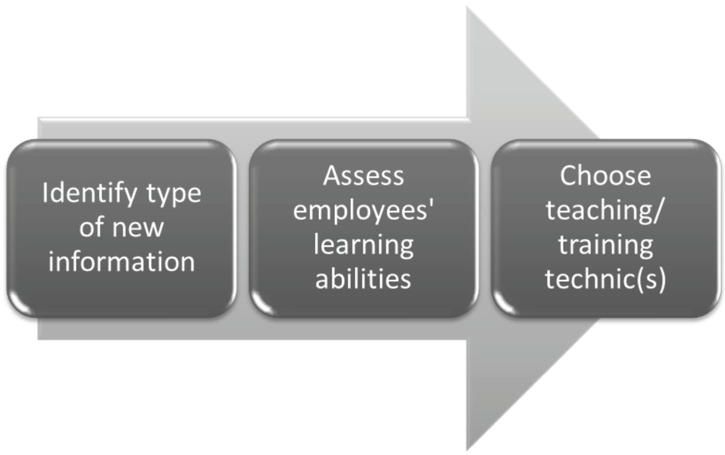

Figure 1. Proposed training development framework

Source: Voronchuk, Stariņeca, 2014: 11.

As the result authors also would like to summarize the possible content of the training programmes. In general we could consider that the idea of the SR organisation 'in the context of employer branding reconceptualises the employee towards a morally acting and responsible human being' (Andersen et al., 2013: 30). Aggerholm et al. (2011: 116) defined the third wave of employer branding framed by a holistic and sustainable perspective on branding. This means that organisation:

- have obligations and responsibilities towards all stakeholders;
- is striving to generate sustainable relations with all stakeholders;
- is striving to create and balance organizational, stakeholders and societal values.

Thus, EB is connected to branding as well as HRM and SR (and CSR). Sustainable organisations are those that reach the sustainable development, e.g., throw SR approach or SR organisations. SR organisations' culture, vision, mission and strategic goals influence EB process, when EB process merge such areas as branding itself as field of marketing, HRM and SR (and CSR mostly in case of private sector organisations) (Aggerholm et al., 2011: 114). Based on information on EB theory and employer branding approaches that are connected to the SR theory as well as information from the practical examples overview authors could propose the following content of the training program(s) on EB for the public sector organisations in Latvia. It should consist of blocks connected to marketing, SR and HRM (Table 3). Public organisations should pay more attention on HRM topics. Executives should have the overview of the strategic place and importance of EB and EB as a process.

Table 3. Proposed list of topics for public organisations' training program(s) on EB

SR related topics	Marketing related topics	HRM related topics
Accountability, Transparency and Integrity Environmental issues (specific for the industry and region) Introduction to sociology Organisation strategic development (mission, vision, values, goals) Organization theory Professional ethics (maybe training may devote time for organisation's ethical code or code of conduct development, improvement or overview) Social activities, sponsorship etc. Stakeholder theory	Branding and reputation External communication Market relations	Benefits and compensation system Career Development Plan Employees learning and development Internal communication Job Roles and Responsibilities Job-life balance Labour law Leadership Performance appraisal Recruitment and induction Rewards and recognition system Safety and health of employee Team management Working environment

Source: Voronchuk, Stariņeca, 2014: 13.

Training should be supported by relevant case studies and organisation case study analysis to have an opportunity to use knowledge in practice and combine learning and working process. Involvement into the EB at least planning process during training might motivate employees to work further on this topic, feel inspired being a part of the organisation and as a result bring EB to the masses spreading the idea among other current, new and potential employees (Voronchuk, Stariņeca, 2014: 14).

EB training for each organisation should be adaptive. For SR organisation the proposed list of topics is the most complete and suitable; however, even other organisations should pay attention on SR related topics developing training program on EB.

Conclusion

Making theoretical research based on newest journal articles and some scientific books authors outlined that EB is the reflection of the organisation by several criteria and one of the most important is what kind of employees are working for this employer. Organisation should develop or find the most suitable employees to create and develop the desired Employer Brand. Develop employees is possible not only through the cultural aspects, but also proposing professional development for employees particularly educating them on EB.

There are different and related approaches of EB, provided by different authors. Authors of this paper analysed five different approaches that were described in publications for last seven years to conclude this. The main scope of the approaches is related to some activities forced to create and maintain positive organisation image in internal and external environment through their organisational culture, attitude to their stakeholders, their values, social responsibility, positive and comfortable working environment, attractive jobs content, etc.

Examining examples of ten public organisations EB in Latvian socially responsible public organisations that were included in Latvian SI in 2014 authors one more time made sure that totally there is a weak public expression of EB activities on the SR public organisation in Latvia in spite of high value of SI of organisations examined. Authors checked information accessible on the organisations WEB pages that reflect the existence of the main seven EB components by several elements that were defined based on theoretical framework. There are could be several reasons for this such as absence of rational motivation to do it or low level of regional development where this organisation works. Sometimes it is impossible to consider definitely if e.g. an organisation do not have set organisational values just based on the information provided on the WEB page; however, it only shows that if even the organisation have defined its values, it does not share them with its stakeholders publicly.

Authors also analysed four concepts of learners. Observation of learning concepts and some human peculiarities on learning process authors found out that humans can be complex learners. Their learning peculiarities can depend on the characteristics of learning environment (is it independent, individual or in groups, formal on non-formal learning process, etc.). Developing training programs it should be taken into account that public administrative organisations administrative stuff needs mainly explicit knowledge; however, afterwards in daily practices employees will use also their tacit knowledge as well.

Authors propose to follow the guidelines of EB training program development by steps. To develop this framework authors summarized all analysed materials on learning concepts, EB approaches and SI. First of all it is rational to evaluate what kind of information should be taught. Most probably for public sector organisations EB training will mainly bring explicit knowledge. Next step would be learners' evaluation. Employees as learners in different kind of circumstances can switch their learning preferences and a trainer need to be aware of them. Therefore the last step would be appropriate, relevant teaching technic(s) selection based on learners peculiarities and type of the material that need to be taught. The first step of the framework mainly assumes work with structure and content of training – topics covered. As EB is related to marketing, HRM and SR, topics covered in the training should be also related to these spheres.

One more things that should be highlighted that the training should planned as a constant and periodical / regular activity at organisation to maintain the positive effect of Employer Branding and support the desire of the organisation to strive for its sustainable existence.

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DARBDAVIO, KAIP „PREKĖS ŽENKLO", MOKYMAI VIEŠOJO SEKTORIAUS ORGANIZACIJOSE

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Santrauka

Šis straipsnis analizuoja darbdavių situaciją dabartinės demografinės Europos situacijos ir konkurencijos dėl specialistų tarp viešojo ir privataus sektoriaus organizacijų kontekste. Svarbu atkreipti dėmesį į viešojo sektoriaus organizacijų, kaip darbdavių, įvaizdį. Siekiama nustatyti darbdavio, kaip „prekės ženklo" (PŽ), principus ir būdus, kaip viešosios organizacijos galėtų organizuoti savo darbuotojų mokymus šia tema. Ištirta PŽ veikla dešimtyje socialiai atsakingų Latvijos viešojo sektoriaus organizacijų. Teorinius tyrimo pagrindus autoriai parengė analizuodami mokslinę literatūrą. Tyrimas atliktas taikant kiekybinius ir kokybinius tyrimo metodus. Parengtos rekomendacijos, kaip vykdyti veiklos mokymus viešojo sektoriaus organizacijų darbuotojams. PŽ mokymų programas turėtų sudaryti blokai, susiję su rinkodara ir žmogiškųjų išteklių valdymu. Vadovai turėtų nuspręsti, kokius darbuotojus reikėtų apmokyti, ir nustatyti atitinkamą mokymosi procesą, atsižvelgiant į darbuotojo žinių ir kompetencijos lygį. Mokymai turėtų vykti periodiškai, atsižvelgiant į vidinės ir išorinės aplinkos pokyčius.

PAGRINDINIAI ŽODŽIAI: *darbdavio, kaip „prekės ženklo", mokymai, viešasis administravimas.*

JEL KLASIFIKACIJA: H83, O15

INNOVATION PROCESSES IN THE SOCIAL SPACE OF THE ORGANIZATION

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ABSTRACT
Innovation is not only an economic mechanism, or a technical process. It is primarily a social phenomenon in which the motivation and participation of employees are determinants of success in the process. Hence, many authors emphasise the social dimension of innovation. The paper summarizes the conclusions of the studies conducted among employees from Polish companies on identification of "soft" determinants of innovation processes in the organization, such as human resources, innovative climate and culture conducive to innovation.
KEY WORDS: *innovation, innovation processes, human resources, organizational development.*

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Introduction

Research problem: The innovation process is the implementation of innovation in the social system of the organization. The process begins when a decision about introducing change is made in the company. This process depends on the attitudes of managers and employees to change. On the one hand, innovation is a real or potential threat for employees, violating the state of social balance and causing employees' resistance (the implementation of innovation is associated with uncertainty, risk taking, sounding out, experimenting and testing). At the same time, motivation, creative and innovative thinking of employees are essential for success in innovation processes. It is, therefore, important to create an innovative climate that supports innovation processes in the company. The findings indicate that even not very dynamic companies are able to strengthen their market position through innovation, if they are given appropriately broad importance, and entrepreneurs and managers are willing to take risks and be more active compared to competitors. A lot also depends on their management style and the atmosphere created in the company. The democratic style and atmosphere of intra-entrepreneurship are favourable to innovation.

The purpose of this paper is a research investigation of internal factors that determine the innovation processes in the organization, i.e. the elements of the innovative climate and organizational culture conducive to innovation.

The object of research – social determinants of innovation processes in the company.

Research methods: theoretical analysis of scientific literature, a direct survey (the instrument of data collection was questionnaires).

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1. Company innovativeness and innovation processes

1.1. The concepts of innovation and innovativeness

Innovation is any change, favorable by definition, in different areas of the organization activity, introducing progress compared to the existing state, developed in or outside the organization, being a response to the needs signaled or satisfying the needs previously unrevealed (Brown, Ulijn, 2004: 2; Lesaková, 2008: 8). It has the evolutionary character of improving existing things, assessed positively in the light of the criteria of the organization (Wojtowicz, Kozioł, 2012: 212). The basis for developing and implementing innovation is appropriate knowledge resources in the form of inventions, industrial designs, acquired licenses, proprietary copyright, know-how, formulas, etc. It can be assumed that the essence of innovation is knowledge and learning.

Innovativeness is the company's willingness and ability to seek, assimilate and develop new and improved products, services provided or technologies used (Janasz, Kozioł, 2007: 57), as well as the ability to efficiently allocate resources to shape the optimal configuration of competitive advantages within the specified time (Bielski, 2000: 87). Innovativeness determines the level and direction of the company development, indicating progress, growth and competitive advantage. Analyzing the definitions of innovativeness in the relevant literature it can be said that innovativeness is the ability to continuously create and implement innovations that are appreciated by customers due to their high level of modernity and competitiveness in a global scale (Skrzypek, 2011: 26). Innovativeness can arise from the assumptions adopted within individual functional areas of the company. Innovativeness and innovation are not identical concepts but they are closely related because innovativeness is often measured by means of innovations created and implemented and expenditure allocated by the company on activity in this area.

The overall innovativeness of the company is determined by its ability and willingness to absorb innovation, involvement in innovative processes and the ability to acquire resources and skills necessary to participate in these processes. The propensity for innovation is expressed in interest in changes. The ability to innovate means having sufficient resources and the internal structure that allows the creation of inventions and/or transforming them in innovations. The innovative ability of companies, the ability to transform all of its resources into real innovation and competitive advantage depends on its characteristics (size, structure, complexity, resources, firm's market orientation and presence of strategic, managerial and marketing changes, etc.), its contacts with the environment and the characteristics of the environment and in particular on education, knowledge of company employees and the qualifications and competence of managers (Bozic, Radas, 2009: 440; Balcerowicz, Wziątek-Kubiak, 2009: 17).

Many authors highlight the social dimension of innovation (Roth, 2009: 232; Labuda, 2008: 229; Kożusznik, 2010: 6). Innovation is not only an economic mechanism, or a technical process. It is primarily a social phenomenon. In their nature, innovations are a collective process that requires the gradual involvement of the increasing number of participants. Thus, motivation and participation of employees are determinants of success in the process.

1.2. Innovation processes

All innovations have no broader economic and/or social significance (for both their creators and users) until they are practically used by implementing them into production. The necessary condition for commercialization of each innovation is the existence of an appropriate sequence of events (actions), which is defined as the innovation process. The concept of the innovation process can be interpreted both in the narrow and broad sense. In the narrow sense, the innovation process is traditional control of the innovative process, already expanded by new elements, but proceeding in a routine manner (a decision to innovate at a higher level, information, implementation, adaptation of the system), within clearly defined borders. This concept, used in plural, refers to establishing a creative organization with innovative culture and means constantly renewed innovation processes, whose boundaries blur not only between successive innovations, but also between creativity (the sphere of ingenuity, idea) and innovation (the sphere of innovation) and whose long-term objective is to increase the innovation capacity of the organization system, to develop a learning organization, capable of adapting, collecting and using knowledge. In this perspective, innovation processes mean gaining autonomy, strategic advantage over the competition, acquiring unique traits and behaviors, changing the organizational culture. Innovation processes are also analyzed in micro and macro perspectives. In the micro perspective, patterns and generalizations are sought, concerning the inventive process, the triad of research, development, and implementation, as well as a response to a question about the advantage of supply over demand-based innovation stimulation, relationship of expenditure on research with their effects. The innovation process can also be seen from the point of view of the organization or groups or individuals operating in it. Changes in behavior of innovative processes participants lead to organizational development (redirecting the organization to one of the tracks of innovative strategies), and transferred to the growing circles of society, can trigger social change (Francik, 2003: 9−10, 47).

2. Innovation processes in the social system of the organization

The innovation process is the implementation of innovation in the social system of the organization (Figure 1). It consists of two stages: the stage of innovation development and dissemination stage. The beginning of the innovation process may be developing and collecting inventions (regardless of the place of their origin). The next steps include selecting one of the concepts, taking the decision on how to implement it, that is specific actions enabling the introduction of innovations in organizational reality. The innovation process begins in a specific organizational context that determines its course.

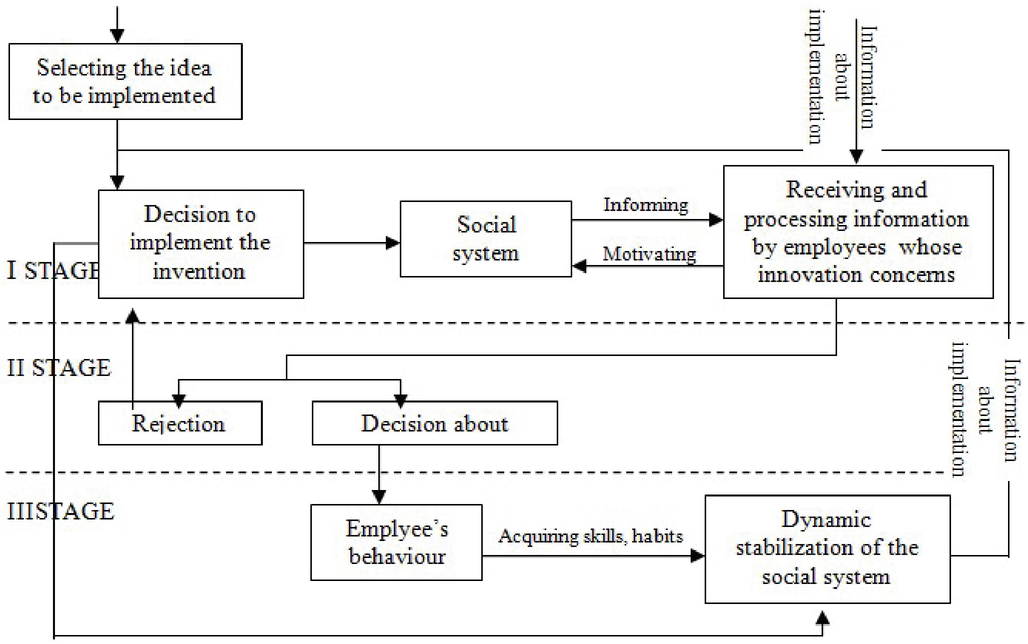

Figure 1. Stages of the innovation process

Source: Francik, Pocztowski, 1991: 30

The innovation process in the company begins when the decision about introducing change is made in the company. This process depends on the attitudes of managers and employees to change. Innovation is for employees a real or potential threat, violating the state of social balance and causing employees' resistance (the implementation of innovation is associated with uncertainty, risk taking, sounding out, experimenting and testing). Thus, the organization of the innovation process should aim to overcome such barriers and achieve the state of balance of the organization social system in the final stage. At the same time, in order to cope with the knowledge-based competition of a new type, it is necessary to search for synergistic effects of broadly understood innovation. It is essential, therefore, to have access to a variety of resources, especially intangible. This implies the need to care for the appropriate level of innovative behavior of employees. These, in turn, derive from innovation-oriented instruments, rules and management procedures. Innovation is understood as the ability to innovate, it requires respect for the individual, the perception of the employee not only as a means of conveying human capital, but primarily as the subject of the innovation process (Bal-Wozniak, 2013: 405–406). It should be emphasised that in managing the process of innovation implementation, flexibility of response to competitive challenges is significantly affected by access to innovative competence and, therefore, it is necessary to manage innovativeness as a process of shaping this competence referring them to people as current and potential participants in the innovation process. Equipping people with this competence is the process of strengthening their ability to actively participate in solving problems in the organization.

A subject of the innovation process − a human being – participates in the business processes in a dynamic way, depending on the current phase of the life cycle of the individual and the life cycle of an organization, in which he or she performs defined functions and plays professional and social roles. In order to optimally use the potential of activity and creativity of employees, it is necessary to take into account their objectives as participants in the processes that contribute to implementing business plans. These participants belong to specific groups of stakeholders; adopt certain attitudes and behavior based on their perception of their own anticipation in these processes. If it is positive, psychological barriers to their activity disappear.

Innovativeness perceived in terms of a subject is seen as a specific competence. According to the theory of competence (Boytazis, 1982: 97; Lévy-Leboyer, 1997: 19), it includes knowledge, skills, values, attitudes, and they are components of the company innovation potential, including a set of resources enabling it to achieve the innovation-related objectives. A category of *competence* (here as a component of innovation) is gradable, which means that through appropriate interaction (management, coordination) it may influence the change in its states (Bal-Wozniak, 2013: 407).

Four areas are crucial to effectively implement innovation: leadership behavior, management processes, people and skills, organizational culture and values (Loewe, Dominiquini, 2006: 24−25; Leiponen, 2005). On the basis of these areas, sustainable internal competence is built for innovation as a continuous process, not incidental, short-term effort (Figure 2).

A prerequisite for the effective team activity, whose task is creative, innovative problem solving, is the openness and willingness to share knowledge and experiences with others. This approach is partly due to personality determinants of team members, so organizational culture is also important here, which can effectively promote or inhibit cooperation, exchange of knowledge, experience and ideas. Open culture, promoting the participation of all team members in the creative process, is favorable to the activity and initiative of employees, while culture based on strong control is definitely not conducive to creativity and innovation. Cultures aimed at developing innovation and creating suitable conditions for doing so are characterized by dynamism, flexibility, fast adaptation to changing conditions, and non-stereotypical solutions. A key to the development of innovation in an organization is support, and encouragement for every employee to seek and discover unconventional, non-standard ways of achieving objectives and performing tasks. Thanks to the participation, an employee has greater responsibility, but also bigger motivation (he / she is not only the "robot", an individual carrying out a superior's order). However, it is necessary to create an environment giving a sense of security, lack of fear, both of criticism and "theft" of the idea by co-workers, and a transparent incentive system taking into account the initiative of employees and rewarding for their active participation in the innovation process, while allowing and accepting impractical solutions, mistakes and risk associated with them. The efficient flow of information is also important- understanding the reasons for and benefits of the changes by all sides involved is necessary for their effective implementation. Personality of team managers, who initiate new projects, or give the "green light" to the initiatives submitted by employees, is also significant (Brouwer, 2002: 83−105; Schumpeter, 2002; Szczepańska-Woszczyna, 2014: 13). Excessive formalization and bureaucratization of processes, as well as extensive control structures are not conducive to innovation. They both delay the decision-making processes, and inhibit the creativity of employees (Fabrowska, 2010: 44–45; Loewe, Dominiquini, 2006: 26–28).

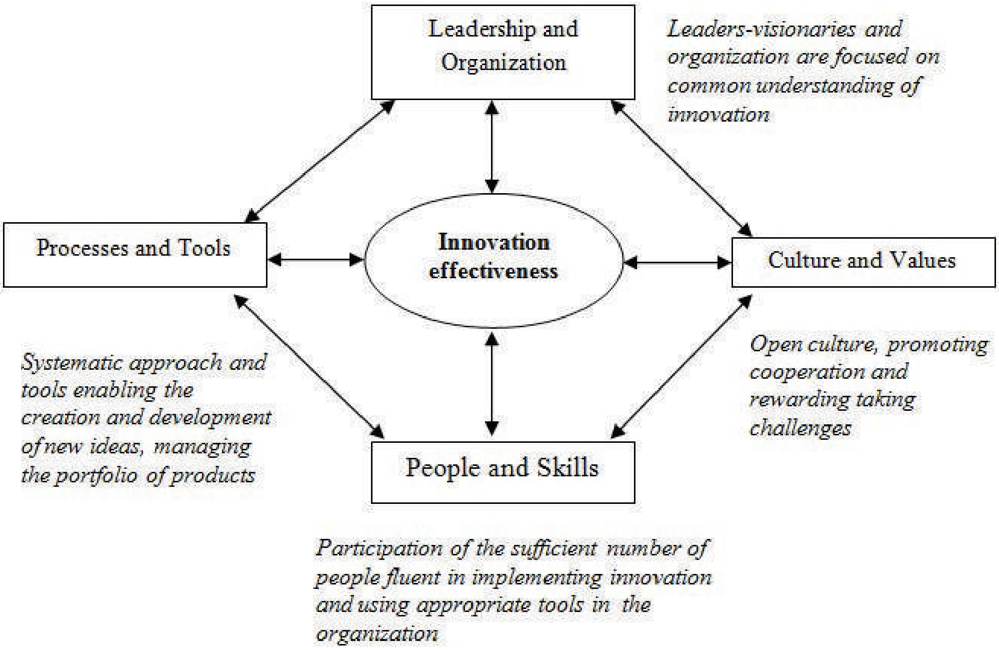

Figure 2. Key areas of a systemic innovation capability

Source: Loewe, Dominiquini, 2006: 26

The research findings show that even not very dynamic companies are able to strengthen their market position through innovation, if they are given appropriately broad importance, and entrepreneurs and managers are willing to take risks and be more active compared to competitors. A lot also depends on their management style and the atmosphere created in the company. The democratic style and atmosphere of intra-entrepreneurship are favorable to innovation. Thanks to them, the process of creating innovation, regarded as a social process, becomes more efficient.

3. Social determinants of innovation processes

3.1. Objectives and research sample

The aim of the study was to investigate the internal determinants of innovation activity in the companies surveyed, in particular human resources, an innovative climate and culture favorable to innovation. The quantitative sample of analysing the internal determinants of innovation activity in companies contains 174 employees – representatives of companies located in the Province of Silesia in Poland. We eliminated the respondents who failed to answer at least 20 per cent of the questions. A total number of 152 usable questionnaires were received. Distribution of the sample is shown in Table 1.

The research was conducted by means of a direct survey. The instrument of data collection was questionnaires. A questionnaire consisting of 10 questions with a mixture of Likert-scale and closed-ended questions with one answer was developed. A five-point Likert scale was employed to gather responses, 5 indicating "maximum agreement" and 1 "no agreement". The survey was sample-based. Non-random sampling was applied and advantages and disadvantages specific to this method of sampling were considered. A small group of those surveyed does not authorize to make generalizations, but allows the identification of the specific mechanisms and formulation of questions and conclusions. Tested on a larger sample, they will make it possible to formulate more documented and certain, useful theses on a larger scale. The data was collected in April and May 2014. The data was first analysed using basic statistical techniques. Data analysis was accomplished using IBM SPSS Statistics 21.

Table 1. Distribution of the sample (%)

Gender		**Age**		**Seniority**	
Woman	65.0	Below 25 years	30.8	Up to 5 years	24.8
		25–30 years	26.5	5–10 years	46.2
Man	35.0	31–40 years	31.6	11–20 years	17.9
		41–50 years	9.4	Over 20 years	11.1
		Over 50 years	1.7		
Position				**Company**	
Non-managerial position (e.g. a specialist)	65.8	I manage a team of at least ten people	18.8	Micro company (up to 9 people)	18.8
Operational manager	12.8	I manage a team of four-nine people	10.3	Small enterprise (from 10 to 50 people)	19.7
Middle manager	15.4	I manage a team of two-three people	10.3	Medium-sized enterprise (from 51 to 250 people)	25.6
Senior manager	6.0	I do not manage teams of people	60.7	Large enterprise (over 250 people)	35.0

Source: own study

3.2. Support for innovation processes

Each innovation may be a threat to employees because it violates the current state of balance, which can lead to employees' reluctance to implement innovation and even boycott and sabotage change. Among the respondents, only 9 % feel threatened by risks arising from the implementation of innovation in the company, fearing the change in the scope of their duties, redundancies, reorganization or new responsibilities. The majority (66.7 %) were people employed in non-managerial positions). Almost every second respondent (44.7 %, of which 60.0 % are people employed in non-managerial positions) felt the danger in a moderate degree, which indicates that the implementation of innovation in the company may violate balance felt by employees, therefore it requires neutralizing activities.

A key to the development of innovation in an organization is support and encouragement for every employee to seek and discover non-conventional, non-standard ways of achieving the objectives and performing tasks. 46.3 % of the respondents believe that the organization supports the new ideas of employees (the opinion most often expressed by operational employees and senior managers (50.0 % of respondents in each group). Negative opinions were expressed by low-level (operational) managers (40.0 %). Senior managers did not rate the issue negatively. Therefore, a discrepancy can be observed in the assessment of employees and their superiors.

In the organizations studied there is a need for change and efforts are made to introduce it, the need to innovate is seen by all the employees of an organization. Management declares a positive attitude to innovate; regardless of the level they occupy in the structure, employees can propose new ideas and solutions that are further discussed, as long as they are part of a corporate strategy. Organizational culture is characterized by openness to the creation of new knowledge and its use in the innovation processes; managers are not afraid of change and encourage their subordinates to introduce it. However, some discrepancy can be observed in the assessment of the elements related to the innovation climate made by operational employees and managers. The assessment of the elements that affect the climate of innovative is presented in Figure 3.

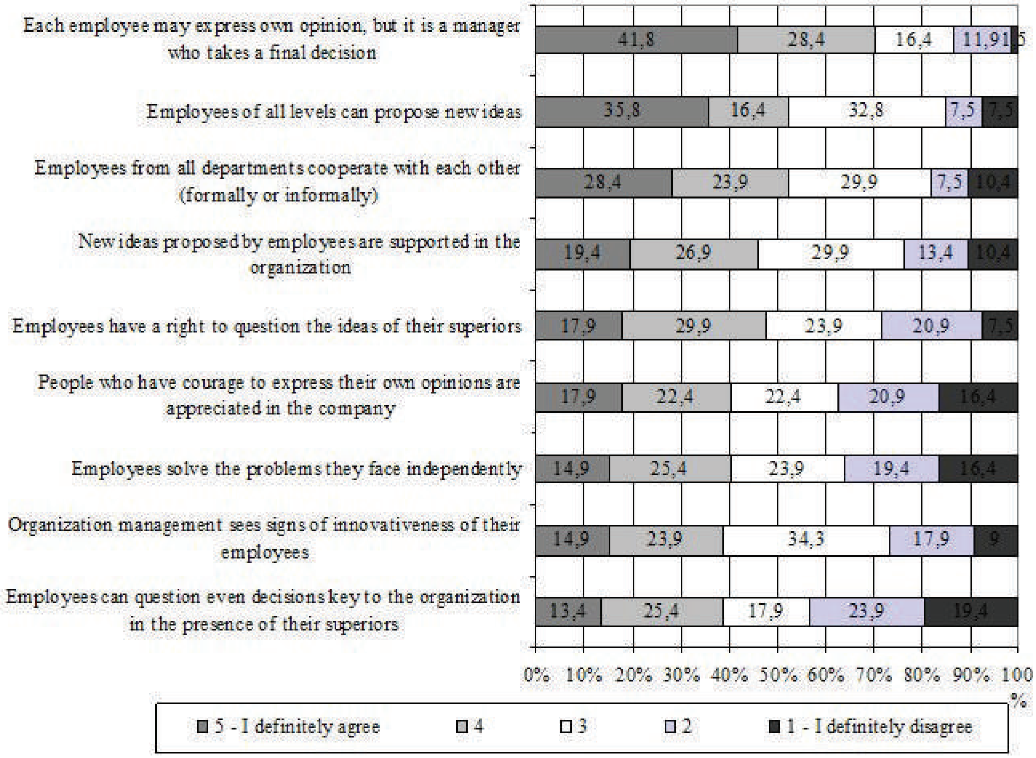

Figure 3. Elements of innovation climate

Source: own study

The comparison of companies that implement innovation and that do not shows that companies where innovative processes take place, new ideas of employees are noticed to a greater extent, managers are more open to their subordinates' opinions, they recognize and reward signs of innovation of their employees, there is a greater cooperation between employees from different organizational units (Fig. 4).

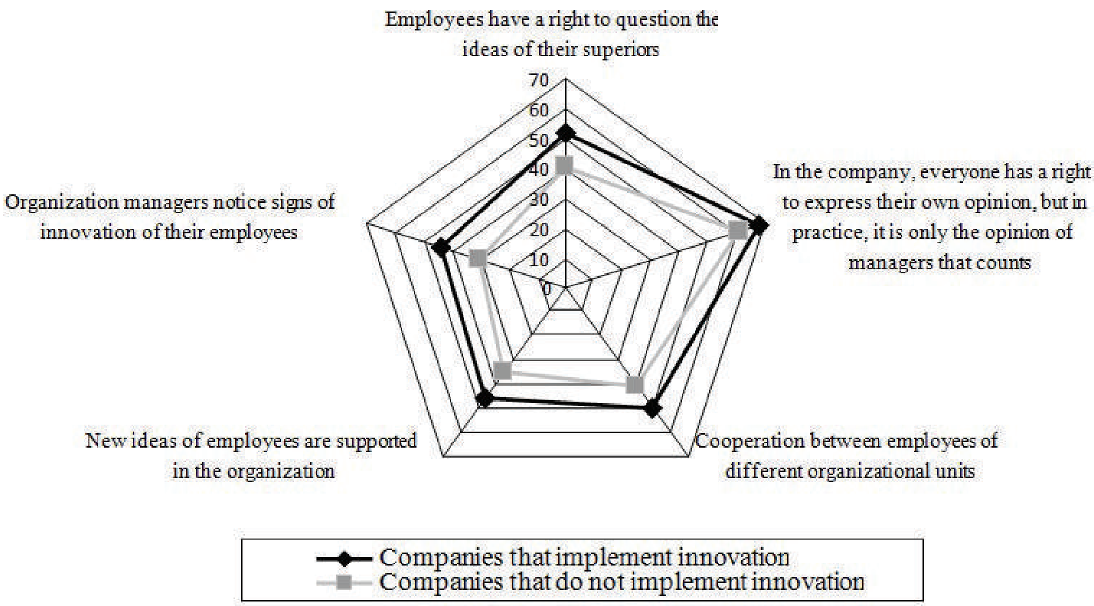

Figure 4. Elements of innovation climate – companies that implement innovation and that do not implement innovation

Source: own study

3.3. Barriers to innovation activity

The element most frequently reported by the respondents that limits innovation processes is rather organizational and financial constraints: bureaucracy, high cost of credit and the lack of funds for the implementation of innovation. However, it should be noted that the problem could also be the reluctance of employees to propose ideas for improvement and completely new solutions (Figure 5). Every third respondent also mentioned too low qualifications of employees to implement innovation, however, significant differences can be observed in the assessment of the operational staff (26.0 %) and managers (40.0 %). It is, therefore, necessary to ensure organizational environment that gives you a sense of security, a lack of fears, both of criticism and the "theft" of the idea by co-workers, and the transparent incentive system that takes into account the employees' initiative and rewards employees for their active participation in the innovation process, while allowing and accepting impractical solution, mistakes and risk associated with them that appears.

The problem seems to be developing a strategy for the organization development, including, in particular, such elements that are related to its innovation activity, and then making the employees aware of it. However, it is not only about informing about innovation, but also about making employees aware of the purpose of this activity in the organization, their roles in the innovation process, as well as their ability to influence this process. Improving the flow of information on innovative activity is also significant.

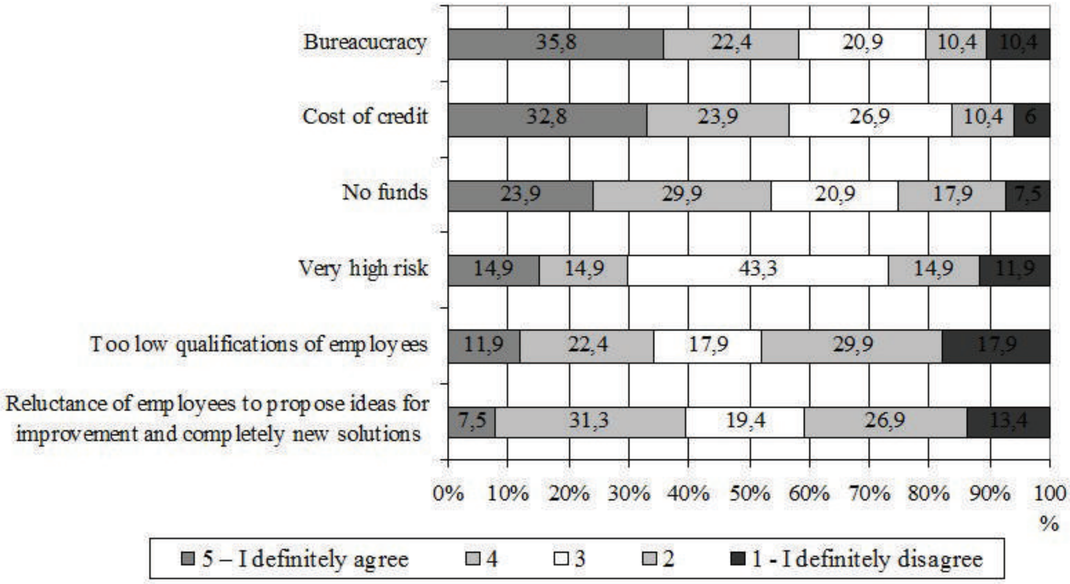

Figure 5. Barriers to innovation activity

Source: own study

Conclusions

Innovation has a social dimension, it is the result of a variety of interactions and relationships between individual actors and in order to be implemented, it must have social approval, because it changes paradigms, both in the ways of thinking, production, organization and management, as well as consumption. The key innovative resources directly affecting the innovation include human capital resource – human capital has a dual meaning here: it is a creator of new knowledge and a factor enabling adaptation and absorption of external knowledge. The importance of a human factor in the process of change, such as innovative processes, is due to the fact that organizations change through people – it is people who need to assimilate the change, take on new tasks and then develop them. Therefore, the problem of change needs to be considered from the perspective of people involved in the process.

According to the research, the feeling of uncertainty associated with change during and after completing the innovation implementation process can lead to resistance of employees, including sabotaging change. The problem may also be a reluctance of employees to propose ideas for improvement and completely new solutions, resulting from the lack of a sense of security and fears, both of criticism and the "theft" of the idea by co-workers, a lack of confidence to the employer and no clear incentive system taking into account the employees' initiative and rewarding them for their active participation in the innovation process.

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INOVACINIAI PROCESAI SOCIALINĖJE ORGANIZACIJOS ERDVĖJE

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Santrauka

Inovacija – tai ne tik ekonominis mechanizmas ar techninis procesas, tai visų pirma socialinis reiškinys, kai darbuotojų motyvacija ir dalyvavimas nulemia proceso sėkmę. Todėl daugelis autorių akcentuoja socialinę inovacijų dimensiją. Straipsnyje apibendrinami tyrimų, kurie atlikti Lenkijos bendrovėse, rezultatai. Tyrimais siekta nustatyti švelniuosius inovacinį procesą veikiančius veiksnius, tokius kaip žmogiškieji ištekliai, inovacinė atmosfera, inovacijoms palanki kultūra.

PAGRINDINIAI ŽODŽIAI: *inovacijos, inovacijos procesas, žmogiškieji ištekliai, organizacijų vystymas.*

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