



Possibilities for development of business cluster network between SMEs from Visegrad countries and Serbia

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Possibilities for development of business cluster network between SMEs from Visegrad countries and Serbia

University of Belgrade, Technical Faculty in Bor,
Engineering Management Department (EMD)
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EDITORIAL OF THE MONOGRAPH:

Possibilities for development of business cluster network between SMEs from Visegrad countries and Serbia

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The Monograph: “Possibilities for development of business cluster network between SMEs from Visegrad countries and Serbia” is **direct result of the Project, with the same title, which was approved and financially supported by the Visegrad Fund (<http://visegradfund.org>).**

INTRODUCTION

1. BACKGROUND OF THE PROJECT

Work of the Engineering Management Department (EMD), founded in 2002, is based on fifty years long tradition of the Technical faculty in Bor, University of Belgrade (which is on the Shanghai list of universities ranked among the top 400).

Since 2004, the EMD organizes May Conference on Strategic Management – IMKSM2014 (<http://mksm.sjm06.com/>), which grew into an international symposium in 2013. The present contribution of the Conference to the field of strategic management is best reflected in the continued increase in the number of works and authors. According to the data, 2013 was the most successful year in the conference tradition with 133 submitted articles and 236 participants (<http://mksm.sjm06.com/statistika-imksm-kroz-godine/>).

Now, in the year 2014, when we were about to organize the 10th jubilee of the IMKSM2014, we had in plan that we should further increase our international impact and in line with this our cooperation with our future partners from Visegrad Countries - V4.

Accordingly we decided to apply to Visegrad Fund with the project titled: **Possibilities for development of business cluster network between SMEs from Visegrad countries and Serbia”**

As it was planned, in the first two days of the IMKSM2014 symposium, national and international authors will have the opportunity to present the results of their research papers in the field of management.

The last day of the three-day conference was planned for the international student symposium and roundtable entitled “Possibilities for development of business cluster network between SMEs from Visegrad countries and Serbia”.

This way IMKSM2014 symposium would represent a continuation and improvement of cooperation between the Technical Faculty in Bor and scientific institutions of V4.

Considering that the project was approved, the conference and the round table were organized in accordance to the plan. In the work of the conference sections and the round table, besides Serbian, representatives of scientific institutions from the V4 partners took a part with the aim of sharing knowledge and entrepreneurial experience and creating a climate for the future international cooperation.

This was also in the line with the aim of the project, which is raising the quality of the conference and the student symposium by retaining old and attracting new participants, who would improve conference fields by their scientific contribution.

2. PARTNERS OF THE PROJECT

Official V4 partners that participated in the project, in the event of IMKSM2014 and the work of the round table are:

1. **Institute of Production Engineering, Faculty of Management, The Czestochowa University of Technology – Poland**; webpage of the partner institution: <http://www.zim.pcz.czest.pl>
2. **University of ss. Cyril and Methodius in Trnava, Faculty of Mass Media of UCM – Slovakia**; webpage of the partner institution: <http://fmk.ucm.sk>
3. **University of South Bohemia, Faculty of Economics**; webpage of the partner institution: <http://www.ef.jcu.cz>
4. **Óbuda University, Keleti Faculty of Business and Management – Hungary**; webpage of the partner institution: http://kgk.uni-obuda.hu/medve_andras
5. **The Managers of Quality and Production Association - Poland**; webpage of the partner institution: <http://qpij.pl>
6. **University of Ss. Cyril and Methodius in Trnava, Faculty of Social Sciences – Slovakia**; webpage of the partner institution: <http://www.fsvucm.sk/uvod>

3. PROGRAM AND THE ACTIVITIES

The programme of the Conference IMKSM2014 and the round table, is available at the official web page of the conference: <http://mksm.sjm06.com/> It can be noticed that record number of participants and institutions were present on the IMKSM meeting this year.

3.1. EVENTS OF THE IMKSM2014 PROJECT

May 22nd, Prof. Dr Ivan Mihajlovic, president of IMKSM2014 organizational board, announced the conference and the project at regional TV station. The link to this activity, and the TV show recorded stream, is available here: http://www.dailymotion.com/video/x1w0zas_budilica-gostovanje-ivan-mihajlovic-22-maj-2014_news

May 23rd – 25th, successfully organized International May Conference on Strategic Management. This year there was a record number of near 160 papers, with more than 260 authors, submitted for the conference. On the other hand, the number of participants who presented their works at the conference was to some extent less than expected (around 100 presentations). The reason for this is in the floods which happened in Serbia immediately before the conference. However, the abstracts of all manuscript were published in Book of abstracts, which is available here: http://media.sjm06.com/2014/05/Book-of-abstracts_MKSM14.pdf. Also, all full length papers are also published in Book of proceedings which is traditionally prepared in the CD form.

May 25th (1), in the frame of International May Conference on Strategic Management – IMKSM2014, 10th International Students Symposium on Strategic Management was also successfully organized. At this symposium 23 students from different countries presented their research work. The program of students' symposium is available here: http://media.sjm06.com/2014/05/Students-symposium_program.pdf

May 25th (2), during the last day of the International May Conference on Strategic Management – IMKSM2014, the Round Table: „**Possibilities for development of business cluster network between SMEs from Visegrad countries and Serbia**„, was organized. The round table was organized with participation of: **Prof. Dr. József Poór** from Szent István University, Gödöllő, Hungary; **Prof. Dr. Kornélia Lazányi**, **Prof. Dr Ildikó Marosi** and student **Viktor Valo** from Óbuda University, Keleti Faculty of Business and Management, Hungary; **Prof. dr Ladislav Mura** and **Marija Igazova** from Faculty of Social Sciences, University of Ss. Cyril and Methodius in Trnava, Slovak Republic; **Prof. dr Ivan Mihajlović**, **Dr Isidora Milošević**, **Dr Milica Arsić** and **MSci Danijela Voza** from Technical Faculty in Bor, Serbia; **Dr Dubravka Škunca** from Faculty of Business and Industrial, Management, Union University, Belgrade, Serbia. Participants from Czech Republic and Poland also sent their presentation for the round table. At the Round table discussion was facilitated with the topic of possibility to create new network between all partners on this project. Also, the present situation in development of SME sector – with the aim of cluster modelling and further cooperation was presented.

Following conclusions can be emphasized from this meeting:

1. All partners on this project will sign the bilateral agreement for future cooperation on faculty level;
2. Ten papers from the IMKSM2014 will be published in next issue of Serbian Journal of Management (www.sjm06.com) and ten in Acta Oeconomica Universitatis Selye; The

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papers should be arranged in accordance to instructions to authors available at the web sites of those two journals.

3. All reports about present situation in SMEs sector in partner countries and possibilities for cluster formation between V4 countries and Serbia will be published in this Monograph. The monograph will be published with up to 6 papers from each partner university. The papers will be with 10 to 20 pages and prepared in accordance to prepared template. It was agreed by all partners that the deadline for manuscripts submission, for the monograph, is 15th of June 2014.

4. It was agreed that the partners on this project will continue with scientific and research cooperation in the future. They will be engaged in near future on preparation of larger projects, possible in the frame of HORIZON 2020.

All further details about directions of future cooperation will be available at the web page of the project: <http://mksm.sjm06.com/visegrad-fund-project/> .

The following sections of this monograph are the manuscripts which resulted from the presentations of the partners of the project, and in accordance to the conclusions of the Round Table: **“Possibilities for development of business cluster network between SMEs from Visegrad countries and Serbia”**.

The organizing committee of the IMKSM2014, wish to express deep gratitude to all partner institutions which supported this project, also to International Visegrad Fund for financial support and contribution, as well as the Ministry of Education Science and Technological Development of Republic of Serbia for additional financial support of some of the conference activities.

SMES COMPETITIVENESS INDICATORS AND CLUSTER INITIATIVES – THE CASE OF VISEGRAD COUNTRIES AND SERBIA

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Abstract

Clusters represents geographic concentration of interconnected companies and institutions in certain field and promote competition and cooperation. Cluster will fail without vigorous competition. Cooperation is mainly vertical, because it includes companies in related industries and local institutions. Clusters are influencing competition by increasing the productivity of companies based in the area, by driving the direction and pace of innovation and by stimulating the new businesses. In the Global Competitiveness Report (GCR) for 2013, issued by World Economic Forum, the best ranked Visegrad country is Poland, on 42nd place among 148 countries, but Czech Republic, which is on 46th place has much better position of indicators related to the small and medium enterprises and cluster development. That is why Serbia should follow example of Czech Republic in the field of cluster initiatives. National Cluster Association (NCA) in Czech Republic brings together organizations and individuals with the purpose to coordinate the sustainable development of cluster initiatives and to develop cluster policy in the Czech Republic on the basis of concentration of knowledge, experience and expertise to strengthen the competitiveness of the country. NCA exists to create a competent long-term platform for the development of cluster initiatives in the Czech Republic and an active interface for international links.

Keywords: Visegrad countries, Serbia, clusters, competitiveness

1. INTRODUCTION

Competitiveness is a driving force that affects the companies that innovate and improve the production process. The rivalry between companies in cluster encourages innovation and change. Regional competitiveness is connected with the exchange of technology, skills and information between individual companies within the cluster. Clusters are one of the crucial factors for improving the competitiveness of the region in which they are formed. Areas with a developed system of clusters are, at the same time, and areas of significant and rapid economic development and a high standard of living. Industrial clusters can be vertical - linking industry through customer relations and horizontal - industries that share a common market of the final product, using the same technology, manpower or the same natural resources. Improving competitiveness, in this sense, requires constant development, innovation and adequate industrial policy, both at the national and at the local and regional level. The main advantages of clusters are access to the latest knowledge, exchange of knowledge, providing cost savings to enterprises within clusters, possibilities of cooperation and support for the innovation.[1] Advantages are

reflected in cooperation and exchange of information, knowledge and experiences. In the Global Competitiveness Report for 2013 the best ranked Visegrad country is Poland, on 42nd place among 148 countries, but Czech Republic, which is on 46th place has much better position of indicators related to the small and medium enterprises and cluster development. That is why Serbia should follow example of Czech Republic in the field of cluster initiatives.

2. THE CONCEPT OF CLUSTERS

Research findings suggest that industry clusters lead to productivity increase, higher innovation rates and faster new business development and that standard of living of a country's population can be improved by raising productivity which represents the main factor for international competitiveness. According to Michael Porter clusters represents geographic concentration of interconnected companies and institutions in certain field. Clusters promote competition and cooperation. Cluster will fail without vigorous competition. Cooperation is mainly vertical, because it includes companies in related industries and local institutions. Clusters are influencing competition by increasing the productivity of companies based in the area, by driving the direction and pace of innovation and by stimulating the new businesses.[2] Competitiveness is a driving force that affects the companies that innovate and improve the production process. The rivalry between companies in cluster encourages innovation and change. Regional competitiveness is connected with the exchange of technology, skills and information between individual companies or branch within the cluster. Clusters are one of the crucial factors for improving the competitiveness of the region in which they are formed. Areas with a developed system of clusters are, at the same time, and areas of significant and rapid economic development and a high standard of living. Industrial clusters can be vertical - linking industry through customer relations and horizontal - industries that share a common market of the final product, using the same technology, manpower or the same natural resources. Improving competitiveness, in this sense, requires constant development, innovation and adequate industrial policy, both at the national and at the local and regional level. The main advantages of clusters are access to the latest knowledge, exchange of knowledge, providing cost savings to enterprises within clusters, possibilities of cooperation and support for the innovation. Advantages are reflected in cooperation and exchange of information, knowledge and experiences. Companies that are members of the cluster can achieve better results than those which are not, because they learn about cost savings (for example, through a joint marketing and branding), greater productivity, faster responses to market demands, training and further education of employees. The development of industrial activities in the cluster has a synergistic effect on the whole community, as well as the macro-economy. Cluster development encourages the development of the sector outside the cluster, as a result of inter-industry links that exist at the regional level. Clusters are, therefore, a key component of regional economic development. [1] Not only companies can be members of clusters, but also universities and institution in public sphere. Cluster benefits for companies, universities and public sphere are given in Table 1.

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Table 1: Cluster benefits for companies, universities and public sphere [3]

CLUSTER BENEFITS		
FOR COMPANIES	FOR UNIVERSITIES	FOR PUBLIC SPHERE
COMMON NEEDS IDENTIFICATION	KNOWLEDGE OF INDUSTRY NEEDS	TARGETED SUPPORT
MUTUAL DEVELOPMENT PROJECTS	TAILOR-MADE EDUCATION	SUPPORT OF COMPETITIVE INDUSTRY
COST SHARING	APPLIED RESEARCH	REGION SPECIALIZATIONS
HR DEVELOPMENT	PROFIT FROM R&D	FDI ATTRACTION
INCREASE INNOVATIONS	TECHNOLOGY TRANSFER	IMPROVED COMPETITIVENESS
ACCESS TO NEW MARKETS	ACCESS TO FUNDS	IMPROVED COMMUNICATION

3. COMPETITIVENESS OF VISEGRAD COUNTRIES AND SERBIA

The Global Competitiveness Report issued by the World Economic Forum is analysing national economies. That Report defines competitiveness as a set of institutions, policies and factors that determine the level of productivity of a country. The level of productivity sets the sustainable level of prosperity that can be earned by the economy. The Global Competitiveness Report ranks competitiveness of nations in relation to 12 pillars of economic competitiveness: institutions, infrastructure, macroeconomic stability, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market efficiency, technological readiness, market size, business sophistication and innovation. These pillars are divided into three groups – 'Basic requirements', 'Efficiency enhancers' and 'Innovation and sophistication factors'. In the group of 'Basic requirements' there are 4 pillars: institutions, infrastructure, macroeconomic stability, health and primary education. 'Efficiency enhancers' consists of higher education and training, goods market efficiency, labor market efficiency, financial market efficiency, technological readiness and market size. Pillars business sophistication and innovation are parts of the third group 'Innovation and sophistication factors'. Carefully chosen indicators are defining each pillar. The 12 pillars reinforce each other, and a weakness in one area has a negative impact in others. A strong innovation capacity will be very difficult to achieve without a healthy, well-educated and trained workforce that is adept at absorbing new technologies, and without sufficient financing for research and development or an efficient goods market that makes it possible to take new innovations to market. Although the pillars are aggregated into a single index, measures are reported for the 12 pillars separately because such details provide a sense of the specific areas in which a particular country needs to improve. [4,5] If we examine competitiveness of the Visegrad countries and Serbia, according to The Global Competitiveness Report for 2013, we can conclude that Serbia has the lowest rank. Constraints are related to the regulation of the goods and services market, market dominance and intensity of local competition. There are poor indicators in the area of macroeconomic environment, infrastructure, goods market efficiency, financial market development and business sophistication. The highest rank in this group of countries has Poland (42nd place), followed by Czech Republic (46th place), Hungary (63rd place), Slovak Republic (78th place) and Serbia (101st place).

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Table 2: Visegrad countries and Serbia competitiveness rank 2007-2013 according to Global Competitiveness Report (number of ranked countries is given in brackets)

Year	Czech Republic	Hungary	Poland	Slovak Republic	Serbia
2007 (131)	33	47	51	41	91
2008 (134)	33	62	53	46	85
2009 (133)	31	58	46	47	93
2010 (139)	36	52	39	60	96
2011 (142)	38	48	41	69	95
2012 (144)	39	60	41	71	95
2013 (148)	46	63	42	78	101

Position of Czech Republic has deteriorated for 7 positions. It is ranked 46th, as opposed to last year when it was in 39th position. According to The Global Competitiveness Report for 2013 the most problematic factors for doing business in Czech Republic are corruption, inefficient government bureaucracy, tax rates, restrictive labor regulations and tax regulations.

Global Competitiveness Index

	Rank (out of 148)	Score (1-7)
GCI 2013-2014	46	4.4
GCI 2012-2013 (out of 144).....	39	4.5
GCI 2011-2012 (out of 142).....	38	4.5
Basic requirements (20.0%)	55	4.8
Institutions.....	86	3.6
Infrastructure.....	39	4.7
Macroeconomic environment.....	55	5.0
Health and primary education.....	60	5.8
Efficiency enhancers (50.0%)	37	4.5
Higher education and training.....	39	4.9
Goods market efficiency.....	48	4.4
Labor market efficiency.....	81	4.2
Financial market development.....	58	4.2
Technological readiness.....	34	4.9
Market size.....	41	4.5
Innovation and sophistication factors (30.0%)	36	4.1
Business sophistication.....	38	4.4
Innovation.....	37	3.7



Figure 1: The Global Competitiveness Index 2013-2014 for Czech Republic [4]

Czech Republic is the only Visegrad country in innovation driven stage of development. In this stage country is able to sustain higher wages and a higher standard of living if the businesses are able to compete by providing new or unique products. Companies must compete by producing new and different goods using the most sophisticated production processes and through innovation. The ability to produce innovative products and services at the global technology frontier using the most advanced methods becomes the dominant source of competitive advantage. An innovation driven

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economy is characterised by distinctive producers and a high share of services in the economy and is quite resilient to external shocks. [4,5]

Global Competitiveness Index

	Rank (out of 148)	Score (1-7)
GCI 2013-2014	63	4.2
GCI 2012-2013 (out of 144).....	60	4.3
GCI 2011-2012 (out of 142).....	48	4.4
Basic requirements (30.7%)	65	4.6
Institutions	84	3.7
Infrastructure	51	4.4
Macroeconomic environment	84	4.5
Health and primary education.....	57	5.9
Efficiency enhancers (50.0%)	54	4.3
Higher education and training.....	44	4.7
Goods market efficiency	78	4.2
Labor market efficiency	85	4.2
Financial market development	74	3.9
Technological readiness.....	46	4.4
Market size.....	52	4.3
Innovation and sophistication factors (19.3%)	71	3.6
Business sophistication	96	3.7
Innovation.....	47	3.5

Stage of development

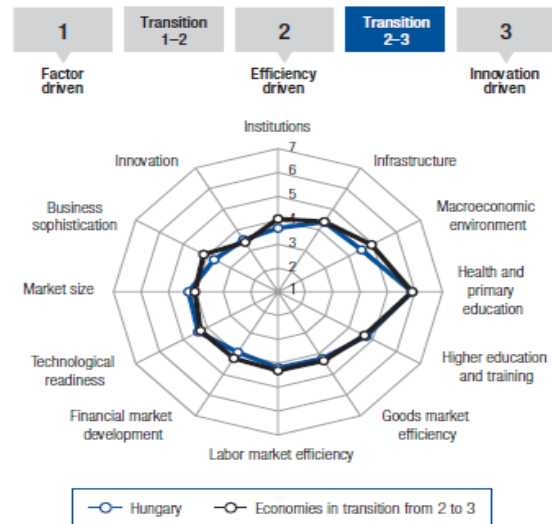


Figure 2: The Global Competitiveness Index 2013-2014 for Hungary [4]

Hungary is on the 63rd position in the latest Report. Compared to the last year ranking, it regressed by 3 positions. The most problematic factors for doing business in Hungary are access to financing, policy instability, tax rates, tax regulations and inefficient government bureaucracy. Hungary is in transition between efficiency driven and innovation driven stage of development.

Global Competitiveness Index

	Rank (out of 148)	Score (1-7)
GCI 2013-2014	42	4.5
GCI 2012-2013 (out of 144).....	41	4.5
GCI 2011-2012 (out of 142).....	41	4.5
Basic requirements (31.2%)	59	4.7
Institutions	62	4.0
Infrastructure	74	4.0
Macroeconomic environment	65	4.9
Health and primary education.....	42	6.0
Efficiency enhancers (50.0%)	32	4.6
Higher education and training.....	37	4.9
Goods market efficiency	57	4.3
Labor market efficiency	80	4.2
Financial market development	38	4.5
Technological readiness.....	43	4.5
Market size.....	20	5.1
Innovation and sophistication factors (18.8%)	65	3.7
Business sophistication	65	4.1
Innovation.....	65	3.2

Stage of development

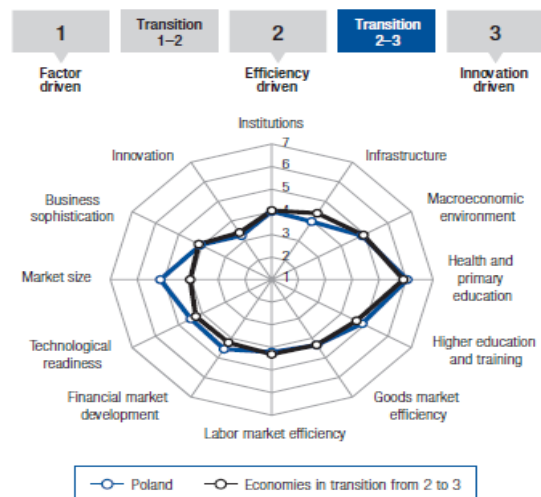


Figure 3: The Global Competitiveness Index 2013-2014 for Poland [4]

Poland has regressed by 1 position compared to the last-year's Report. It is on 42nd position. The most problematic factors for doing business in Poland have been identified as

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tax regulations, restrictive labor regulations, inefficient government bureaucracy, tax rates and access to financing. Poland is in transition between efficiency driven and innovation driven stage of development.

Global Competitiveness Index

	Rank (out of 148)	Score (1-7)
GCI 2013-2014	78	4.1
GCI 2012-2013 (out of 144).....	71.....	4.1
GCI 2011-2012 (out of 142).....	69.....	4.2
Basic requirements (20.3%)	67	4.6
Institutions.....	119.....	3.3
Infrastructure.....	67.....	4.1
Macroeconomic environment.....	62.....	4.9
Health and primary education.....	39.....	6.1
Efficiency enhancers (50.0%)	56	4.3
Higher education and training.....	58.....	4.4
Goods market efficiency.....	76.....	4.2
Labor market efficiency.....	76.....	4.2
Financial market development.....	42.....	4.5
Technological readiness.....	52.....	4.2
Market size.....	58.....	4.0
Innovation and sophistication factors (29.7%)	77	3.5
Business sophistication.....	73.....	4.0
Innovation.....	95.....	3.0

Stage of development

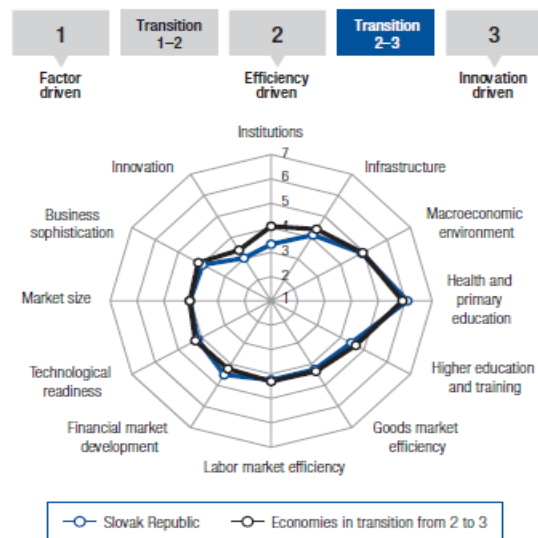


Figure 4: The Global Competitiveness Index 2013-2014 for Slovak Republic [4]

Slovak Republic has regressed 7 positions compared to the last year and is now in 78th position. The most problematic factors for doing business in Slovak Republic have been identified as inefficient government bureaucracy, corruption, restrictive labor regulations, policy instability and tax rates. Slovak Republic is in transition between efficiency driven and innovation driven stage of development.

Global Competitiveness Index

	Rank (out of 148)	Score (1-7)
GCI 2013-2014	101	3.8
GCI 2012-2013 (out of 144).....	95.....	3.9
GCI 2011-2012 (out of 142).....	95.....	3.9
Basic requirements (40.0%)	106	4.0
Institutions.....	126.....	3.2
Infrastructure.....	90.....	3.5
Macroeconomic environment.....	136.....	3.4
Health and primary education.....	66.....	5.7
Efficiency enhancers (50.0%)	92	3.8
Higher education and training.....	83.....	4.0
Goods market efficiency.....	132.....	3.6
Labor market efficiency.....	116.....	3.9
Financial market development.....	115.....	3.5
Technological readiness.....	60.....	3.9
Market size.....	66.....	3.7
Innovation and sophistication factors (10.0%)	125	3.0
Business sophistication.....	137.....	3.2
Innovation.....	112.....	2.9

Stage of development



Figure 5: The Global Competitiveness Index 2013-2014 for Serbia [4]

In Global Competitiveness Report for 2013 Serbia is ranked 101st among 148 ranked countries, which is for 6 places lower since last year, when 144 countries were ranked and

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when it was on 95th place. The most problematic factors for doing business in Serbia relate to corruption, inefficient government bureaucracy, access to financing, government instability and inadequate supply of infrastructure. Serbia is in efficiency driven stage of development. Heavy investment in efficient infrastructure, business friendly government administration, strong investment incentives, improving skills and better access to investment capital will allow major improvements in productivity. In this stage country must begin to develop more efficient production processes and increase product quality. Competitiveness becomes increasingly driven by higher education and training, efficient goods markets, efficient labor markets, developed financial markets, the ability to harness the benefits of existing technologies and its market size, both domestic and international.[4,5]

Table 3. Data concerning population, GDP and GDP per capita for 2012 [4]

Country	Population (millions)	GDP (US\$ billions)	GDP per capita(US\$)
Czech Republic	10.5	196.1	18.579
Hungary	10.0	126.9	12.736
Poland	38.5	487.7	12.538
Slovak Republic	5.4	91.9	16.899
Serbia	7.3	37.4	4.943

By observing Table 2 we can conclude that Visegrad countries have a population of about 64.4 million inhabitants, while Serbia has population of 7.3 million. Visegrad country with highest GDP of 487.7 US\$ billions is Poland, followed by Czech Republic with 196.1 US\$ billions, Hungary with 126.9 US\$ billions, Slovak Republic with 91.9 US\$ billions and Serbia with GDP of 37.4 US\$ billions. Concerning the GDP per capita generated in 2012, Czech Republic has best result with 18.579 US\$, followed by Slovak Republic with 16.899 US\$, Hungary with 12.736 US\$, Poland with 12.538 US\$ and Serbia with 4.943 US\$. Serbia has lowest GDP as well as lowest GDP per capita in observed group of countries, while Slovak Republic has lowest number of inhabitants of 5.4 million.

4. GCR INDICATORS RELATED TO SMEs

Global Competitiveness Report (GCR) indicators related to SMEs can be found in 6th, 7th, 9th and 11th pillar of competitiveness. In 6th pillar of competitiveness *Goods market efficiency* we can find 3 indicators related to SMEs – effectiveness of anti-monopoly policy, no. procedures to start a business and no. days to start a business. *Labor market efficiency* is the 7th pillar of competitiveness which has 5 indicators connected to SMEs – cooperation in labor-employer relations, flexibility of wage determination, hiring and firing practices, pay and productivity and reliance on professional management. In 9th pillar of competitiveness *Technological readiness* we can find 1 indicator related to SMEs – firm-level technology absorption. *Business sophistication* is 11th pillar of competitiveness and it has 6 indicators related to SMEs – local supplier quantity, local supplier quality, state of cluster development, production process sophistication, extent of marketing and willingness to delegate authority.

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Table 4: GCR Indicators related to SMEs [4]

GCR INDICATORS	CZECH REPUBLIC	HUNGARY	POLAND	SLOVAK REPUBLIC	SERBIA
EFFECTIVENESS OF ANTI-MONOPOLY POLICY	70	90	72	95	141
NO. PROCEDURES TO START A BUSINESS	104	20	47	47	47
NO. DAYS TO START A BUSINESS	88	10	108	73	57
COOPERATION IN LABOR-EMPLOYER RELATIONS	74	83	88	106	144
FLEXIBILITY OF WAGE DETERMINATION	63	88	37	76	35
HIRING AND FIRING PRACTICES	121	53	112	126	103
PAY AND PRODUCTIVITY	19	85	45	22	118
RELIANCE ON PROFESSIONAL MANAGEMENT	62	114	79	77	135
FIRM-LEVEL TECHNOLOGY ABSORPTION	54	73	114	72	137
LOCAL SUPPLIER QUANTITY	25	101	32	69	117
LOCAL SUPPLIER QUALITY	21	70	51	41	117
STATE OF CLUSTER DEVELOPMENT	45	111	104	71	129
PRODUCTION PROCESS SOPHISTICATION	32	70	51	42	130
EXTENT OF MARKETING	43	65	46	45	135
WILLINGNESS TO DELEGATE AUTHORITY	57	137	68	94	141
MEAN VALUE	58	78	70	70	112

According to effectiveness of anti-monopoly policy Czech Republic is on highest 70th position, followed by Poland (72nd place), Hungary (90th place) and Serbia (141st place). Hungary has lowest number of procedures to start a business, it is ranked 20th. Poland, Slovak Republic and Serbia share the 47th place according to this indicator, while Czech Republic has lowest rank – 104th place. Hungary has also the lowest number of days to start a business and it is on 10th position, followed by Serbia (57th place), Slovak Republic (73rd place), Czech Republic (88th place) and Poland which is on 108th position. The best rank in cooperation in labor-employer relations has Czech Republic (74th place), followed by Hungary (83rd place), Poland (88th place), Slovak Republic (106th place) and Serbia (144th place). Concerning flexibility of wage determination Serbia has highest rank and it is on 35th position. Poland is ranked 37th, Czech Republic 63rd, Slovak Republic 76th and Hungary 88th. According to hiring and firing practices Hungary is ranked 53rd, Serbia 103rd, Poland 112th, Czech Republic 121st and Slovak Republic 126th. Czech Republic has the

best rank according to pay and productivity and it is on 19th place. Slovak Republic is ranked 22nd, Poland 45th, Hungary 85th and Serbia 118th. Czech Republic has highest rank also according to indicator reliance to professional management, it is on 62nd place, followed by Slovak Republic (77th place), Poland (79th place), Hungary (114th place) and Serbia (135th place). Concerning firm-level technology absorption Czech Republic ranks 54th, Slovak Republic 72nd, Hungary 73rd, Poland 114th and Serbia 137th. According to local supplier quantity Czech Republic is 25th, Poland 32nd, Slovak Republic 69th, Hungary 101st and Serbia 117th. According to local supplier quality Czech Republic ranks 21st, Slovak Republic 41st, Poland 51st, Hungary 70th and Serbia 117th. State of cluster development is an important indicator, suggesting the level of cluster initiatives. In this indicator also, Czech Republic ranks the highest, it is on 45th place, followed by Slovak Republic (71st place), Poland (104th place), Hungary (111th place) and Serbia (129th place). Czech Republic is ranked 32nd concerning production process sophistication, followed by Slovak Republic (42nd), Poland (51st), Hungary (70th) and Serbia (130th). According to extent of marketing Czech Republic is on 43rd place, Slovak Republic on 45th place, Poland on 46th place, Hungary on 65th place and Serbia on 135th place. Concerning willingness to delegate authority Czech Republic ranks 57th, Poland 68th, Slovak Republic 94th, Hungary 137th and Serbia 141st. In the Global Competitiveness Report for 2013 the best ranked Visegrad country is Poland, on 42nd place among 148 countries, but Czech Republic, which is on 46th place has much better position of indicators related to the small and medium enterprises and cluster development. That is why Serbia should follow example of Czech Republic in the field of cluster initiatives.

5. NATIONAL CLUSTER ASSOCIATION IN CZECH REPUBLIC

National Cluster Association (NCA) in Czech Republic brings together organizations and individuals with the purpose to coordinate the sustainable development of cluster initiatives and to develop cluster policy in the Czech Republic on the basis of concentration of knowledge, experience and expertise to strengthen the competitiveness of the country. NCA exists to create a competent long-term platform for the development of cluster initiatives in the Czech Republic and an active interface for international links. NCA is strengthening the role of clusters in innovation processes and development strategies within the Czech Republic, boosting dynamic development in key sectors and emerging technology-based clusters, providing institutional support for cluster organizations and initiatives – helping to strengthen the foundations of developing knowledge regions, helping to raise efficiency and quality in cluster management, harnessing the potential offered by social capital and innovation based on shared knowledge and relationships of trust among SMEs, industry leaders, the public sector and universities and promoting effective, proven solutions on an international scale. Nation Cluster Association is creating long-term and competent platform for the development of cluster initiatives in Czech Republic and represents active interface for their internationalization. The goal is to help clusters and cluster managers to improve their management skills in order to optimize the resources and to find new development and cooperation opportunities in the Central Europe area. The primary aim is to establish a cross-border, creative industry-based network to facilitate long-term cooperation. Globalization pressures force European regions to enhance their competitiveness. Regions are considered a key level where innovation processes are shaped, coordinated and governed through localized capabilities. Often competitive advantages do not emerge spontaneously, but are the results of collective actions and initiatives taken by firms, research organizations and governments at

various levels. Policies for constructing regional advantage cannot be based on one “best practice” model but should reflect the different conditions and problems of the respective regions. [6]

6. CONCLUSION

Clusters represents geographic concentration of interconnected companies and institutions in certain field and promote competition and cooperation. Cluster will fail without vigorous competition. Cooperation is mainly vertical, because it includes companies in related industries and local institutions. Clusters are influencing competition by increasing the productivity of companies based in the area, by driving the direction and pace of innovation and by stimulating the new businesses. There are many advantages of clusters that are strengthening regional economy and upgrading standard of living for those who are associated with the cluster in a particular region. The importance of clusters, especially with the point of view of regional development, will increase in the future, especially in promotion of new technologies. In countries with no developed clusters, large investments and state support are crucial. The role of the public sector is, in this sense, critical. In fact, in overcoming the difficulties that occur in the process of cluster construction, an important role should state play and be leading economic actor who participate in its emerging business. In the Global Competitiveness Report for 2013 the best ranked Visegrad country is Poland, on 42nd place among 148 countries, but Czech Republic, which is on 46th place has much better position of indicators related to the small and medium enterprises and cluster development. That is why Serbia should follow example of Czech Republic in the field of cluster initiatives. National Cluster Association (NCA) in Czech Republic brings together organizations and individuals with the purpose to coordinate the sustainable development of cluster initiatives and to develop cluster policy in the Czech Republic on the basis of concentration of knowledge, experience and expertise to strengthen the competitiveness of the country. NCA exists to create a competent long-term platform for the development of cluster initiatives in the Czech Republic and an active interface for international links. NCA is strengthening the role of clusters in innovation processes and development strategies within the Czech Republic, boosting dynamic development in key sectors and emerging technology-based clusters, providing institutional support for cluster organizations and initiatives – helping to strengthen the foundations of developing knowledge regions, helping to raise efficiency and quality in cluster management, harnessing the potential offered by social capital and innovation based on shared knowledge and relationships of trust among SMEs, industry leaders, the public sector and universities and promoting effective, proven solutions on an international scale. Nation Cluster Association is creating long-term and competent platform for the development of cluster initiatives in Czech Republic and represents active interface for their internationalization. The goal is to help clusters and cluster managers to improve their management skills in order to optimize the resources and to find new development and cooperation opportunities in the Central Europe area. The primary aim is to establish a cross-border, creative industry-based network to facilitate long-term cooperation.

REFERENCES

1. G. Bosković, A. Jovanović, *Ekonomске teme*, 2 (2009), pp. 107-119

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International May Conference on Strategic Management - IMKSM2014,
23-25. May 2014, Bor, Serbia

2. M. Porter, The Competitive Advantage of Nations, Macmillan, New York, 1990, pp. 69-90
3. <http://www.oecd.org/globalrelations/psd/43361636.pdf>
4. The Global Competitiveness Report 2013-2014, World Economic Forum, Geneva, 2013, pp. 95-130
5. D. Škunca, Operativni i strategijski menadžment, Calibris, Beograd, 2012., pp. 50-80
6. <http://www.nca.cz/en>

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PAST, PRESENT AND FUTURE OF SMES IN THE VISEGRAD4 GROUP. CONSEQUENCES OF A SURVEY

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Abstract

SMEs are considered by EU documents as backbones of the European Union's economy. Competitiveness of SMEs is one of the popular topics of researchers all over the world for a long time. We started our field work in 2006, and made a follow-up research in 2013 following Porter's methodology in the North Hungarian Region. In this paper first we compare the outcomes of the two surveys and on the basis of its results we think over the potential role of SMEs in the periphery of the EU with special emphasis on Visegrad4 countries. We will put stress on the need of a specific SME policy of these countries inside the EU and the need of their cooperation with neighbouring countries like Serbia.

Keywords: SMEs, competitiveness, clusters, regional cooperation, Visegrad4

1. INTRODUCTION

Our basic goal of research was to identify how small and medium sized enterprises are able to contribute to the competitiveness of regions. For this general question we expect answer from the empirical research survey carried out in the North Hungarian Regions before and after the world economic crises. The theoretical background of this research were previously made by different authors either in Hungary or abroad [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20], we only refer to them in this paper. The survey is also based on research activities started some twenty years ago at the Institute of Organization and Management in Budapest Tech [21,22,23]. This particular research was started in 2006 in the North Hungarian Region and was followed in 2013 by the help of our students at Budapest Tech and in its successor at Óbuda University.

In this particular paper we concentrate on the strength of regional connections between firms and other stakeholders with special regard to their propensity to join clusters. We intend to give a comparative analysis between the two periods, before and after the crises. North Hungarian Region, as it is proved by several different macroeconomic figures, is the most backward regions out of the seven regions of Hungary. Previous and further overall results and conclusions were and will be published in respective articles. The survey is based on the questionnaire made by M. Porter and his colleagues at Harvard University and the U.S. Council of Competitiveness [24].

We adopted the above mentioned questionnaire and added some own questions concerning the relations between enterprises and other bodies in the region. The addresses of firms

were earned from the comprehensive list of Dun & Bradstreet Hungary. This list was filtered according to Hungarian SME's law and our needs with the exception that micro enterprises are excluded. This means that firms having more than 10 employees were put in our sample. This way we had all the names and addresses of small and medium sized enterprises in the North Hungarian Region. We got 103 pieces of valuable questionnaires from the North before the crises and 117 after the crises.

The survey is structured around the following areas: the business environment, collaborative business networks in the region, economic beliefs and attitudes, accessibility of services in the region and in smaller regions. We defined innovation, following Porter's approach, in a broad sense. Innovation is the transformation of knowledge into new products, processes, and services. Innovation involves more than just science and technology. Improvements in marketing, distribution, and service can also be considered innovations .

2. EVALUATION OF ANSWERS

Business environment

The business environment can be understood in terms of four critical areas which can be affected by government through its policies:

- community infrastructure;
- local demand conditions;
- rules and incentives governing investment and competition;
- related and supporting industries.

In the first block of questions we were curious about the availability of infrastructure assets in the region. We asked the people to evaluate our statements on a seven grade Likert scale according to the intensity of their agreement or disagreement. The cost of doing business (cost of real estate, wages and salaries, utilities etc) in comparison with other regions was estimated lower by only half of the people in the North Hungarian Region before the crises. To our surprise all the grades appeared, although it is considered to be the most backward region in Hungary. The most frequently given mark for the overall quality of transportation (roads, air transport, railroads and ports) was two before the crises. It went up to three after the crises.

Specialized facilities for research (science laboratories, university research institutions and technical laboratories) were considered as very limited in the North. Almost one third gave mark one initially, and it did not change! Almost the same proportion of answers stated that institutions in the region that perform basic research does not transfer knowledge to regional firms. We did not find significant difference between the results of 2006 and 2013. In other words, unfortunately the results of the research carried out by universities and other institutions do not reach regional SMEs although the research facilities have been improved in the last few years.

In contrary to the above, but not surprisingly, the communications infrastructure, including internet access, satisfies the business needs of the companies at a high level. The average of the grades exceeded five before the crises, and the level of satisfaction was close to six

in 2013. Most of the firms complained about the scarcity of qualified scientists and engineers in the North Hungarian Region.

The available pool of skilled workers in the North was considered heterogeneously. The average grade in 2006 was a bit over three which worsened to 2,9 for 2013. The overall quality of the elementary and secondary school education got an average of four in the North before the crises. The advanced educational programs (e.g. vocational schools, colleges and universities) were said to provide regional business with relatively low quality workers.

The regional access to risk capital (venture funds and private equity investments) seems to be really difficult. We suspect that for a part of the firms it is simply out of question. No significant differences can be identified in this area between 2006 and 2013.

Quality of life

The quality of life and cost of living were examined from the point of view of their contribution to easy recruitment and retention of employees. Almost all the seven marks were mentioned in the same proportion before the crises, while according to the post-crisis answers, the recruitment and retention of employees became significantly harder.

Local demand conditions

Local demand conditions refer to the presence or emergence of sophisticated and demanding local customers who press firms to improve and provide insights into existing and future needs. One fourth of companies in the North Hungarian Region considered their regional customers for their products and services very sophisticated and demanding before the crises. On the other hand the same amount of answers evaluated customers as undemanding. It seems that the crises made competition even more fierce, and customers became much more demanding. The proportion of demanding clients went up to one third from one fourth. For the question, if regional customers have special needs that impact the firm's product offering the distribution of answers are very similar to the previous one before the crises but it did not improve as much as the percentage of demanding customers.

Rules and incentives governing investment and competition

The investment climate and policies towards competition set the context within which firm strategy and rivalry develop. The climate for investment refers to labour market policies affecting the incentives for workforce development, the structure of the tax system, intellectual property rules, and their enforcement. In the opinion of the majority of those entrepreneurs who gave answers in the North Hungarian Region, state and regional regulations affecting business were and remained inappropriate and hinder their firm's ability to succeed. A bit more than the half of companies regarded state and regional environmental standards and safety regulations quite strict in 2006 and in 2013 as well. Investment in R&D is considered to be neutral from the view point of state and local taxes by most of the firms, but considerable part of companies stated state and local taxes as discouraging for the investment in R&D in the North Region. The assessment of the situation did not change for 2013. The support of state and local government for the investment in R&D (funding business incubators, creating consortia etc.) got 1 and 2

marks in nearly half of the Northern cases in 2006. The opinion of the small- and medium entrepreneurs became slightly more favourable for 2013.

The government's overall responsiveness and ability to work with the needs of business got the hardest critics initially. The most frequent grade was two and average was under two! Basic changes were not recognized in 2013, but the average exceeded two. The number of regional competitors was estimated to be high by approximately 55% of entrepreneurs, and a bit less than 45% felt competition to be intense in the North Hungarian Region. In the opinion of the SME owners, the competition intensified by three percentage points during seven years.

Related and supporting industries

Related and supporting industries refer to the local access to internationally competitive suppliers of materials, components, machinery, and services. It also involves local access to industries sharing technology, channels and customers. Only very few of the firms said that specialized suppliers of their business's materials, machinery, and services are mostly not available inside the region.

Roughly the same group of firms stated that regional special suppliers' quality is rather low and more or less this group considered infrequent regional supplier's assist with new product and process development. Two thirds of companies shared the opinion in the North that businesses in the region hide information from other firms even when there is not a competitive reason to do so. In the follow-up survey, slight improvement in the special suppliers' quality could be identified.

Clusters

A cluster is a geographic concentration of related companies and institutions in a particular industry field. A cluster also usually includes specialized suppliers, universities, trade associations, government institutions and other organizations that provide training, education, information, research and or technical support.

Questions concerning clusters caused problems for the firms in the region and for us to process data. In most of the cases there are no clusters at all in the industry or service area of the firms, or if there is, it is at the starting point of its life cycle. That is why the most frequent mark for the relationship between firms and organizations in their cluster was one in the North Hungarian Region in 2006. This has not been changed for 2013, only the average became higher by 0,1 percentage point. The situation is almost the same in case of changing information inside the cluster and the willingness to accept new members into cluster activities. Those who participate in a cluster mostly finds it a good initiative. Theory of clusters developed in the last few decades, but knowledge is not widespread enough. [25]

Only 5% of the firms had geographic preferences for their business partners. Very low number of the companies stated that firms in the cluster perceive new buyer trends more rapidly than their competitors who do not operate within a cluster.

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For the question, finally, considering all the significant factors, including government, industry and social factors, how good a location is your region as a place to innovate in your business, half of the firms gave mark one or two in the North Hungarian Region in 2006. For 2013, only the distribution of ones and twos changed for the favour of twos, but their cumulated proportion remained on the same level i.e. 50%. About innovation goals and practices among Hungarian SMEs in general see Marosi's approach [26].

Overall evaluation of business environment

As a summary the last question in the first section of the questionnaire was as follows: Taking into account all the elements of the business environment that you have considered so far, which five currently have the greatest positive impact on your business's success? Which factors do you consider to be greatest future threats to your business if not addressed? Out of the five positive and negative factors we asked to give the ones which have the greatest impact.

Table 1. Part of the questionnaire

Positive impact	Future threat		
		Cost of doing business (real estate, wages and utilities)	1
		Quality of transportation	2
		Specialized facilities for research	3
		Qualified scientists and engineers	4
		Transfer of knowledge from research institutions	5
		Communications infrastructure	6
		Available pool of skilled workforce	7
		Quality of K-12 education	8
		Sourcing of employees from advanced educational programs	9
		Access to capital	10
		Demanding regional customers that provide feedback	11
		Specialized needs of regional customers	12
		State/local regulations for production processes and products/ services	13
		State and regional environmental /safety regulations	14
		State and regional tax and incentives for investment in R&D	15
		Predictability of government policies	16
		Government's overall responsiveness to the needs of business	17
		Level of competition in your industry	18
		Quality and in-region location of your suppliers	19
		Assistance from regional suppliers for new product and process development	20
		Relationships between firms and organizations in your cluster	21
		Participation with regional institutions in R&D efforts	22

In the North Hungarian Region around 60% of the entrepreneurs were afraid of the raising cost of doing business, although only four percent considered it as the major threat. 45% of

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the firms were anxious about the predictability of government policies and for half of them it is the most important threat. Available pool of skilled workforce is a potential problem for almost half of the enterprises, but only 8% put it on the first place.

Access to capital is one of the threats for forty percent, but very few of them considered it as the most serious threat for the future. Beyond the above mentioned factors, state and regional environmental / safety regulations got considerable amount of votes, approximately 30% in 2006. In 2013 we recognized some considerable changes.

The percentage of those who were afraid of the raising cost of doing business has not been changed significantly, but from four it increased up to 11% the ratio of those who consider it as the most serious threat. It is even more remarkable, that the access to capital became one of the most important threats for the future business after the crises.

As far as the positive impacts are concerned, more than the half of the enterprises did not mention any as the most important one in the North! That is why we did not find any positive factor with more than 10% in our first survey. Communications infrastructure and demanding regional customers that provide feedback gave positive experience for equally 40% of the entrepreneurs. Approximately thirty percent of the companies appreciated the quality of in-region suppliers and the quality of transportation. It is interesting that the level of competition was considered by 20-20% of the firms as positive impact and a future threat.

3. REGIONAL CONNECTIONS

One of the crucial aims of our research was to explore the regional and international connections of the SMEs. First we examined the division of their income by different territorial levels. Less than forty percent of them had export activity, while the proportion of those who acquired more than 50% of their income from abroad is only a bit more than ten percent in the North. Every fifth of the firms realized the majority of its income from local sales. 57.7% of the companies did not have sales on subregional level at all. None of the firms reported subregional sales with more than 30% ratio. Fifteen percent of the SMEs did not have any sales on county level. 7% of the enterprises got the majority of their income from this level.

As far as the strength of the regional connections are concerned, 69.3% firms reported income from the region in the North Hungarian Region. On the other hand, just like in case of the counties, a very small group of companies gets the majority of its income from the region. Approximately one third of the Northern SMEs does not have any sales in Budapest. 90% of them earns less than 25% of their income from the capital city in 2006. Taking into account the changes during the last seven years, no major movements can be recognized. Neither the export orientation of SMEs, nor the importance of their regional sales strengthened significantly, although a slightly higher proportion of companies reported subregional activities.

Only half of the small and medium sized companies in the North Hungarian Region had business connections in other Hungarian regions in 2006. As we have already mentioned before, roughly 40% of these companies are involved in exports. But only ten percent earns its living basically from this source. Most probably there is some kind of invisible,

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indirect export, very often regional producers do not even know that their components are built in a product exported by somebody else.

As far as the territorial structure of the exports is concerned, it dominantly went to EU member countries, but every fourth of the enterprises had exports to non EU members. Overseas exports was and remained exceptional and the volume of it is very low. An important indicator of territorial connections between firms is the origin of inputs used for products and services. 42% of the North Hungarian SMEs did not use any local input in 2006. Usage of inputs from imports could be found at half of the companies. In comparison with other territorial levels, the proportion of the firms using basically imported inputs is much higher. Almost half of the importing firms got more than 50% of their inputs from abroad. During the crises this import dependence became even stronger, although we expected import substitution tendencies.

Naturally we wanted to also know where did our firms find their new partners in the previous few years. In 2006 a bit less than 30% of the SMEs succeeded in getting new partnerships abroad. In case of those who were able to find new international partners, the importance of these new connections was significantly bigger than in any other territorial levels. More than the half of new partnerships had at least sixty percent weight in the given enterprise's new connections. For 2013 the number of those who could find new international partners were somewhat less than in 2006, but the importance of these new foreign partnerships remained outstanding.

For our question if they had any cooperation with other companies in product development and in putting products on different markets, 15% of the SMEs reported local cooperation of both types. On regional level product development was stronger, 14.1% of the firms were involved in both surveys. The outstanding role of Budapest has not been changed. 38.4% of Northern Hungarian SMEs cooperated in product development in the capital city, while 26,9% in introduction of new products to markets in 2006. These figures were almost the same in 2013. As far as cooperation with international partners are concerned, a bit more than five percent cooperated in product development and slightly more than 10% in product introduction to markets at both dates.

Experts with different professional background widely accept the notion that participation in networks contributes to the stability of enterprises. That is why we asked SMEs in the North Hungarian Region if they participated in networks. 46.3% of them said, yes in 2006 and 48,1% in 2013. Out of those who participated, more than the half had connections in more territorial levels. Participation in Budapest based networks was and remained dominant, but cooperation with networks in other Hungarian regions continued to be also important.

Accession to international networks was not and have not become relevant. Only a few percentage of the firms participated in these kind of networks. We measured the intensity and importance of participation in networks by the income earned from sales to network partners. With a few exceptions this ratio in 2006 was above 20% and went up to 22,2 for 2013. One third of the participants earned more than 80% of their income from networks. The average moved up from 48.3% to 49,6 which expresses the dependence of SMEs on network activities.

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Around twenty percent of the SMEs took part in tenders financed from EU budget. Those who got funding from these resources earned an average of 3.36% of their annual income in 2006, while this figure reached 4,03% in 2013. Out of ten applicants six proved to be successful in 2006 and 6,6 in 2013. Finally we wanted to see what kind of help do SMEs require from central, regional and local governments to improve their market position. We offered 18 possible answers. Out of them three had outstanding importance for the firms when they were first questioned, and not any change could be recognized for 2013.

The most powerful requirement was and remained long term, predictable government rules. Similarly almost all of the enterprises would like to see reduced rate of old age pension and health care contributions. Reduced taxes based on research and development costs would also be appreciated by entrepreneurs.

For other possible measures, mainly for those which would cause direct government intervention into market relations e.g. subventions, protectionist steps against foreign firms etc., the demand is very limited from the companies side. Organizing clusters by governments is at the bottom of the list! All in all SMEs seem to require a stable behaviour and ruling i.e. assurance of the general framework of market activities in the long term and any other tool is considered to be of secondary importance.

4. CONCLUSIONS OF THE SURVEYS

As it was proved by our surveys, regional connections between North Hungarian SMEs are quite weak, they basically depend on other regions and Budapest. Their usage of inputs is also dependent on other sources outside the region. The most important possible forms of their cooperation, taking part in regional networks or clusters are not characteristic, they are at the beginning of this route. Most of them are not aware of the importance of these kind of connections. Spatial development in the framework of EU's Regional Policy has outstanding importance for the less developed regions. On one hand the considerable territorial differences over the country can be influenced by the state basically using EU financial sources.

On the other hand it would also be very important that companies, mostly small- and medium sized enterprises, could contribute to the spatial development in different regions. For being able to push spatial development, firms should use as much local resources as possible. It creates connections between SMEs and provides their interest in networking. As we could see above, on the basis of the outcomes of our research these kind of connections are not satisfactory in the most backward Hungarian region. That is why the contribution of local SMEs is limited to the spatial development in the North Hungarian Region. The competitiveness of a certain region is determined very much by the productivity and strength of the companies in the region. On the other hand the region affects the performances of local firms to a considerable degree. Balanced spatial development needs mutual efforts.

5. RESPONSIBILITY OF GOVERNMENTS IN CREATING A BETTER SME POLICY

European Competitiveness Report 2013 gave a detailed analysis on the present and possible future of SMEs inside the European Union [27]. Among other remarkable issues, it studied

the complexity of EU export products suggesting that targeting only hightech sectors might be less rewarding than increasing the share of knowledge-intensive products in all tradable sectors, including medium-low tech sectors. Moreover, according to ECR 2013, some of the labour-intensive sectors with lower knowledge intensities may be better positioned to tackle the EU's unemployment challenges than the high-tech sectors. About 40% of EU manufacturing employment is in low-tech sectors. Therefore the policy priority attached to key enabling technologies which lead to new materials and products in all manufacturing sectors has a strong potential to upgrade EU competitiveness not only in the high-tech sectors but also in the traditional industries.

The European Competitiveness Report handles EU and its Member States as an economic unity. This approach is quite misleading when characterising the European industry. It leaves in shadow the fact that between Member States the centrum-periphery relations can be observed, which basically influences the division of labour inside the European Union. It sounds well, that European content in the export of high-tech products is higher than in any other rival's share, but the advantages of the export outside of the EU appear mostly on the side of Germany and other highly developed countries.

The assembling activities are deployed mostly to the periphery, among others to the countries of the Visegrad Group(V4), thus guaranteeing the pumping of incomes from the periphery to the centrum. Upgrading inside the value chain would be important for the enterprises located in the V4 and other members and non-members such as Serbia, Montenegro etc. As it was proved in our empirical research survey in the North Hungarian Region, quite high proportion of the SMEs belong to different networks, but their position in these value chains are not decisive, they are not the ones who determine prices and distribution of profits.

Although the EU has a very sophisticated SME policy, quite surprisingly, the role of SMEs is not analysed in the competitiveness report of 2013. Their role is necessarily different in knowledge-driven reindustrialisation of Europe. It is even more true for the SMEs of the Visegrad Group [28]. Knowledge –driven economy offers chances for a relatively small group of enterprises, while others may feel themselves discriminated or excluded.

On EU and national levels solutions should be found for the integration of the majority of enterprises and people. Countries of V4 and other neighbouring countries around, basically the previous so called socialist countries and former members of Yugoslavia have common interests, among many others, in this field, too.

The Hungarian government, recognizing the above mentioned situation, launched the so called „Wekerle Plan” which is intended to be the growth strategy of the Hungarian economy on the Carpathian Basin level [29]. It was created during the worldwide economic crisis and its main goal is to offer opportunities in the first place to the Hungarian enterprises, but wants to integrate the efforts of the neighbouring countries as well. Carpathian Basin is defined as a meeting point of enterprises and economies coming from the resource-driven East and the innovation-driven West.

This combination may offer new chances for this region. Deeper integration in this region could mobilise additional resources, while showing a certain unity for business partners from other areas. Not only the historical background, but the current problems are common

in this region. All of the countries of the Carpathian Basin, in a broader sense in the V4 group, have relatively low GDP/capita inside the EU, their financial position is very similar and their markets are too small. Their economy is dominated by foreign large enterprises who are the drivers of growth while their own SMEs are quite weak. Until 2020 the vision expressed in the Wekerle Plan is that SMEs of the Carpathian Basin will be able to contribute on the regional level to the creation of jobs and the growth of export activities. The vertical cooperation of the entrepreneurs in the Carpathian Basin can be enforced, from raw material processing up to the selling of the ready-made products for the consumers.

The two supporting measures of the strategic goals of the Wekerle Plan are as follows:

- Coordination of the infrastructure in the Carpathian Basin
- Creation of the Single Labour market

There are five sector specific areas in the background:

- Vehicles and machinery production
- Food industry
- Tourism and Health Industry
- Creative industries and ICT
- Green Economy.

In each of the above mentioned areas the role of SMEs should be guaranteed, but with different emphasis. Mikó Imre Plan in Transylvania[30] is a good example for the regional cooperation initiatives. It contains an overall approach for the Transylvanian economic cooperation opportunities and lean, in many aspects, on the local resources and SMEs.

Raising competitiveness in the Carpathian Basin is a complex and long term task of governments, enterprises and many other stakeholders. The common history and common current social and economic problems of the countries located in the there, gives the mutual interest for cooperation. Identifying competitiveness factors is not easy, but it should be done by governments, chambers, researchers and other interested parties. EU's policies concerning competitiveness and SMEs provide a starting point for the policy makers, but they are too general and insufficient for regional use [31].

As it was described earlier, although knowledge-driven reindustrialisation in Europe offers opportunities even for our companies, but the vast majority will not be able to access to this process. Among other reasons, that is why it would be so important to be able to combine resource-based and knowledge-based approaches in the Carpathian Basin and in the V4 group as well. At least on the level of planning, Wekerle Plan gives us some hope in this respect.

6. TASKS OF THE SMEs FOR THE FUTURE

The time of independent fighters have already gone. As the outcomes of our research carried out in the North Hungarian Region proved, the majority of the small- and medium sized enterprises tries to fulfil their plans independently, their propensity for cooperation with others on the different stages of innovation is quite weak, there are very few local networks on the basis of common interests.

Regional and country level networks are improving, but they are mostly led by foreign companies based in the centrum of the EU. Many other outcomes of different surveys on SMEs supports our results, which means that the problems we described in the North Hungarian Region are quite general, enterprises all over the Visegrad Group member countries and their neighbours are facing the same challenges. That is why it is important to find each other not only inside certain regions, but on cross regional levels, too. For this interest SMEs should make at least the following steps:

- Create and become members of local networks,
- Join to existing clusters in their fields of activity,
- Found new clusters in cooperation with all other interested stakeholders,
- Cooperate with universities and research institutions in their geographical proximity,
- Find partners and cooperate with them in all stages of innovation process,
- Keep in mind the traditional economic connections with the neighbouring countries on the basis of mutual interests,
- Based on the above mentioned requirements, try to upgrade their positions in the value chains.

REFERENCES

1. R. A. Boschma: Competitiveness of regions from an evolutionary perspective, *Regional Studies* 38 , 2004, pp.993-1006.
2. N. Buzás, L. Kállay, I. Lengyel: Small –and medium sized enterprises in the economy (Kis- és középvállalkozások a változó gazdaságban) JATEPress, Szeged,2003.
3. A. Chikán,E.Czakó,Z.Zoltayné Paprika: Competitiveness of enterprises in the globalising Hungarian economy(Vállalati versenyképesség a globalizálódó magyar gazdaságban). Akadémiai Kiadó, Budapest,2002.
4. A.Chikán, E.Czakó: In competition with the world(Versenyben a világgal. Vállalataink versenyképessége az új évezred küszöbén). Akadémiai Kiadó, Budapest,2009.
5. É. G. Fekete: The absorption potential of the subregions of North Hungarian Region and their position in comparison with other subregions in Hungary(Az Észak-magyarországi régió kistérségeinek abszorpciós képessége és helyzetük Magyarország más kistérségeivel összehasonlítva). Észak-magyarországi Stratégiai Füzetek, Miskolc,2004,pp. 40-97.
6. Gy. Horváth: The competitiveness of Hungarian regions and cities in the European economic space (A magyar régiók és települések versenyképessége az európai gazdasági térben). *Tér és Társadalom*, 2001,pp.203-231.
7. P. Horváthová: The Talent Management and its Usage at Human Resources Management in Enterprises. *International Periodical Research Bulletin"Prospectives of Innovations, Economics and Business"*. Prague: PIEB,2009, Volume 3, pp.76-79.
8. L. Kállay: Paradigm change in small business improvement (Paradigmaváltás a kisvállalkozás-fejlesztésben). *Közgazdasági Szemle*, 2002,7-8., pp.557-573.
9. Gy. Kocziszky: The analysis of the innovation potential of the North Hungarian Region(Az Észak-magyarországi régió innovációs potenciáljának vizsgálata). Észak-magyarországi Stratégiai Füzetek, Miskolc,2004, pp.5-39.

10. P. Krugman: Competitiveness: A dangerous obsession. *Foreign Affairs*, 2. 1994, pp.28-44.
11. I. Lengyel: About regional competitiveness (A regionális versenyképességről). *Közgazdasági Szemle*, XLVII. évf. december, 2000, pp.962-987.
12. I. Lengyel: Competition and spatial development: Competitiveness of regions in Hungary(Verseny és területi fejlődés: Térségek versenyképessége Magyarországon). JATEPress, 2003, Szeged.
13. M. Losoncz: International competitiveness. The Hungarian economy lost from its competitive advantage(Nemzetközi versenyképesség. A magyar gazdaság veszített előnyéből). *Cégvezetés*, 2003. július, pp.90-94.
14. M. Losoncz: The economic policy challenges of the Hungarian membership in the EU(A magyar EU-tagság gazdaságpolitikai kihívásai). Tri-Mester, 2007, Tatabánya.
15. B.Mazur: Introduction to International Business. University of Finance and Management in Bialystok.2006, Bialystok.
16. K. Maková: Development of Employment in the European Union in the View of Lisbon and Stockholm Aim. In “*Medzinárodná vedecká konferencia „Lisabonská stratégia pre rast a zamestnanosť“*“. Banská Bystrica, 2.10.2008. ISBN 978-80-969535-9-2.
17. M. Mikusová: Knowledge in Enterprise: The Role and Performance Measurement. In: IOCBM 2008. Boca Raton, Florida: Universal Publishers, 2008,pp.318-329.
18. A. Némethné Gál, A. Sinkovics, J. Szennyessy: Helyzetbe hozhatók-e a kis- és középvállalkozói szektor társas vállalkozásai? *Közgazdasági Szemle*, LV.évf. szeptember, 2008, pp.807-825.
19. M. E. Porter: On Competition.The Free Press, 1998, New York.
20. D.Vokounova: Marketingovy prieskum ako dolezity zdroj informacii. *Marketing v politike*. Bratislava,2003, pp. 54-68. ISBN 80- 225- 1767-4.
21. L. Borbás: EU’s enterprise policy to improve Europe’s competitiveness. 4th MEB International Conference, Budapest,2005, pp.341-350.
22. Gy. Kadocsa: Research and development of SMEs at Budapest Tech. Jubilee Conference of Budapest Tech,2004, Budapest.
23. Á. Tibor: Why do Hungarian entrepreneurs fail?(Miért buknak meg a vállalkozók Magyarországon?) In: *Renaissance of SMEs in the globalized economy*. Verlag KMU HSG 1998,Vienna.
24. M. E. Porter:Clusters of Innovation: Regional Foundation of U.S. Competitiveness.Council of Competitiveness, 2001, Washington.
25. Handbook for Cluster Optimization.
26. <http://abclusters.org/wp-content/uploads/2013/12/Handbook-for-Cluster-Optimization1.pdf>
27. I. Marosi: Innovation Goals and Practices among Hungarian Small and Medium Enterprises. In: V.Szekeres (ed.) *FIKUSZ - Symposium for Young Researchers: Proceedings*. Óbudai Egyetem Keleti Károly Gazdasági Kar, 2013. Budapest, pp. 7-18.
28. European Competitiveness Report 2013. Commission Staff Working Document SWD(2013)347final.
29. http://ec.europa.eu/enterprise/policies/industrial-competitiveness/competitiveness-analysis/european-competitiveness-report/files/eu-2013-eur-comp-rep_en.pdf
30. SMEs in V4 countries.

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31. <http://www.visegrad.info/smes-and-innovative-businesses/factsheet/smes-in-v4-countries.html>
32. Nemzetgazdasági Minisztérium(2012): Wekerle Terv:
<http://www.kormany.hu/download/1/45/a0000/Wekerle%20Terv.pdf>
33. EMNT(2013)Mikó Imre Terv
34. <http://neppart.eu/admin/data/file/20130919/miko-imre-terv-webre.pdf>
35. EC “Think Small First” A “Small Business Act” for Europe {SEC(2008) 2101}
{SEC(2008) 2102} Brussels, 25.6.2008 COM(2008) 394 final
36. <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0394:FIN:EN:PDF>

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SMALL AND MEDIUM-SIZED ENTERPRISES AND CLUSTER INITIATIVES IN THE CZECH REPUBLIC

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Abstract

Small and medium-sized enterprises play an important role in every economy. The aim of this chapter is to describe the interconnection of small and medium-sized enterprises and cluster initiatives in the Czech Republic. Small and medium-sized enterprises in the Czech Republic represent the majority of active business entities. Namely, there were 1,468,776 of active business entities in the end of 2013 and 99.85% of those were SMEs [1,2]. The problematic of the clusters, the source of their funding and their scope was briefly introduced. The greatest incidence of clusters is in the energetics sector, IT and engineering. The study "Doing business" was used for the evaluation of the business environment of the country, according to which Czech Republic occupied the 68th place in 2013. Czech Republic mostly lags behind in areas, "Starting a Business" and "Getting Electricity", where in both cases to 146 place. On the contrary, the best position Czech Republic is in the area of "Resolving Insolvency", where CR occupies 29th place (2014) [3].

Keywords: *small and medium-sized enterprises, Czech Republic, cluster initiatives, business environment, development of SMEs*

1. INTRODUCTION

Small and medium-sized enterprises (SMEs) are important elements in every economy. SMEs are generally considered as independently owned businesses that are not in a dominant position in the sector of the market and they meet certain criteria [4]. There are many characteristics which differ these companies apart from others. These characteristics include turnover, the amount of capital or number of employees [5]. The definition of small and medium-sized enterprises was, in relation with the planned accession to the EU No. 47/2002 [6], modified by Act no. as amended. Since 1. 1. 2005 a new definition of small and medium-sized enterprises, which was in alignment with the recommendations of the European Commission (REC 2003/361/EC) [7] and Commission Regulation (EC) No. 364/2004 [8] is used for granting of public support funds for their development. The definition of SMEs was modified on 4th January 2014 by Commission Regulation (EC) No 800/2008 [9], currently regulated by the Ministry of Trade and Industry and the Office for Protection of Economic Competition.

For medium-sized enterprises in the Czech Republic are considered those, which have fewer than 250 employees, annual turnover not exceeding EUR 50 million or annual balance sheet total not exceeding EUR 43 million. Compliance with which is also the criterion of independence, i.e. that not more than 25% of the capital or voting rights owned by another entity. Enterprise Is considered small when it has fewer than 50 employees, an annual turnover not exceeding EUR 10 million or balance sheet total does not exceed 10 million and meets the criterion of independence. Small enterprise (micro enterprise) employs fewer than 10 employees, annual turnover or balance sheet total does not exceed EUR 2 million and meets the criterion of independence [10].

SMEs are indispensable in all economies and can be described as the driving force of business, growth, innovation, competitiveness, and are also very important employers. In the Czech Republic There were 1,468,776 entrepreneurs, who were categorized as small and medium-sized enterprises (31st December 2013). The total percentage of small and medium-sized enterprises in 2013 from all active subjects was 99.85%. In 2012, small and medium-sized enterprises employed 34 000 (ie 1.9%) employees less than in the previous year. In 2012, therefore, SMEs employed 1,786 thousand employees. The proportion of employees working in small and medium-sized enterprises in 2012 counted 59.43% compared to the total of Czech economy. In 2012, these businesses contributed 53.81% to total value added [1, 2].

SMEs are an important counterpart to the monopoly market operators. Their development also contributes to unemployment reduction. This group of companies quickly and swiftly responds to changes in demand. It plays an important role also in terms of public budgets, which make up a significant portion of revenue, particularly in municipal budgets [11]. Small and medium-sized enterprises create a healthy business environment, increase market dynamics, have the ability to absorb a significant part of the workforce released from large enterprises and they also represent stabilizing element in the economic system [12].

For additional SMEs' benefits can be considered [12]:

- mitigating the negative effects of structural changes;
- subcontractors for large companies;
- creating conditions for the development and deployment of new technologies;
- the ability of innovation (rather a quick response to market changes and implement simple ideas, than to realize the results of systematic research);
- flexibility and faster adaptation to the demands and market fluctuations;
- filling the peripheral areas of the market that are not interesting for larger companies;
- the ability to create and change the business climate of the region, which has an influence on his development; High motivation to the performance of companies.

As a disadvantage, compared to large enterprises, SMEs do not utilize capacity options from increased production costs and this can be considered as a barrier for further development or in extreme cases can lead to the bankrupt of the company. Another disadvantage is, that the SMEs' orientate mainly on local markets; companies therefore poorly penetrate beyond them, e. g. to the foreign markets. A common problem is the lack of funding for research, development, training and further education of employees [11].

Unlocking the potential of small and medium-sized enterprises in the economy is largely dependent on the environment which surrounds them. Small and medium-sized enterprises in the Czech Republic are negatively affected in particular by [12]:

- small economic strength in comparison with large enterprises;
- difficult access to capital, limiting the possibility of financing development activities; especially for small and micro enterprises,
- limited range of experience and knowledge of management, particularly in management and marketing, less access to training, less access to needed information and advisory services;
- unfair competition from large enterprises and dumping of imported products;
- restrictions on sales of finished products in the domestic market and increased costs of its exports;
- competitive retail chains generated strong capital companies;
- weak position in the competition for public contracts;
- payment indiscipline causing secondary insolvency;
- high administrative burden; insufficient emphasis on human resource development.

2. CHARACTERISTICS OF SMEs IN CZECH REPUBLIC

The numbers of companies in the Czech Republic between 2005 and 2013 are shown in Table 1. The table includes only those businesses that have been active in these years. The states are always recorded at 31st December. Enterprises are classified according to the number of employees in categories 0 (or not specified the number of employees), 1-19 employees, 20-249 employees and 250 or more employees, the subdivision is also depending on the number of employees and small and medium-sized businesses and large enterprises, furthermore, the total number of economically active enterprises.

While in the first observed year (2005) there were 1 266 336 economically active enterprises in 2013 there were 1 470 929 units in 2013. As the table shows, the total number of economically active enterprises declined only in years 2006, 2007 and 2013.

SMEs make up the vast majority of businesses in the country. Their increasing and decreasing number copies the evolution of the total subjects, i.e. decline in the years 2006, 2007 and 2013. Number of SMEs was 2005 at the level 1 264 323 of active subjects and number of large companies was 2 013. In the last reported period (2013) were in CR 1 468 776 MSP and 2 153 large enterprises. The largest number of SMEs is observed in 2012.

From the table it is also obvious that the biggest representation have the entities with no employees and we may also observe that with increasing number of employees decreases the absolute number of enterprises in a given category.

Table 1. Number of enterprises in Czech Republic in 2005 – 2013 [1]

Year	Number of employees				EU classification		Total of subjects
	0	1–19	20–249	250 and more	SME	Large	
2005	1 010 520	224 188	29 615	2 013	1 264 323	2 013	1 266 336
2006	986 092	238 537	30 066	2 076	1 254 695	2 076	1 256 771
2007	950 419	241 620	30 681	2 143	1 222 720	2 143	1 224 863
2008	1 064 511	247 325	31 572	2 181	1 343 408	2 181	1 345 589
2009	1 071 503	242 074	30 545	2 063	1 344 122	2 063	1 346 185
2010	1 122 671	244 788	30 364	2 160	1 397 823	2 160	1 399 983
2011	1 181 726	247 052	30 203	2 220	1 458 981	2 220	1 461 201
2012	1 230 872	251 688	28 857	2 139	1 511 417	2 139	1 513 556
2013	1 193 087	247 235	28 454	2 153	1 468 776	2 153	1 470 929

As shown in Table 2, in the Czech Republic, as well as throughout the European Union, small and medium-sized enterprises play the most important role. Small and medium-sized enterprises, as estimated for 2012 (source data comes from Eurostat [13]), occupy 99.8% of all enterprises, which is the same as the percentage of businesses in the EU. Micro-enterprises, i.e. enterprises employing up to 10 employees are represented by 95.5% (3.4% more than the average percentage of the EU). These enterprises employ a third of the country's population and the added value they produce is one fifth of the national total. The specialty of Czech microenterprises is their smaller size, compared to the EU. Small and medium enterprises are significantly affected by the economic crisis. Generally speaking, SMEs are more vulnerable to the economic shocks than large businesses, which usually recover faster from the crisis. Small and medium-sized enterprises recorded a moderate but progressive reduction of employees, but they still are not at pre-crisis levels. Very disturbing is the data coming from the demography of enterprises that point to the fact that more than 50% of companies that cease operation, operate on the market for more than 15 years. For SMEs there was also a fall in exports and imports in the single market (decline in exports compared to 2010 was 17%, imports by 23%).

Table 2. Basic data on small and medium-sized enterprises in the Czech Republic [14]

Enterpr ises	Number of enterprises			Number of employees			Added Value		
	Czech Republic		EU 27	Czech Republic		EU 27	Czech republic		EU 27
	Number	Share	Share	Number	Share	Share	Billions of EUR	Number	Sha re
Micro	897.895	95,5%	92,1%	1.076.383	30,1%	28,7%	17	19,9%	21,1 %
Small	34.339	3,7%	6,6%	674.344	18,9%	20,4%	13	15,2%	18,3 %
Mediu m	6.815	0,7%	1,1%	696.760	19,5%	17,3%	17	19,9%	18,3 %
SME	939.049	99,8%	99,8%	2447.487	68,5%	66,5%	47	54,9%	57,6 %
Large	1.463	0,2%	0,2%	1.127.022	31,5%	33,5%	39	45,1%	42,4 %
Total	940.513	100%	100%	3.574.509	100%	100%	86	100%	100 %

Figure 1 shows the development of small and medium-sized enterprises in the Czech Republic and the EU, basis is 2008, data from 2011 onwards are estimates. In the Czech Republic, compared to the EU, for monitored period in relation to the year 2008 index in each year more than 100, which means that in the years 2009 to 2014 the number of SMEs has not fallen below the number of enterprises in 2008- This is not true for the EU, where in 2009, the number of SMEs has decreased. This is the only year for the EU, in which such occasion occurred, during the period relative to the base year 2008. In 2012, the number of SMEs in the EU approached number of enterprises in 2008.

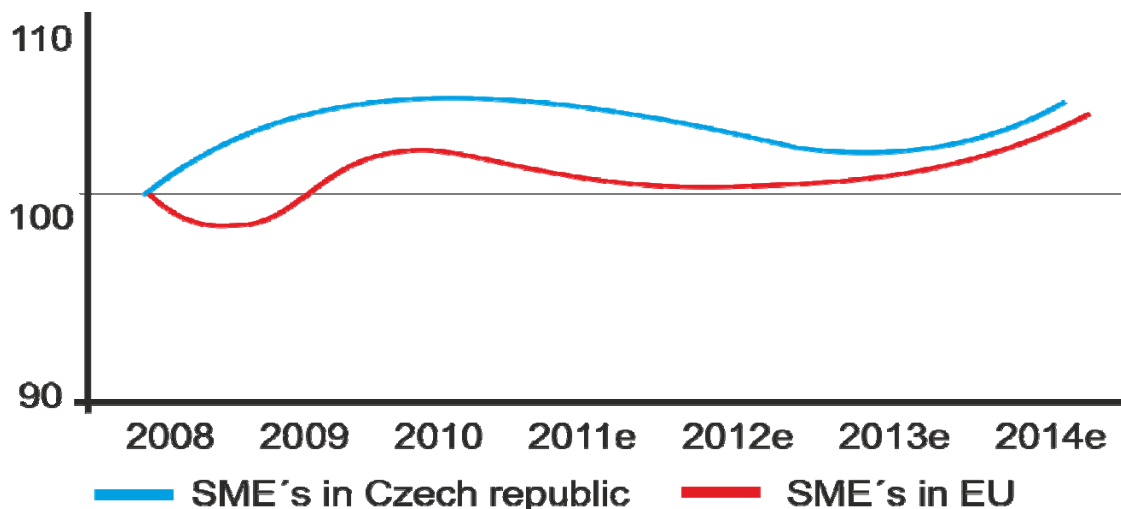


Figure 1. Development of SMEs in the Czech Republic and the EU (index 2008) [14]

Figure 2 shows the development of employees in SMEs in the Czech Republic and the EU, the base year is 2008, data from 2011 onwards are only an estimate. Throughout the period, the Czech Republic and the EU, is under the 100 index (excluding projections for the EU, in 2014).

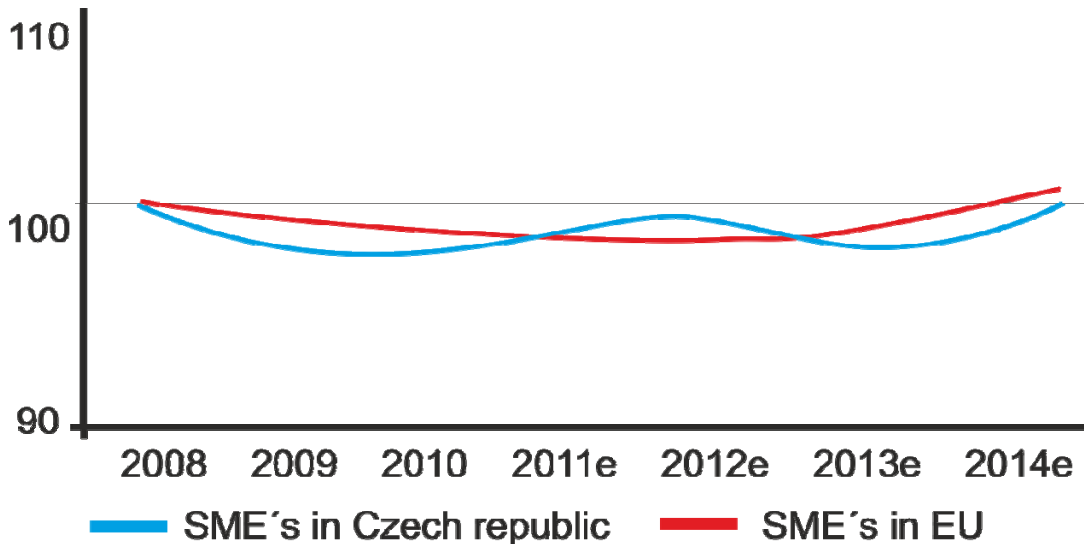


Figure 2. Evolution of number of employees in SMEs in the Czech Republic and the EU (index 2008) [14]

Figure 3 shows how the value-added created by SMEs developed in the Czech Republic and the EU, the base year is 2008 again, from 2011 onwards, data are only estimated. Significant decrease in business showed in 2009, where the Czech Republic has seen a much greater drop than the EU. Prospects for 2014 are positive, but still only approaching the values which SMEs reached in 2008.

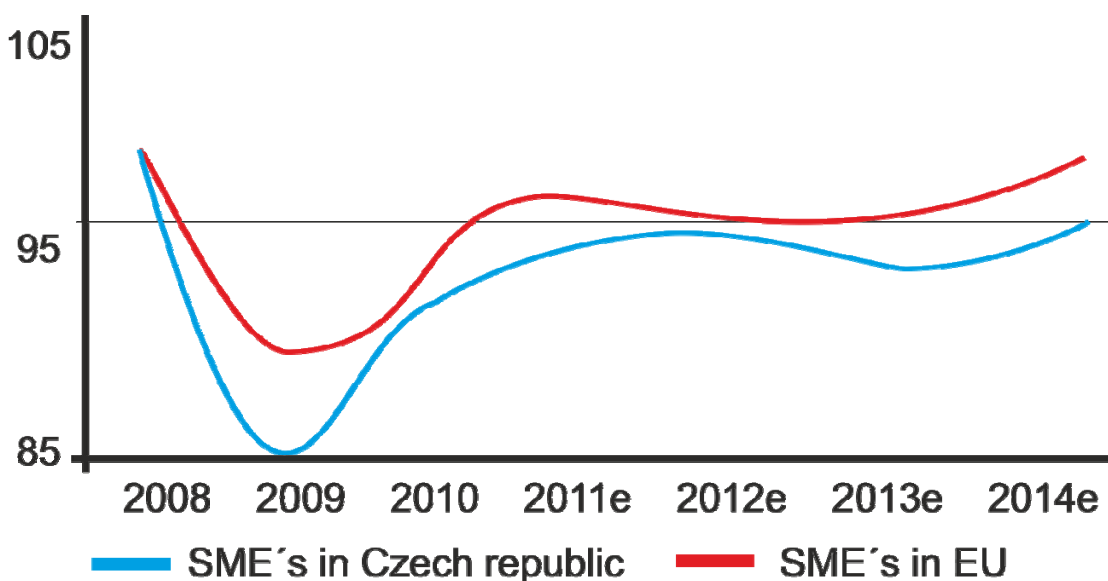


Figure 3. Evolution of value added generated by SMEs in the Czech Republic and the EU (Index 2008) [14]

3. THE BUSINESS ENVIRONMENT IN THE CZECH REPUBLIC

"Doing Business" study, which is published annually by the World Bank, is very important basis for the evaluation of the business environment. The study contains data and information on how favorable environment creates the country. In 2014 we may compare 189 countries of the world. The evaluation of the World Bank is based on 10 indicators, which are primarily focused on reduction of the business regulation, it doesn't evaluate environment by macroeconomic stability, corruption, or level of education of the labor force in the country. Data are tested, reviewed, and in their formation thousands of professionals are involved [15].

The monitored indicators are [3]:

- Starting a Business – procedures (number), time (days), cost, paid –in min. capital
- Dealing with Construction Permits - procedures (number), time (days), cost
- Getting Electricity - procedures (number), time (days), cost
- Registering Property - procedures (number), time (days), cost
- Getting Credit - Strength of legal rights index, Depth of credit information index, Public registry coverage Private bureau coverage
- Protecting Investors – Extent of disclosure index, Extent of director liability index, Ease of shareholder suits index, Strength of investor protection index
- Paying Taxes - Payments (number per year), Time (hours per year), Profit tax (%), Labor tax and contributions (%), Total tax rate (% profit)
- Trading Across Borders - Documents to export (number), Time to export (days), Cost to export (US\$ per container), Documents to import (number), Time to import (days), Cost to import (US\$ per container)
- Enforcing Contracts - procedures (number), time (days), cost
- Resolving Insolvency - Time (years), Cost (% of estate), Outcome (0 as piecemeal sale and 1 as going concern), Recovery rate.

Czech Republic in the evaluation of the study "Doing business" in 2013 occupied the 68th place. In 2014 declined to 75th place, a drop of 7 positions. The study also cited the economy distance from the so called borders, which represent performance of the economy in individual areas across all economies. Distance economy is on a scale of 0-100, where 0 is the lowest power, 100 represents the frontier. Czech Republic in 2014 reached 33.54 percentage points below the best performances across all economies and over time. Mostly undeveloped fields in the Czech Republic are "Starting a Business" and "Getting Electricity" (see figure 4), where in both cases occupies 146th place. On the contrary, the best position of the Czech Republic is in the area of "Resolving Insolvency", which was placed in 2014 to 29th place.

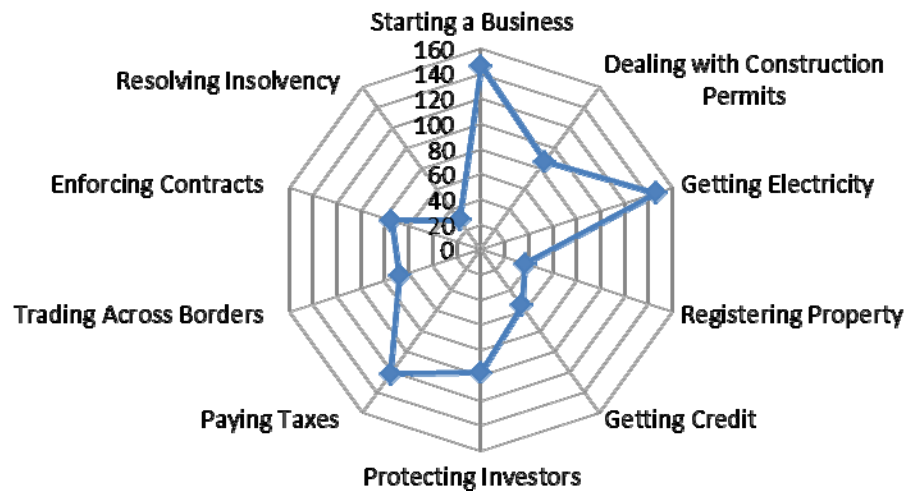


Figure 4. Ranking Czech Republic with regard to the indicators [3]

Singapore has the best rating for the year 2014 according to the "Doing business" evaluation study, lagging only 7.79 percentage points below the best performance across economies and over time. The last place in 2014 occupies Chad, which lags 68.77 percentage points below the best performances across all economies and over time [3,16].

4. CLUSTER INITIATIVES IN THE CZECH REPUBLIC

Except the fact that Small and medium-sized enterprises exist in various forms, as described above, they may exist in specific structures. These structures are called clusters and are very important articles not only from the point of view of the national economy, but also as a possible tool for regional development. Many of the features that they have are the same as those of small and medium-sized enterprises, as they are in essence identical. In favor of clusters operate some features that make them completely unique and in terms of economy completely indispensable. They can be characterized as an intermediate step between traditional small and medium sized businesses and large enterprises.

Michael E. Porter in his work *The Competitive Advantage of Nations* in 1990 [17] defined clusters as "local concentrations of interconnected companies and institutions in a particular field..." According to these, clusters are geographically concentrated organization of several companies, which are linked to their regional environment. Enterprises that create the cluster can compete with each other and through the organization to solve common problems, such as the development of human resources, logistics costs for suppliers or customers, or in research and development.

4.1. CLUSTER INITIATIVES IN CZECH REPUBLIC

Clusters were in the Czech Republic supported mainly through the agency CzechInvest [18], in three successive programming periods (Calls). The following text maps individual

challenges and briefly describes the most important clusters within each region, data was drawn from the CzechInvest agency [18].

1) Call I.: 2008-2009

As we can see in Figure 5, 17 clusters were supported in the first call.

The most important clusters are:

CGMC - the cluster of general engineering

Cluster of Engineering was established in 2009 with headquarters in Planá nad Lužnicí. The engineering cluster is a group of engineering companies. Based on requirements and plans analysis of member enterprises, the scope of the cluster was extended to general engineering with an emphasis on the development of interdisciplinary links in three specialized areas; handling and transportation equipment, automation and robotics and energetics - equipment for energetics.



Figure 5. The most important initiative in terms of cluster from Call I. [18]

CzechBio - association of Czech biotech companies, association of legal entities

CzechBio - association of Czech biotech companies - was established December 18th in Vestec. Association was established to create a platform that would facilitate not only communication, but also the intensification of cooperation between academic sphere and the biotechnological industry. CzechBio brings together leading academic institutions and important professional companies and a significant number of small and medium-sized enterprises active in the field of biotechnology.

2) Call II.: 2010

Nine major clusters were supported thank to the second call (see Figure 6).

The most important are:

CREA Hydro & Energy, o.s.

CREA Hydro & Energy, o.s. is a cluster of companies, research institutions and universities active in the field of technologies for water managements works, water and waste management and renewable energy sources. CREA Civic Association was founded

on 19th June 2008, but cluster itself has been operating since 2005. CREA main activities are water, power, water pumping and irrigation systems.



Figure 6. The most important cluster initiative in terms of call II. [18]

Czech brewing Cluster

Czech brewing Cluster was established in 2008. Cluster was created for the cooperation purpose of small and medium-sized businesses with the tertiary sector in Southern, Central Bohemia and the Vysočina region. The cluster brings together organizations that want to innovate, develop and promote new products and do not have sufficient HR, technical and financial potential to secure the whole process. The aim of the cluster is to compete in the market against the intensifying competition through the specificity of the products produced by Czech traditional practices and innovative activity.

3) Call III.: 2012

During the third call, 15 major clusters mainly from Moravia were supported.

The main clusters are:

ENVICRACK, cooperative

Cooperative ENVICRACK is an open society that was established to support innovation and increase competitiveness of its members. The cluster was established in 2005 in Ostrava. The main activities of the cluster ENVICRACK are focused on the use of alternative and renewable energy sources. The strategy of the cluster is to focus on research and development projects in the waste processing and alternative energy sources business. Activities are designed to support its members in the implementation and commercial usage of research results in practice. Innovation strategy is based on the analysis of trends. Attention is focused on solving the problems of waste and reducing the carbon footprint while reducing costs associated with expenditures on energy consumption. The goal is to find a solution in accordance with the requirements of sustainable development that will benefit the end user.

Possibilities for development of business cluster network between SMEs
from Visegrad countries and Serbia

International May Conference on Strategic Management - IMKSM2014,
23-25. May 2014, Bor, Serbia



Figure 7. The most important cluster initiative in terms Challenges III. [18]

Regional Food Cluster – Chutná hezky, Jihočeský

Regional Food Cluster is an open association of South Bohemian small and medium-sized companies operating primarily in the food industry, universities, research institutions and non-profit sector. The objective of the cluster is to link individual members and to support the development, production and sales of their products, services and support of joint activities. These objectives would be difficult to achieve for entities acting individually, without the assistance of a cluster. The cluster is designed for organizations that want to innovate, develop and promote new products and do not have sufficient HR, technical and financial potential to secure the whole process. The cluster was established for beneficial relationship between food producers in the South Bohemian region. It is possible to obtain the support from the EU, thanks to a connection of at first glance competitive companies. Due to the cluster, companies as well achieve a strong potential for participation in major contracts and strengthen promotional activities of all involved sites.

Clusters in numbers

Sector of energetics is the most numerous with its 10 members, followed by IT technologies and engineering. Significant are also those clusters focused on the woodworking and technology.

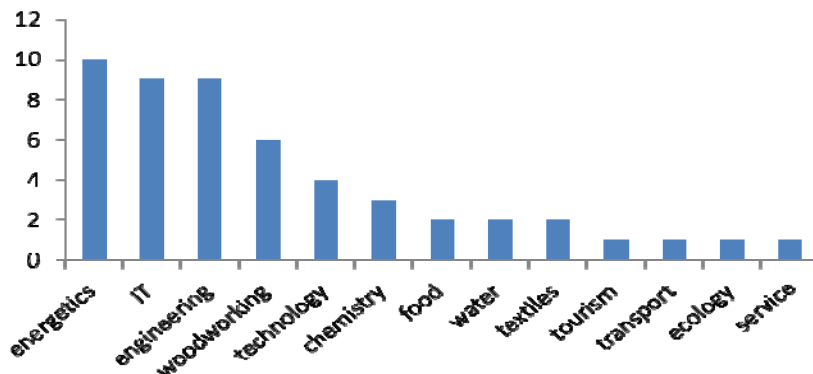


Figure 8. Number of clusters according to individual sectors [19]

In the Czech Republic clusters may legally take several forms, because in terms of subsidies cluster must be legal entity authorized to conduct business. Clusters may take the following legal forms [18]:

- company;
- cooperative;
- interest grouping;
- civic association;
- loose association (consortium);
- foundation.

The above figure 9 shows that most clusters choose as a legal forms associations and interest groups, on the contrary forms foundation or loose association are not used in any of the clusters. For some clusters legal form cannot be determined, therefore, is not mentioned here.

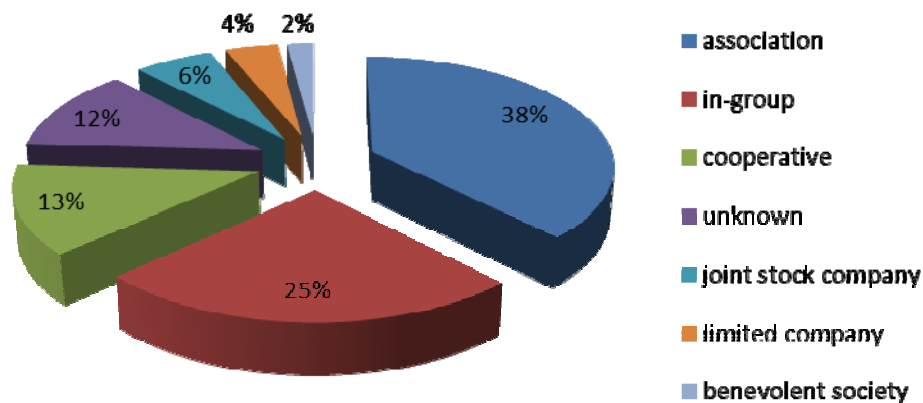


Figure 9. Legal forms of clusters [19]

The following figure 10 shows the evolution of newly formed clusters in the Czech Republic over the last decade. As the chart shows the largest increase was in 2006, which is linked to the launch of business support funds. Subsequently, the emerging clusters were typical for the second programming period in 2009, where the number of the clusters started to recede. Due to the crisis their establishing began again in 2012. In terms of further development prediction a steady decline can be expected, which is also connected with the intentions of CzechInvest following years plans to limit the support.

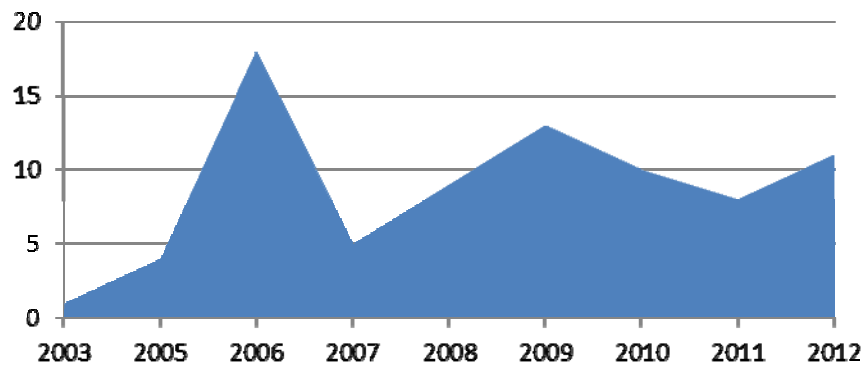


Figure 10. Evolution of newly formed clusters

Figure 11. presents the overall number of major clusters within the regions. As the graph shows, the greatest incidence is currently in the Moravian-Silesian Region, South Moravia and South Bohemia. The main clusters are: ENVICRACK, Moravskoslezský automobilový klastr, Moravskoslezský energetický klastr, Bezpečnostně technologický klastr, MedChemBio, ENERGOKLASTR, CREA, Klastr přesného strojírenství, Klastr českých nábytkářů, Regionální potravinářský klastr - Chutná hezky. Jihočesky. Český pivovarský klastr.

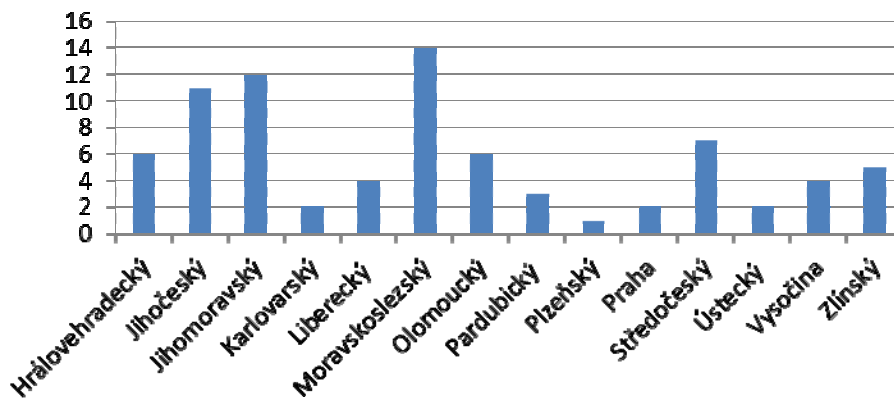


Figure 11. Frequency of clusters by region

4.2. THE BENEFITS OF CLUSTERS

Clusters provide a number of benefits, both for the SMEs and all entities of the business environment. Most of the clusters are connected to state institutions and universities. The benefits for businesses and universities are described below, data was obtained from CzechInvest [18]. Clusters enhance competitiveness, which leads to improved business performance in three ways;

1. Increased productivity through better access to specialized suppliers, skills and information.
2. More emphasis on innovation, as the need for improvement is emphasized in the production process. A firm cooperating with each other can meet that need.
3. Once cluster occurs, it begins to grow due to the formation of new companies and the entries of new suppliers.

Table 3. Benefits of clusters for companies [18]

They provide economies of scale and reduce costs	The cluster provides businesses with the opportunity to achieve critical mass in key areas, giving them the success that would not have been possible if they had worked in isolation. Cooperating companies can open new markets and reduce costs.
Reduce the constraints of small enterprises and increase specialization	A cluster can associate companies from different links in the value chain. It allows smaller companies to cooperate in competition against larger, vertically integrated companies. Working with larger companies, however, provides access for smaller companies to international networks of larger companies in the cluster.
Increase local competition and rivalry and the global competitive edge	This rivalry supports innovation in companies with which they seek improvement of efficiency and competitiveness in order to maintain herd.
They increase the power and voice of smaller companies	Smaller companies are able to influence events and to lobby the government to improve services and infrastructure, thanks to networking.
Increase the speed of information and technology transfer	This occurs due to the proximity of enterprises, strong ties between them and high competitive nature of the cluster
They encourage the government to invest in specialized infrastructure	Thanks to the visibility of the cluster, as well as to its cost effectiveness and return on investment, which is represented by the cluster, these investments are easier to justify. Specialized infrastructure could include the establishment of training centers, institutes of technology, government-sponsored research and development and ensure expensive manufacturing equipment needed for local industry.
Enable effective networking and partnership	Visibility and importance of the cluster can also stimulate the response of academic institutions to create partnerships with local industry. More importantly, the cluster initiative can provide businesses, which usually compete, neutral forum for sharing common problems or opportunities without restrictions on their ability to compete.

REFERENCES

1. Czech Statistical Office, (2014)
2. Ministry of Industry and Trade, Report on the Development of Small and Medium-sized Enterprises and its Support in 2012, (2013), pp. 6-13
3. The World Bank Group, Doing Business, (2014)

4. J. Schwarz, Small and Medium-sized Enterprises: Discrimination and Support (Malé a střední podniky: diskriminace a podpora), (2002)
5. G. Lee, R. Mcguigann, Understanding of small- and medium-sized firms' financial skill needs, 8(3), (2008), pp. 93–103
6. Law no. 47/2002 Sb., (2002)
7. Commission Recommendation 2003/361/EC (2003)
8. Commission Regulation (ES) no. 364/2004, (2004)
9. Commission Regulation (ES) no. 800/2008, (2008)
10. J. Srpová, V. Řehoř et al., Basics of Business (Základy podnikání), (2010), pp. 35-41
11. P. Pešek, Business Support for the Revitalization of the Regions (Podpora podnikání při revitalizaci regionů), (1999)
12. D. Bednářová, D. Škodová Parmová, Small and Medium Businesses (Malé a střední podnikání), (2010), pp. 30-35
13. Eurostat, (2014)
14. A European Commission report, Summary SBA 2013 Czech Republic (Přehled údajů SBA 2013 Česká republika), (2013)
15. The World Bank Group, Evaluation of Business Environment by the World Bank Group, (2014)
16. The World Bank Group, Doing Business, (2014)
17. M. Porter, The Competitive Advantage of Nations: With a New Introduction, (1990)
18. Czech Invest agency, (2014)
19. J. Sládková, The Methodology for Creating Competitive Strategy ICT-scale Undertaking to Cluster (Metodika Tvorby Konkurenční Strategie ICT Podniku Působícího k Klastru), (2013), pp.41-66

ANALYSIS OF THE ECONOMY GLOBALIZATION IMPACT ON THE CHOSEN VISEGRAD PRODUCTION COMPANY FUNCTIONING

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Abstract

The quest for effective functioning has existed long before the introduction of the term "management". The term has evolved over the years and its meaning still needs to adapt to changing conditions. The impact of economy globalization on selected elements of the enterprise environment was discussed in the presented scientific elaboration. The aim of the elaboration is to show how to change key elements of the organization which affects company success elements (product, customer, employee, competition, etc.). The main determinants of the enterprise success were discussed from the perspective of the several past decades. Results of the discussion have been compared to the current situation of the chosen Visegrad company.

Keywords: *management, globalization, competition, TQM, Visegrad, production company*

1. INTRODUCTION

Globalization has contributed to the situation, where the modern management varies depending on the level of organization, and not depending on the country in which the company operates. Companies operating in USA, China or European countries don't vary from the others. The significant difference that varies contemporary companies is the origin of the company company or organizational culture significant for the country, where the company operates in [1].

The Visegrad Group (also known as the "Visegrad Four" or simply "V4") reflects the efforts of the countries of the Central European region to work together in a number of fields of common interest within the all-European integration. The Czech Republic, Hungary, Poland and Slovakia have always been part of a single civilization sharing cultural and intellectual values and common roots in diverse religious traditions, which they wish to preserve and further strengthen. All the V4 countries aspired to become members of the European Union, perceiving their integration in the EU as another step forward in the process of overcoming artificial dividing lines in Europe through mutual support. They reached this aim in 2004 (1st May) when they all became members of the EU.

The V4 was not created as an alternative to the all-European integration efforts, nor does it try to compete with the existing functional Central European structures. Its activities are

in no way aimed at isolation or the weakening of ties with the other countries. On the contrary the Group aims at encouraging optimum cooperation with all countries, in particular its neighbours, its ultimate interest being the democratic development in all parts of Europe [2].

Companies operating in European Union as in the Visegrad Group act in condition of the market competition and their main aim is to achieve the leader position in the industry with using different management tools and the market opportunities. One of the market opportunities in the Visegrad countries Group is using the grants offered by the Group that support Visegrad economy and emphasis its culture feature in the globalization conditions. The fact that underlines the specificity of the Visegrad companies functioning in the globalization conditions is that changes that occur in the external environment affect the company internal environment of the company (Fig. 1).

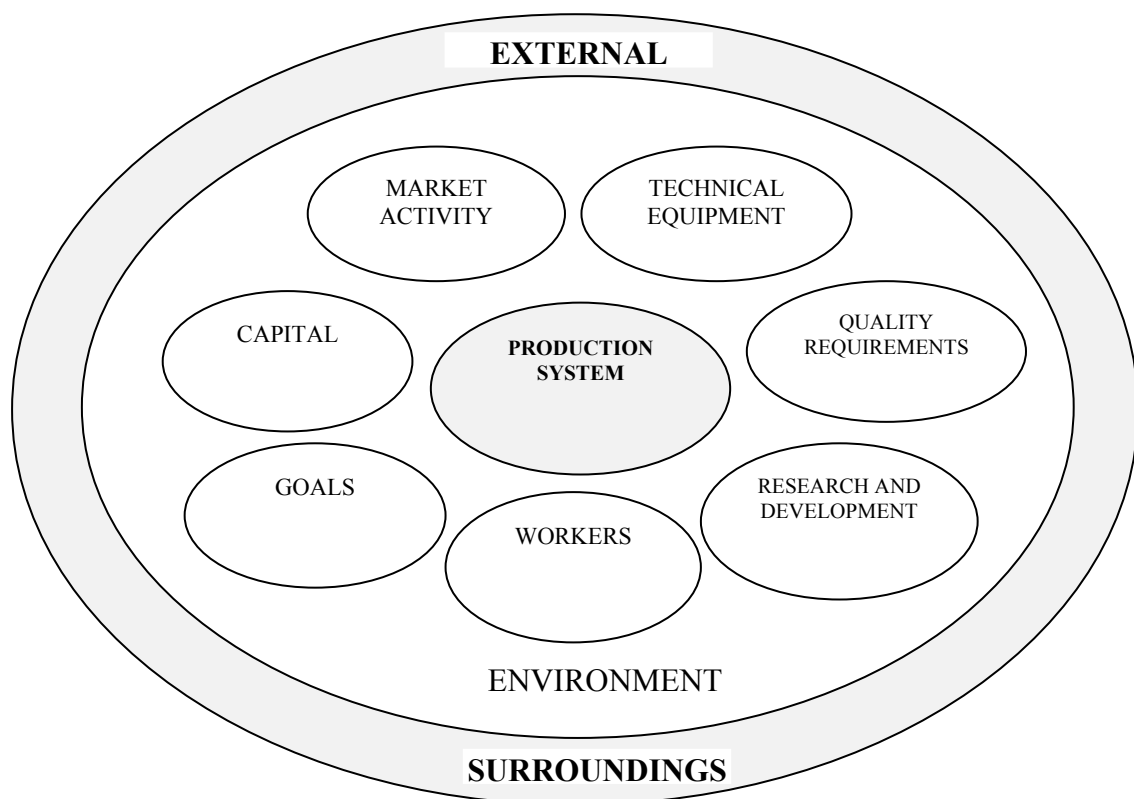


Figure 1. Environment of the production company [own elaboration]

The global economy demands a different approach of the enterprise to their own business, an employee, a customer, a competition. The company is forced to adapt elements of the environment to the prevailing standards, otherwise it will be naturally eliminated from the market. Both the product and the associated quality and employee, owned equipment must be still improved in the aim of satisfying of the increasingly demanding customers. Table 1 describes the effect of changes in the external environment on selected elements of the enterprise [3].

Table 1: Elements of the production company environment [own elaboration based on]

The element of the organization	Previously	At present
The organization system	Each segment separately	Uniform system, the whole
Purpose of organization	To manufacture the product	To satisfy the client with the product
Management-directing	Caring for the smooth functioning of the organization	Flexible observer who is still developing
Product	Conforms to the specification	Complies with the customer requirements
Quality	At the production stage	At every stage of the company's activities
Worker	Performs assigned the task	He/She identifies with the organization, brings ideas
Motivation	Wages, working conditions	Promotion, development, training
Customer	The potential recipient of products	Demanding business partner

Modern economy confronts enormous challenges to the company organization. It is not enough to provide customers with products compliant with the specification. It should be provided with a comprehensive service having the highest level of quality at every stage from design, through production to service. The future of an company, that wants to be in a market leaders group, is related to the continuous development and improvement at every stage of the business activity [4].

Currently, the client is not on the opposite side and became a partner whose the products seller wants to get to know and understand. The customer expects and requires not only the quality but also expects that the producer/seller recommend solutions that will help in achieving business success. Customers expect that sellers who work with them, they have a basis for the analysis of the most important aspects of their business as well as the knowledge necessary to use strategic information that they provide to the customer. The sellers wishing to meet the demands of today's customers need to be knowledgeable not only about their products and services but also about products offered by the competition. The client requires the complexity of the seller, which is treated as a companion in gaining success.

2. THE IMPACT OF THE ECONOMY GLOBALIZATION ON THE FOUNDRY COMPANY FUNCTIONING

2.1. ANALYSIS OF THE EXPORT STRUCTURE IN THE FOUNDRY COMPANY

The impact of the economy globalization on the functioning of specific areas was analyzed on the example of the foundry company that is located in Poland and selling

products especially to Visegrad countries. The company operates since 1990 and it has changed beyond recognition ranging from employees, skilled workers, through the castings quality and cooperation with suppliers. The foundry produces around 80 types of parts, and the average monthly production is 90000 kg. Figure 2 presents the export share in total production in period 2005 ÷ 2012 compared to 1995.



Figure 2. The export structure of the foundry company in period ÷ 2012 compared to 1995 [own elaboration].

The analysis of the research findings presented in Figure 2 shows that in the analyzed foundry since 2007 there has been noted a sharp increase in the export share in total castings production. In 1995, exports was accounted for 20%, while in 2012 the major part of total production. It follows that changes in the external environment had an impact on the customer demand changes of the analysed company.

2.2. AN EMPLOYEE IN THE COMPANY OF XXI CENTURY

Today, when "the world is getting smaller" term management also takes on a slightly different meaning. The departments do not exist as separate "bodies", but cooperate with each other, what increases the organization efficiency. The success of the next generation company depends on the commitment of people forming the company. Contemporary organization cares about the employee who has the right to express their own opinion, participate in projects, contribute ideas aimed at improving the functioning of the company, which gives him a sense of self-worth. It seeks to provide the employee a sense of security, which will improve efficiency [5].

The organization members are required to continuous development, learning, thinking to solve problems, identifying with the organization. In order to explore the change in the number of employees with higher education in the studied foundry, there was analyzed the employment structure in recent years compared to the base year (1995) for education (Figure 3).

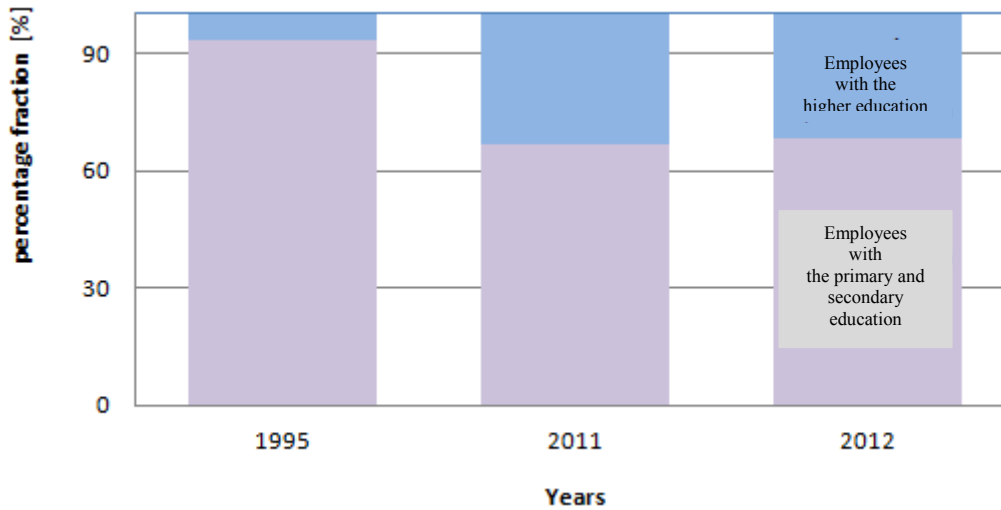


Figure 3. The employment structure in the period 2010 ÷ 2012 compared to 1995 including workers group with high education and workers group with primary and secondary education [own elaboration].

The analysis of the study results shows that in the studied foundry there is noted an increase within the share of employees with the higher education. The analysis of the figure 3 shows that in the early years of the foundry existence there were approximately 6% of all employees with the higher education. This situation has greatly changed since 2007. In 2012, the phenomena was noted as in the years 2010 ÷ 2011 placing at around 34%. Using surveys, factors motivating workers in the contemporary companies were verified. Approximately 60 employees have been asked “what motivates them to work”. Respondents indicated atmosphere at work (27%) as the most important determinant of job satisfaction (Fig. 4). The factor “salary” (23%) was pointed by the workers as the most important determinant of the job satisfaction, The other factors noted in third place was “character of the work” (19%) or “possibility of the skills development (trainings)” (16%). Satisfaction was identified as the last important factor in the analyzed importance hierarchy (15%).

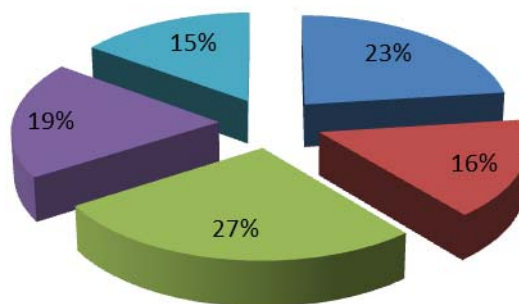


Figure 4. Factors motivating workers in the contemporary company [own elaboration].

2.3. ANALYSIS OF THE COST STRUCTURE IN 2012 COMPARED TO 1995

Changes of the economy globalization also affect the company's costs. Newer machines, more qualified workers, etc. cause a change in the cost structure of the company. Figure 5 presents the cost structure of the division of materials, labor, energy, depreciation and other costs in 2012 and 1995 for comparison. Proportions of individual costs in 2012 compared to the basic year 1995 have been changed. The analysis of the figure 5 shows that the reduced costs of materials and labor costs, while newer technologies have increased the cost of depreciation of machinery.

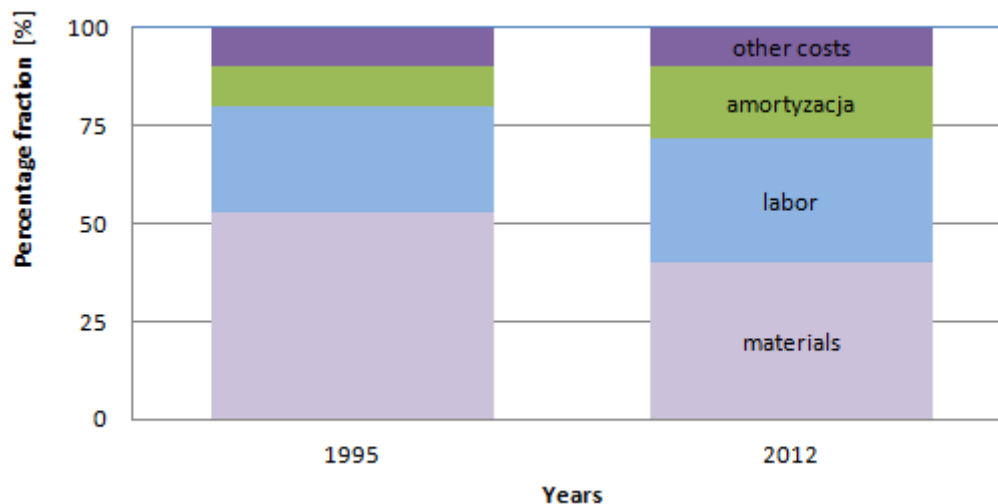


Figure 5. Comparison of the cost structure in the years 2012 and 1995 in the chosen contemporary company [own elaboration].

3. CONCLUSION

The changes taking place in the wider environment forcing companies to adapt to these new conditions which characterized the economy globalization. Currently, the effective management of an organization cannot be afraid of change. Every element of the company and its environment, as the client, evolves. Therefore, the company should be flexible observer to positively surprise the customer. Both the company that wants to improve its competitive position as well as those who do not want to simply go out of business must adapt to a constantly changing business environment. The environment forces the entrepreneur to make changes aimed at improving the functioning in all areas of the company.

In the studied foundry there can be observed changes in production, exports, education level of employees. Increase in the number of exported products from 20% in 1995 to 58% in 2012, shows the changes scale. An analysis of the research results shows that economic globalization affects every part of the internal environment of the tested company.

REFERENCES

1. D.M. Coker, E.R. Del Gaizo, K. A. Murray, S. L. Edwards, Organizations successful in sales. How to get an edge over the competition, IFC Press, 2003.
2. <http://www.visegradgroup.eu/about>
3. A.F.J Stoner, R.E. Freeman, R.D. Gilbert, Directing, Polish Economic Publishing Company, Warszawa, 1998, pp. 71.
4. H.J. Doeleman, S. Have, S., K. Ahaus, The moderating role of leadership in the relationship between management control and business excellence. *Total Quality Management & Business Excellence*, (2012) 23(5-6), pp. 591-611.
5. S. Borkowski, A. Czajkowska, The qualitative aspects of Al-Si alloy die casting, Printing House, The Managers of Quality and Production Association, Częstochowa, 2012.

SHORT ASSESSMENT OF THE SITUATION OF HUNGARIAN SMES AND THE POTENTIAL ROLE OF HIGHER EDUCATIONAL INSTITUTES

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Abstract

Small and medium sized enterprises are considered to be the engines of economic growth. The SMEs employ more than 60% of the active population in the European Union, since the SME sector's labour intensity is much higher than that of the large enterprises. Hence the major advantage of the sector is its employment potential at low capital cost. However, the SMEs are not always as prosperous as they could be. According to the newest data of the Small Business Act factsheet, Hungarian SMEs do not even accomplish the average European standards. The death rate of Hungarian SMEs is high (12%), and their competitiveness is also suboptimal. Most SMEs are lagging behind large companies in strategic planning, marketing activities and in entrepreneurial and management skills along with innovation. Accordingly, it is of utmost importance, to analyse the impediments and search for possible solutions. Hence, the potential role and tasks of higher educational institutes is enlisted in present paper.

Keywords: *SMEs, Hungary, innovation, competences, higher educational institutes, business clusters*

1. INTRODUCTION

Small and medium sized enterprises play a crucial role in the European economy. According to the latest data [1] more than 20 million SMEs employ over 87 million people and produce around 58% of the European Union's value added. However, the average size - and with it, the average number of employees – have been decreasing throughout the EU since 2005, which is an alarming signal.

In Hungary, the proportion of SMEs within the economy is even higher than that of the EU. Nevertheless, the real significant difference lies in the ratio of micro, small and medium-sized companies. More than 36 % of all Hungarian companies employ less than 10 people, than makes micro companies not only the most frequent participants of the Hungarian economy, but the employment at micro sized enterprises the main form of employment. On the other hand, in average in the European Union large companies employ more people than micro sized enterprises; however, SMEs are the dominant employers in each and every country. Accordingly, the SME sector's average labour intensity is much higher than that of the large enterprises. Hence a major advantage of the SMEs is their employment potential at low capital cost.

Table 1: SMEs in the European Union and in Hungary [2]

	Number (%)		People employed (%)		Value added (%)	
	EU	Hungary	EU	Hungary	EU	Hungary
Micro	92.2	94.8	29.6	36.5	21.2	18.2
Small	6.5	4.4	20.6	19.3	18.5	15.9
Medium	1.1	0.7	17.2	16.9	18.4	19.5
Big	0.2	0.1	32.6	27.1	41.9	46.2

This wouldn't be a problem in itself, however; their high relative ratio is not mirrored in their value added. What is more, contrarily to many European countries, where in 2013 the value added has started to grow along with the number of people employed in SMEs, in Hungarian SMEs, the number of employees increased without the value added moving along [2].

Hence, many Hungarian SMEs close down and go bankrupt within their first two year of operation, and many are struggling to survive the fierce competition with the powerful big companies that are also present on the Hungarian market. The 2 years survival rate of Hungarian enterprises is only better than that of Bulgaria, Portugal and Lithuania (See Figure 2 for further information). What is more, the death rate - number of enterprise deaths divided by the number of active enterprises - is the fifth worst in the European Union behind Lithuania, Slovakia, Portugal and Czech Republic [3].

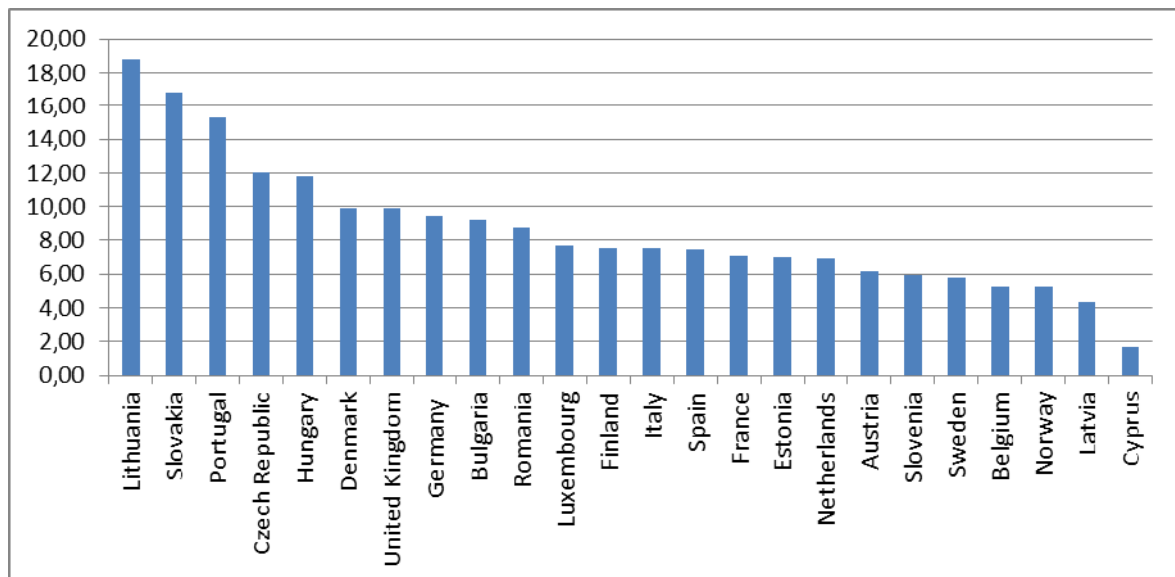


Figure 1. Death rate of business enterprises in 2007 [4]

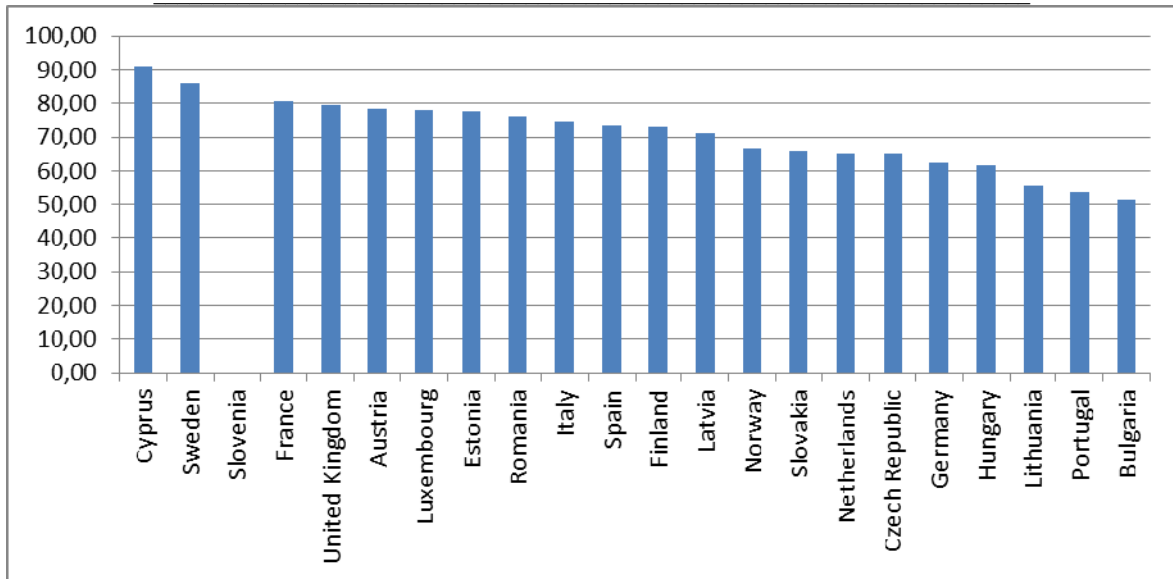


Figure 2. Survival rate of business enterprises in 2007 [4]

The high early death rate is especially damaging, since new ventures have a typical growth cycle. In the first few years most ventures start up as small companies, with a relatively slight growth rate. Only after several years do their revenues start to grow at an increasing rate. However, most of the time it is solely due to this increase that a venture can reach a more balanced phase of stabilisation (as represented on Figure 3 below). Accordingly, the problem with the Hungarian SMEs is their short life-span, which does not allow for the rapid growth phase to occur, and hence, the value added by the Hungarian SMEs is relatively low.

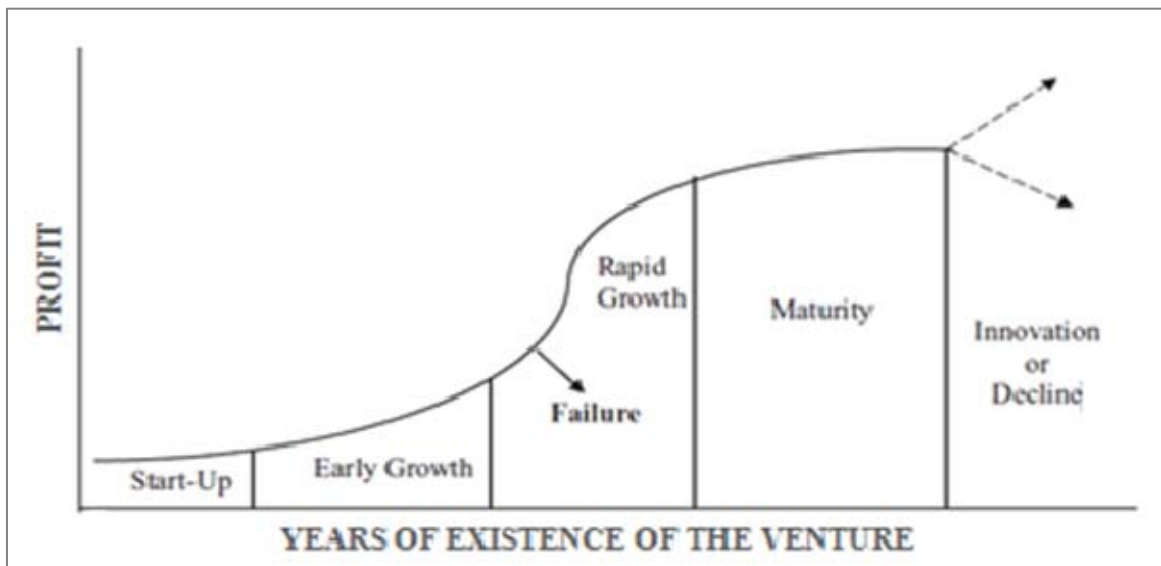


Figure 3: The life cycle of ventures [5]

Hence, present paper endeavours to analyse the situation of Hungarian SMEs to create a better understanding of the position and suboptimal operation of Hungarian SMEs. Factors, such as marketing skills, entrepreneurial competences and innovation are considered.

2. COMPETENCES

When the owners/managers of SMEs decide to grow they often face problems labelled as ‘hitting the growth wall’ – meaning, that the knowledge and competencies necessary for the evolution are scarce, or non-existent within the SME. Accordingly, the intent on growth is a necessary, but not sufficient quality, entrepreneurs (SMEs) consciously have to prepare by developing effective management skills and supportive processes in order to be able to successfully manage growth.

Correspondingly, whether another growth cycle is started anew, or the phase of stability is maintained depends on the venture, and its managers, however, it is also probable that without innovation, the demand for the product or service will decline resulting in a decline of revenues and with it a slow (or even relative fast) death of the company.

According to Figure 3, it is up to the entrepreneur to innovate and/or search for and enter new markets, or let the profit and the venture along it decline after the fast growth phase as well.

2.1 MARKETING SKILLS

According to Vágási [6], efficient business operations necessitate an appropriate philosophy and adequate level of managerial competences. In line with his theory, marketing is not a mere tool for selling the company’s products and services, but the philosophy leading to success itself. Marketing is an orientation of the venture, where the aim of the business processes is to explore and satisfy the consumers’ needs, expectations.

Marketing philosophy would be especially important in the life of SMEs, since it could provide a mean for creating a higher added value through identifying and creating market demand for their products and services. However, it is important to note, that applying marketing as a tool is not enough for long term success.

It is sad, but true that almost half (45%) of the Hungarian SMEs do not even have a marketing plan, so they are not even using marketing as a tool [7]. The prevalence of marketing tools increases with the size of the companies; however, there is still a significant difference between medium sized and large companies in regard to the applied marketing toolkit and the presence of marketing as a business philosophy [8].

2.2 ENTREPRENEURIAL COMPETENCIES

To sum the previously mentioned up, necessary skills and competencies might be the greatest marplots of evolution [5]. By the time of the second growth phase SMEs should have developed their own functional strategies along with processes, such as inventory management, record keeping, HR management and controlling in order to succeed. What is more besides short term business decisions and mid-term tactical strategies, the vision and mission statement of the venture is indispensable.

Along the lines of the above mentioned, it is not in numbers but due to qualitative features the Hungarian SMEs are below the EU average in productivity and profitability and hence

seldom survive their 5th anniversary and prosper in the long run. According to SBA data [9] Hungarian enterprises are lacking – compared to the average SMEs in the EU - in all dimensions of effective performance excluding the responsive administration. There are even two SBA areas - "think small first" and "state aid on public procurement", - where the collective growth indicators for 2007-2012 were negative. In 2011, Hungary's SBA profile had been described as a “typical profile of a country catching up” [9], however, unfortunately there have been no sign of catching up in 2012 or 2013.

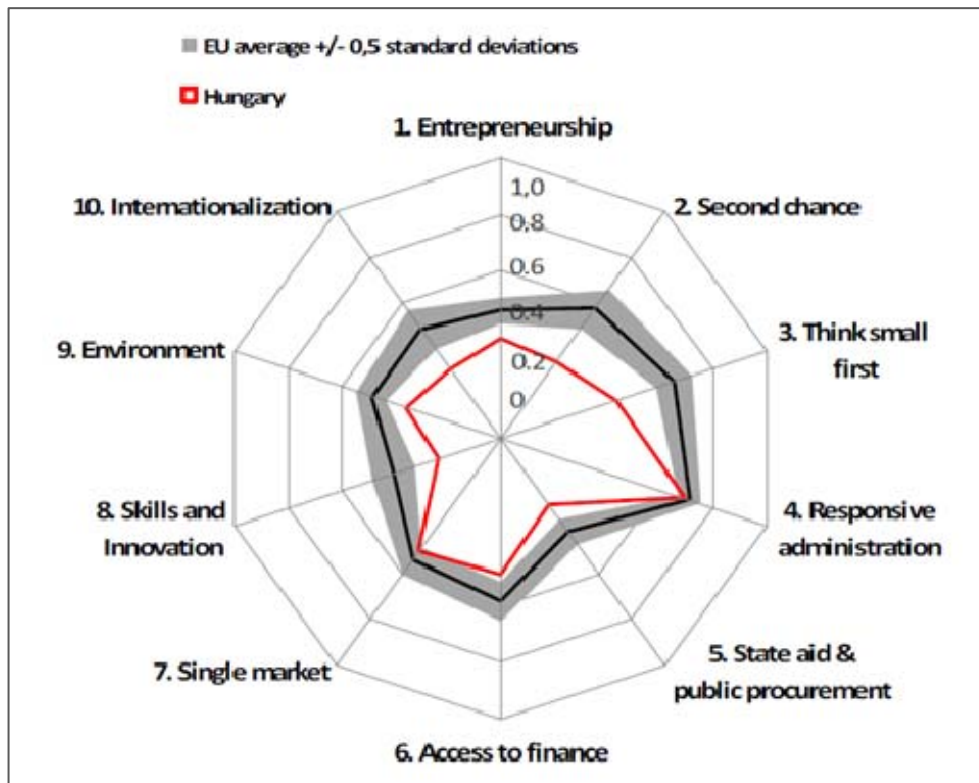


Figure 3. Hungary's SBA profile [9]

What is more, according to the Global Entrepreneurship Monitor [10] compared to other European businesses Hungarian enterprises are lacking in almost any aspects of entrepreneurship; among others competencies and innovation, the core personal characteristics. Lazányi's [11] findings also corroborated that even successful entrepreneurs are lacking in personal entrepreneurial competencies. Figure 4 displays 13 entrepreneurial competencies which range from score 5 – least competent to 25 – most competent. As it can be seen, the average level of competence has been around 18 points.

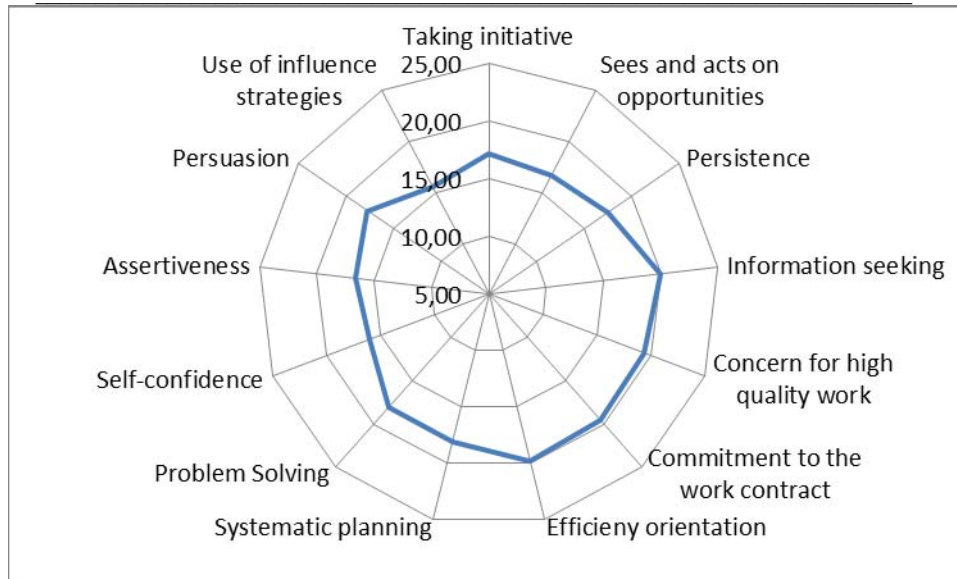


Figure 4. Successful entrepreneurs' level of personal entrepreneurial competencies [11]

So performance in a start-up or a growing venture does not just happen, but conscious decisions along with managerial skills and entrepreneurial competencies. Besides the broadly defined marketing skills, innovation and competencies connected to building and maintaining networks might be the two most essential factors affecting the success of SMEs.

2.3 INNOVATION

In line with the life-cycle approach of ventures innovation is one of the key components of success and steady or growing profits. According to Hisrich [5], the one thing successful ventures have in common is that their success derives in a large measure from innovation – innovation being the largest sustainable competitive advantage. However, innovations are not necessarily radical, giving birth to new industries and transforming the society and its behaviour (like the Internet), but might be slight changes, distinctive features that generate new markets, increase consumer interest and demand for product. The latter kind does not really necessitate large amount of resources and a wide-ranging market research but may occur due to employment or recombination of already existing external and internal resources as well. What is more, according to Marosi's [12] research data, a vast majority (82.4%) of SMEs think that innovation could be boosted as a consequence of a decrease in bureaucracy.

Despite this “easy” nature of innovations, according to OECD data and that of the INNOTARS survey Hungarian innovation, or more precisely the lack of it seems to be one of the main hurdles of SMEs prosperity [13,14]. The main flaws of Hungarian innovation system are, the low-level innovative activity combined with a similarly low-level patent activity. There are not enough innovative SMEs, within them mobility and collaboration are scarce and human resources for research, development and innovation are insufficient. What is more, innovation is not regionally balanced in Hungary [12].

In 2008, the average innovation expenditure as % of the total turnover was only 1.81% in Hungary, compared to the EU's average of 2.21%, or that of the excelling countries', such

as Sweden (4.45%) or Finland (3.37%) [15]. However, it is not only the percentage of total turnover for innovative expenditures that is dissimilar, but its distribution as well.

As it is displayed on Figure 5 Hungarian SMEs hardly ever spend on acquisition of external knowledge, whether due to lack of financial means or intent is yet to be explored. They spend about 40% less (compared to the EU average) on innovations that transcend their ventures' boundaries and half the proportion on internal (intramural) innovations. The majority of innovation costs is spent on machinery, equipment and softwares, on so to say "innovation raw materials" that enable them to create products that match their consumers' needs better or deliver innovative services.

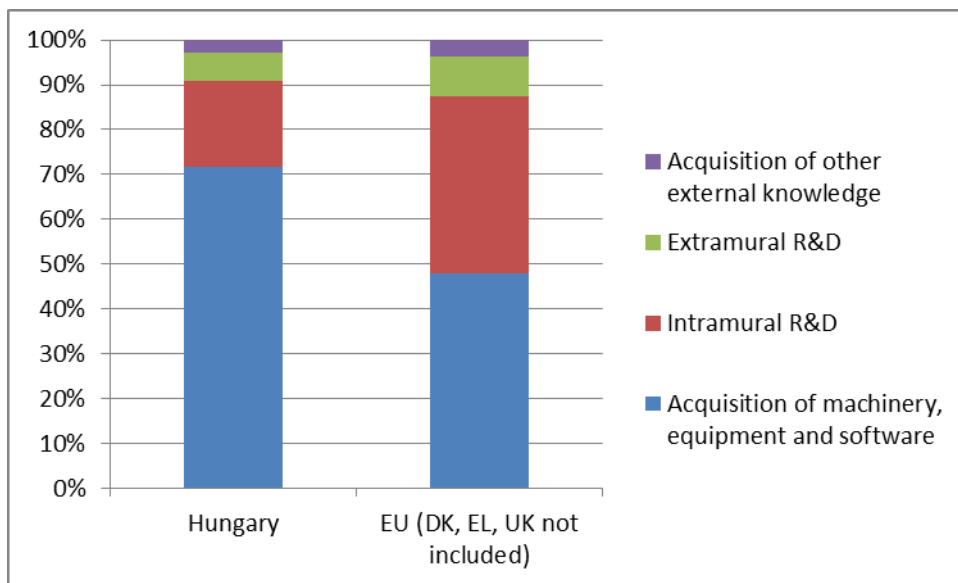


Figure 5. SMEs' distribution of innovation expenditure by type of activity in 2008 [15]

However, it is important to know, that in line with the inborn inertia of systems, for small ventures, if left alone, it is very hard to innovate on their own. They usually lack financial as well as information and knowledge to do so.

2.4 NETWORKING

Since Hungarian SMEs are characterized by low innovative activity it would be in their best interest to establish and maintain a supportive belt that can provide inputs and feedbacks for innovation. However, due to the surrounding national culture being principally individualistic SMEs and their owners/manager usually lack sufficient social capital [16]. This is why most SMEs pursue innovative activities on their own: they refuse to open to, or cooperate with, others [17]. What is more, according to the Innobarometer [18] survey staying away from active participation in networks is the main strategy of companies and if they join a cluster, their major aim is to reduce tax on R&D and innovation. What is more, the majority of companies, (around 60%) do not even know about business clusters and the potential advantages offered by them. Hungarian business ventures possess the least diverse network in the whole European Union. Figure 6 indicates the Partnership Diversity Index of the EU and its member states displaying the average number of the partnerships with public administration, financial institutions universities and other education

institutions, public laboratories or research centres, large companies, small and medium enterprises of the region and newly established companies.

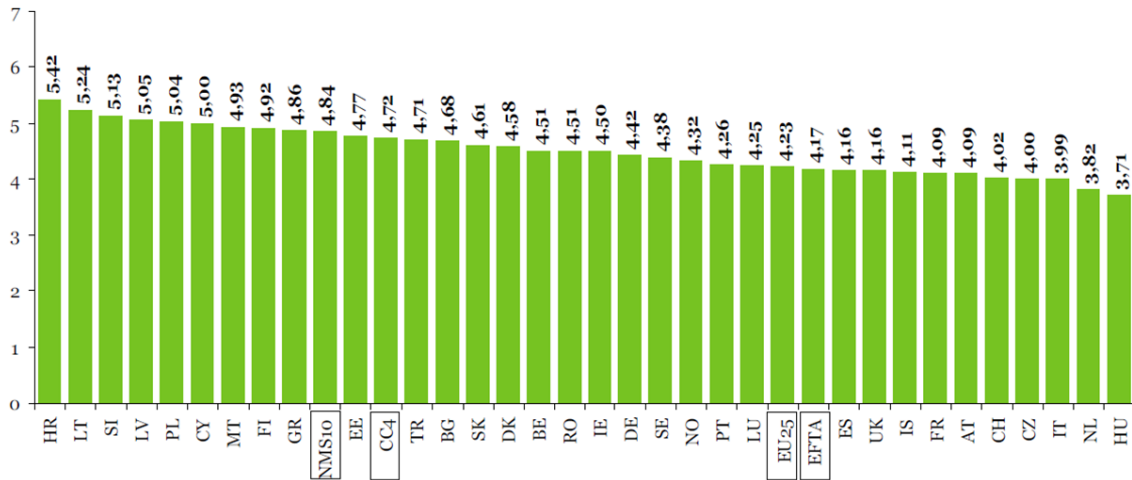


Figure 6. Partnership Diversity Index [18]

However, it is important to know that most of the connections that are indispensable for the success of an entrepreneur are not contract based [19]. Informational support (data on different aspects of the environment), tangible support (material, financial resources), along with emotional support (love, trust and respect) and positive social support (quality time) are essentials, and for entrepreneurs – especially with businesses in the growth phase - it is a must to accumulate social connections to individuals, groups and organisations. Accordingly, setting up, balancing and maintaining social ties/networks are considered essential [20]. What is more, according to Klyver's and Hindle's [21] research data social ties do not only provide various benefits to entrepreneurs, but affect, or even determine the entrepreneurial orientation, the opportunity recognition, the intention of starting a business venture and the final decision whether to become an entrepreneur as well.

In line with this Tóth-Bordásné [22] found that for 71.2% of the enterprises involved in her survey (N=486) think that a higher level of trust would largely contribute to innovation in the world of business. Around two-thirds of the enterprises (65.8%) assumed that closer connection and cooperation with customers would also boost innovation.

3. WHERE CAN HIGHER EDUCATIONAL INSTITUTES HELP OUT?

The success of SMEs is highly dependent on the skills and competences their manager possesses. Entrepreneur as owners and manager of business ventures influences performance of SMEs by defining objectives, recognizing and minimizing obstacles to the achievement of those objectives, and effectively planning, organizing, and controlling resources - within and outside the organisation - to attain high levels of venture performance [23]. However managing a growing SME effectively can be a difficult challenge for many entrepreneurs since most of them have never received formal training in management. Their points of reference are only their peer entrepreneurs, family members and potential previous bosses who also might have never been exposed to formal entrepreneurial training beforehand.

Although it's not necessary to have formal entrepreneurial education to be an effective manager, but the concepts and tools provided via formal training can lead to more effective business performance. Hence the role of higher educational institutes is clearly defined. However, according to Tóth-Bordásné's [22] research conducted among 486 enterprises, unfortunately there is remarkably little cooperation or even willingness to cooperate with tertiary institutions. The few existing relations were mostly dominated by short-term entrepreneurial interests, and were themselves only short term.

In line with this, higher educational institutes should offer and provide more than just formal education and knowledge transfer. The newest idea is the creation of innovation clusters, where universities may help joint partners with HR upgrading, business development, monitoring and reporting and commercial collaboration. They may undertake tasks, such as organising events and trainings, information and contact brokerage, networking, lobbying, practical assistance and advice, direct financing and providing facilities [24]. According to the Innobarometer [18] survey, the most important areas where the members of a business cluster would prefer to get more support from the public domain are in facilitating administrative procedures, in facilitating information flow. What is more, clusters can mutually increase their members' efficiency by developing interdependencies and complementarities which are not always well exploited in a competitive market environment. Consequently; clusters help to generate trust and engage in collaboration by improving mutual learning and common strategies [25].

Hence university – business clusters play an important role in innovation through gathering academics, researchers, creative people and enterprises to catalyse the creation of new products and services and contribute to their members' success [26].

What is more, higher educational institutes cannot only participate in or form business clusters, but can become entrepreneurs themselves by establishing their own spin-off venture(s) [27]. This way, the members and leaders of SMEs created by the universities are not only in possession of the sufficient knowledge, but already enjoy the advantages of the higher educational institute as a community with high potential of innovation and extensive knowledge about the business environment.

REFERENCES

1. SBA, A recovery on the horizon? - Annual report on European SMEs 2012/2013, SBA, 2013.
2. KSH, The situation of SMEs in Hungary (in Hungarian), Statisztikai tükör, 7 (108), 2013.
3. European Commission, Innovation Union Competitiveness Report 2011, European Commission, 2011.
4. Eurostat, DG Research and Innovation 2011, Eurostat, 2011a.
5. R. Hisrich, Small Business Solutions How to Fix and Prevent the Thirteen Biggest Problems That Derail Business. McGraw-Hill, New York, 2004.
6. M. Vágási, (Ed.), Marketing – Strategy and management (in Hungarian). Alinea Kiadó, Budapest, 2007.
7. F. Katona, Managerial challenge of the contemporary society, Babes-Bolyai University, Cluj-Napoca, 2014a, in press.
8. F. Katona, On-Line Journal Modelling The New Europe 2014/10, 2014b, p. 29-41.
9. SBA, SBA Fact Sheet 2012 - Enterprise and Industry – Hungary, SBA, 2012.

10. GEM, Global Entrepreneurship Monitor 2012 Global Report. downloaded from <http://www.gemconsortium.org>, 2012.
11. K. Lazányi, On-Line Journal Modelling The New Europe, 2014/10, 2014, p. 17-28.
12. I. Marosi, FIKUSZ Symposium for Young Researchers Proceedings, Budapest, Óbuda University, 2013a, p. 7-19.
13. OECD, SMEs, Entrepreneurship and Innovation – Hungary, OECD, 2010.
14. M. Csath, (Ed.), Analysis of supportive and hindering factors of the domestic SMEs' innovation (in Hungarian), Székesfehérvár, Kodolányi János University College of Applied Sciences, 2011.
15. Eurostat: Community innovation survey, Eurostat, 2011b.
16. K. Lazányi, The role of social support in an individualistic society, A Virtuális Intézet Közép-Európa Kutatására Közleményei, 4(2), p. 51-58, 2012.
17. I. Marosi, Trust and innovation in Hungarian SMEs, Economists' Forum 2013/6 16(115), 2013b, p. 117-133
18. European Commission, 2006 Innobarometer on cluster's role in facilitating innovation in Europe, The Gallup Organization Hungary & Gallup Europe, 2006.
19. E. L. Hansen, Resource acquisition as a startup process: Initial stocks of social capital and organizational foundings. downloaded from: <http://www.babson.edu/entrep/fer/IV/IVB/html/Iv-B.html>, 2001.
20. A. R. Anderson, S. L. Jack, S. D. Dodd, Family Bus Rev, 18(2), 2005, p. 135- 154.
21. K. Klyver, K. Hindle, Small Business Research, 15(1), 2007, p. 22-37.
22. I. Tóth-Bordásné Marosi, A. Bencsik, Organisational Behaviour – the force of trust (in Hungarian), Győr, Universitas-Győr Nonprofit Kft., 2012.
23. T. Duening, R. Hisrich, M. Lechter, Academic Press, London, 2010.
24. European Commission: Innovation Clusters in Europe: A statistical analysis and overview of current policy support, European Commission - Enterprise and Industry Directorate-General, 2013.
25. European Union: EPISIS final report: Policy recommendations to support service innovation, PRO INNO paper n° 20, European Union, 2012.
26. R. Reiner, C. Gelzer, Cluster policy in the context of EU strategy 2020, Enterprise and Industry Directorate-General Directorate D2 - Support for innovation, 2010.
27. M. Wright, B. Clarysse, P. Mustar, A. Lockett, Academic Entrepreneurship in Europe. Edward Elgar, Cheltenham, 2007.

APPLICATION OF PROCESS MANAGEMENT IN BUSINESS PRACTICE

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Abstract

The paper is focusing on the issues of improving the quality in business processes. The analysis and monitoring of quality is incessantly important these days. It is the quality which represents one of the basic ways of how to achieve a competitive advantage among competitors. Through the use of quality improving instruments we subsequently reach the demanded level. In the paper we deal with Six Sigma methodology application with the use of concrete instrument, planning of experiments to eliminate the problem areas of the company.

Keywords: Six Sigma. Design of Experiments. Quality. Improvement. Company.

1. INTRODUCTION

We deal with the issues of quality improvement in selected company. The quality itself, as well as the question of reaching maximum quality generally, is very actual nowadays. We can observe that issues of lowering costs have shown in the form of decline of reached outputs quality in selected company. In fact, this situation has in many cases lead to decline of interest in company's products, because due to the continuously high competition these products have become less competitive. Based on this fact, it is important to track the achieved quality level of production and at the same time track also the costs, where there have to be a link between these two variables. It is impossible to reach the quality growth unlimitedly, because in that case, it will clearly have an influence on the rise of costs as well as on reaching particular critical values of economic indicators.

2. SYSTEMS OF QUALITY IMPROVEMENT

Total quality management is a system which has to be accepted throughout the company. It is based on the existence of effective documented treatments in the individual elements of the company. Concurrently the economic side of quality improvement plays one and the same importance, although it is not a necessity with the regard to the cost of quality [1]. Besides TQM is also defined by El-Haik a Yang that claims „*TQM is a management approach to long-term success through customer satisfaction, and this approach is based on the participation of all members of the organization in improving processes, products, services and culture in their work*“ [2].

Following to the system TQM comes with new methodology Six Sigma that was created in early eighties. It has been popularized just by using of the company General Electric. It has used the knowledge that were presented by TQM but now the mentioned approaches have gotten commercial. The aim of methodology Six Sigma is to ensure perfect quality and status when the origin of reject is impossible. According to the conditions the origin of reject will not happen. According to Pande et al. „*Six Sigma is a comprehensive and flexible system for achieving, maintaining and maximizing business success.*“ [3]

Six Sigma is based on customer needs and expectations. Management could use Six Sigma that may proceed through the following strategies:

- process improvement - continuous improvement
- process design - discontinuous improvement
- process management
- combination of previous strategies.
-

As part of these methodologies and philosophies the experiment is monitored that is a way to identify and describe the behaviour of the target entity. Typically, an experiment is based and contains a selected number of attempts. The factors represent defined cause. The impact of factors on the response is monitored, ie the target value of the observed variable. Normally it is based on the choices that between the factors and the response there must be a causal-consequential relationship [4].

Planning of experiments comes out from the mathematical modelling, where in these experiments we assume that it describes and is based on the existing physical or chemical laws [5] At the end of each experiment planning is a mathematical model, which has to be based on the function, either generally linear or non-linear too. Such a function can be written as follows:

$$y = f(x_1, x_2, \dots, x_n) + \varepsilon \quad (1)$$

where ε is the experimental error (deviation of the experiment). This tolerance experiment expresses the difference between the assumed and actual response value, which means that between y and (x_1, x_2, \dots, x_n) is probably not a deterministic functional relationship. This is due to: [6]

1. Uncontrollable factors (z_1, z_2, \dots, z_p) affecting the response y , but are not included in equation (1).

2. Errors of experiment and also errors of measurement errors on both sides of the equation y and (x_1, x_2, \dots, x_n) enter into a functional relationship.

Just planning of the experiments is served to detect these dependencies between individual factors and their impact on the response. We assume that these effects are not random, but are based on specified relations and operate continuously as well. Therefore, we assume that it is necessary to monitor the connection between factors. Subsequently, based on a set of factors, which can be written as (x_1, x_2, \dots, x_n) [7]. Within this we can then distinguish between significant and insignificant factors, and the significant factors can be included in the analysis, especially if there is prediction of the existence of impacts based on theoretical assumptions.

According to Phadke planning of experiments should substantiate the main information on the relationship between the factors and response with minimal effort and cost, in which case it is necessary to also consider it before the implementation of the experiment, and if these questions cannot be answered in advance. It should also consider whether it is necessary to carry out more experiments, or is it just a one-off task. In addition, the experiment must be defined clearly and precisely, often based on past experience and conclusions. Planning of the experiments yet does not interfere directly in the production process as such, because it is not online quality control. [3]

3. ANALYSIS OF THE EVOLUTION OF ECONOMIC INDICATORS

When monitoring the activities of the company, we analyzed the economic indicators aiming to identify the problem sources, which were signaled by the management. This is how we monitor the decline in the amount of profit. Analyzing the amount of profit we find out, that from 2010 to 2011 there was an increase in the amount of profit. In 2012, there was a moderate decline of the profit, which had been caused as well by investment costs used for procurement of cogeneration unit and considering the adjustments in production, which were realized with our assistance. Regarding this reason the production was stopped for a certain time. Therefore a decline in amount of profit occurred during the monitoring period. On the other hand we can see that the trend in 2013 is very critical. There was a slump in the profit.

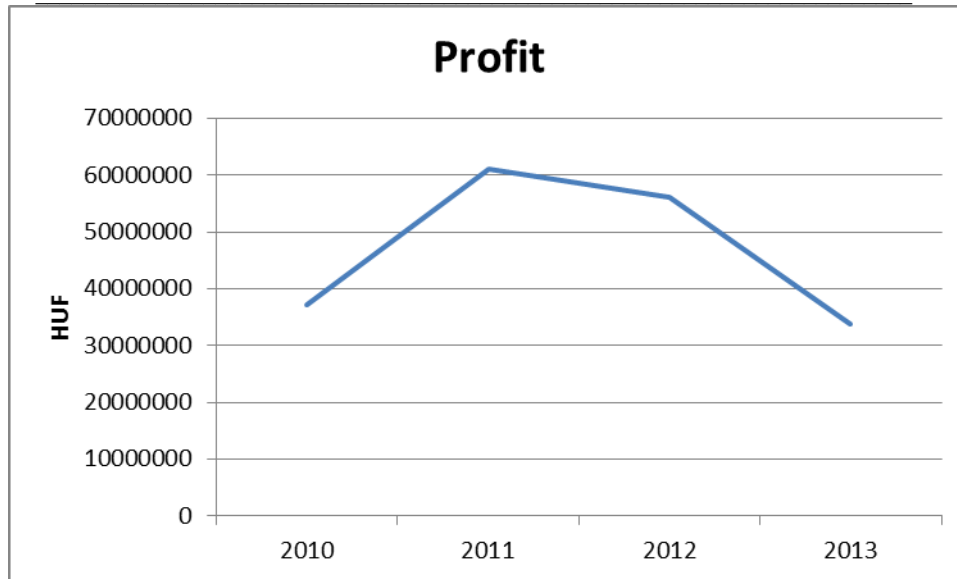


Figure 1. Trend of company's profit

Based on this fact, it was necessary to identify reasons and causes of such critical situation. In our case, the main duty was to find the reasons of profit decline. Therefore we have focused on the element, which is created and mostly affected by the profit and those where operational costs. In this case we can see, that the amount of operational costs is continuously increasing during the whole period of monitoring. This may be also positive trend, since the increase in the amount of production was expected too during monitored periods. The agreed amount of supply was as well rising each year, because even though there was an inflation it was still possible to evaluate this trend positively.

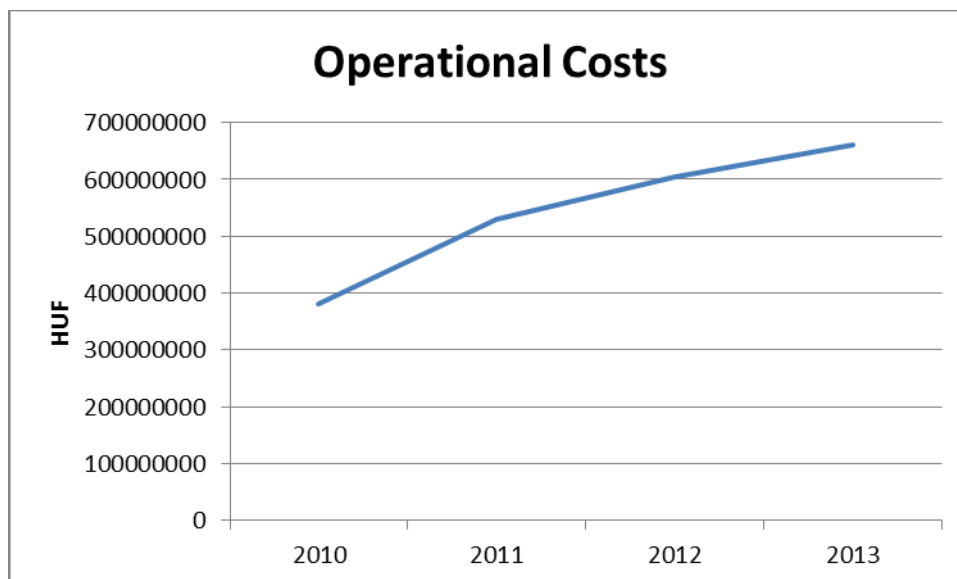


Figure 2. Trend of operational costs

We have calculated the share of operational costs afterwards, which one unit of output produced in the same year get. We can see, that this share is continuously increasing, although it should have been stable based on the quality of production. Regarding this fact, we have decided to monitor the production process. Within the frame of this process, products' repairs occur, therefore there is a reverse production.

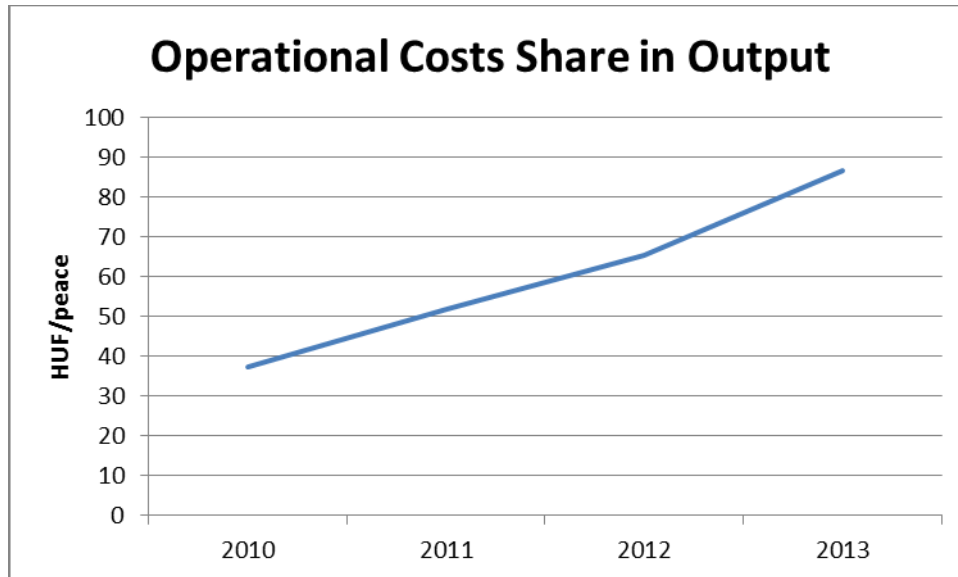


Figure 3. Trend of the operational costs share in output

Considering the mentioned problem, we focused on monitoring of reality in correction production, and thus on the repairing of product, which has already been produced. In this case we discovered, that the percentage of repairs is gradually increasing, while since 2011 has the growth reached substantial values. The rate of product repairs was at the level of 12 percent in the first two years, but since 2012 we noticed the rate of approximately 17 % and in 2013 the rate reached the level of 24 percent, which is considered to be a critical state. In this case, quarter of all products are defective and so have to be repaired. The production therefore uses 20 % of its resources for product repairs. Therefore we can consider this fact as the cause of mentioned slump in terms of production, since the production capacities are fully used, but they are used for repair of already produced items, not for a production of new ones. Because of this reason, we decided to focus on the monitoring of causes responsible for mentioned negative state.

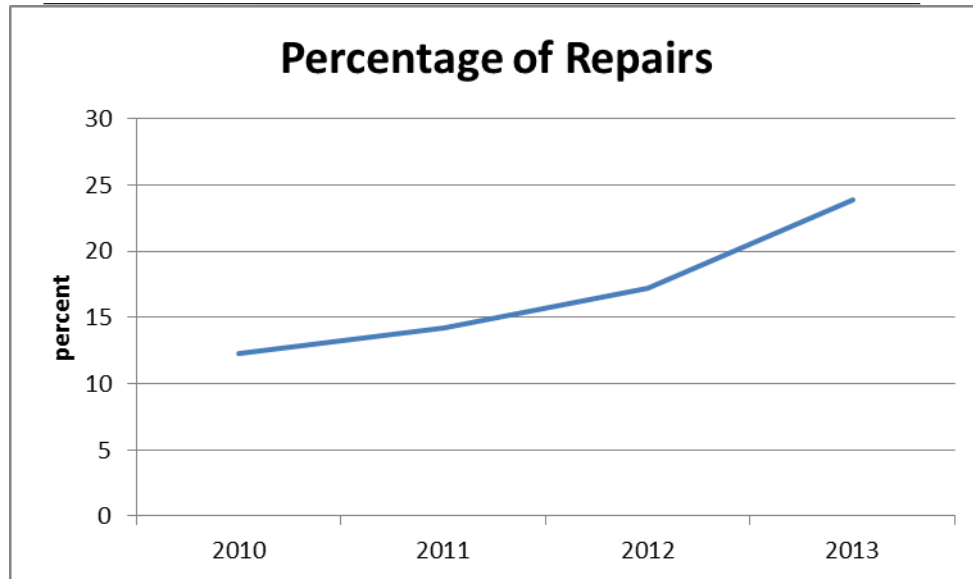


Figure 4. Evolution of the percentage of repairs

4. CHARACTERISTICS OF THE PRODUCTION PROCESS

Then it deals with the description of production. Within the design phase, there is a description of the environment and the individual processes that are carried out in production. On that basis, we can get a brief overview of the situation in the company as well as critical points, which is a problem in the company. The process itself in the company, which provides raw wood flooring, consists of a total of seven phases. These phases are arranged in chronological order and interlock. We also assume that the particular stages could be possible displayed deeper through maps and there are devoted subsequent parts of this subchapter.

At the beginning the entire process of wood flooring begins with sourcing of the materials. Imports of materials is carried out through lorries, trucks usually that import wood directly from producers in the regions of Slovakia.

Following this stage after unloading imported wood and its storage at the warehouse, there is its cuts and preparation for processing. Usually it leads to remove residual cortex, which is located on the wood well to identify any errors in the wood.

After preparing the wood and the incision the grain of the wood should be checked and its suitability for use in the manufacture of parquets. Since a company produces the parquets of high visual quality, in this case it is necessary to carefully select the elements of the wood, so that drawing does not appraise this approach. In this way the wood is broken down into three groups, namely the first and second quality and consequently waste, which is subsequently processed by other means.

After selecting wood and initial processing there phase of wood treatment occurs and its training directly on the production process. In this case, the wood has drying treatment and finalizes in the form of grinding and cutting out the required length and shape.

After each step there is a selection of wooden intermediates in the quality again into three categories, namely, first grade, second grade and waste, which is shifting to other processing. In the case of non-conforming products, and they can be treatment, so this is carried out subsequently, in order to ensure the quality of the set back.

In this treatment the modified wood comes to finished product and milled tongue and groove and surface grinding. Based on previous recommendation it also comes to the first stained wood preservative and filling. Then again phase is completed by quality control.

The last phase presents delivery and removal. Goods are packed in packages that are placed on EUR pallets. The weight of the pallets is approximately 1 ton. Transfer package is ensured by forklifts and ancillary carriers as trucks that have sufficient capacity. Loading pallets onto trucks is also ensured through forklifts.

5. IDENTIFYING POTENTIAL SOURCES OF ERRORS

In monitoring of these errors and the manufacturing process itself it has been found that in the system there are several types of errors that have relatively regular character. Overall, we have identified in the production of the following 5 major mistakes that are required for analysis. Based on the assumption that these errors are involved in the greatest number of weaknesses that are monitored.

The production of parquets for the period of February 2014 is evaluated. In this case, we found that these errors occurred in the following frequencies. In order to determine the actual status the company has decided to monitor the entire production and not only specimen collected elements to control. Therefore, we can observe a relatively high number of errors that we have found.

Table 1: List and frequency of errors

Codes	Errors	Occurrence
1	inaccurately cut depth of the grooves	2217
2	jagged edges	1726
3	imperfection wood material	1640
4	black line along	1637
5	black lines cross	1277

Based on these frequencies at the same time we create a Pareto chart. We can see that the highest proportion of errors reach inaccurately cut depth of the grooves. In this case, the number of such errors is two thousand per month. Listed errors sometimes occur while at the same time on a single product, so we can not assume that it was the number of defective products.

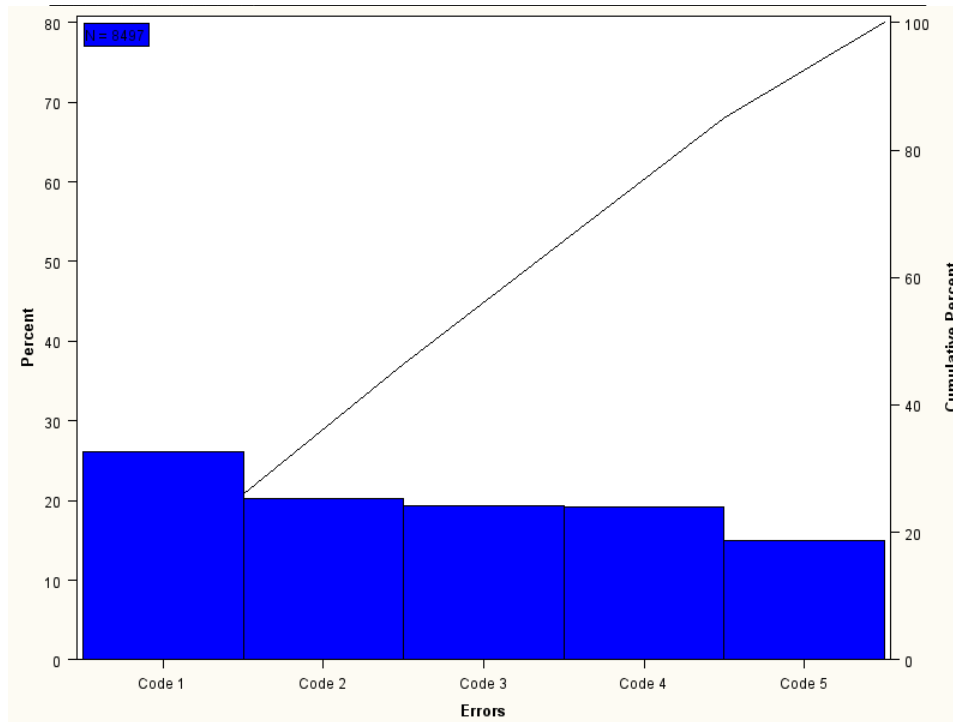


Figure 5. Pareto diagram of errors

We have identified a major problem for the case of sufficient depth milled grooves. For this problem we decided to create a planned experiment by which we want to optimize production and minimize the number of errors in production from this perspective.

6. DESIGN OF EXPERIMENT FOR ERRORS

In view of the above conclusions, which are stated above, we decided then to highlight the problem posed by inappropriate milled grooves. To this end, we have focused on the creation of an experiment through which we will create a design and identification of the optimum conditions that result in minimizing errors.

In our case, after consultation with experts from the company as well as other experts we have decided on these two factors that we monitor. In our case, of:

- cutting speed, which is set on the machine,
- (shift) speed of printing parquet in the milling cutter, which can be set in the form of pressure, therefore, this variable is designated as shift.

Cutting speed is adjustable while only in units that indicates the machine. On the machine are indicated by the values from 1 to 10. According to our experience we have found that speeds from 5 to 10 can only be taken in account and for that reason of such activities also in our experiment. The second factor is the shift parquet during milling, which use variable pressure and at 50 and 100.

Table 2: Determined level of factors

Factor	Lower level	Upper level
Cutter	5	10
Shift	50	100

For the development of the experiment, we chose the following system. Implementation and statistical processing of the experiment had been done through software SAS 9.2 and various auxiliary calculations are also conducted through SAS Enterprise Guide 4.2.

Table 3: Design parameters of the experiment

Design Type	Two-level
Design Description	Full Factorial
Number of factors	2
Number of runs	16
Resolution	Full
Number of replicates	4

Listed monitored measurements show the following chart. In this case, we start from chronological order of display, where we present the results in the order we conducted an experiment. When analysing the errors we used always the same volume of produced pieces of parquet. On this basis, we decided to track the number of 150 pieces of parquet. After their production, we changed the settings and production started on. Following data show the number of errors for the following 16 measurements that we have implemented.

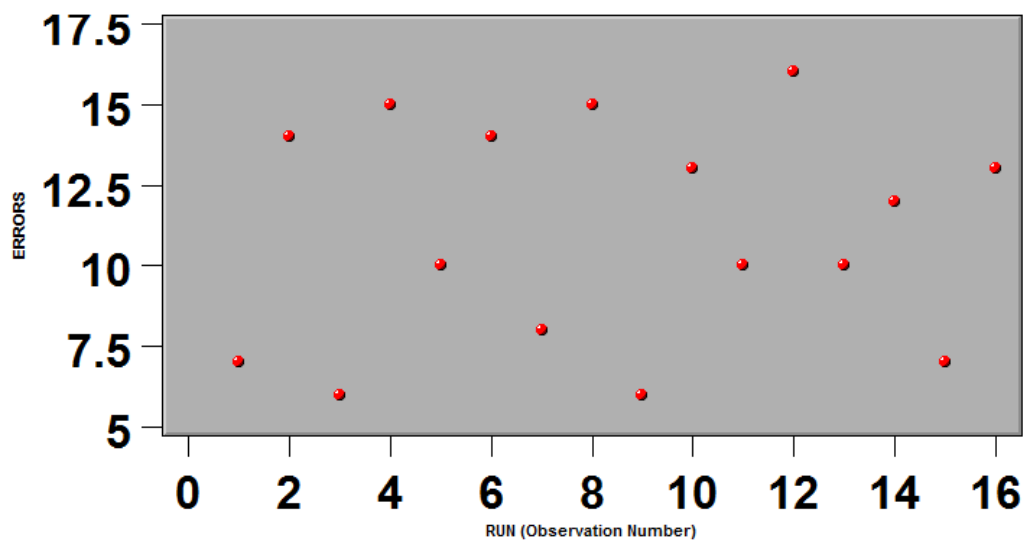


Figure 6. Display of measurement values

Listed measurements were used for the analysis of individual impacts of these factors, which we analyze. We found out, that each factor represents specific impact. While the second factor has shown low level of statistical significance on the response.

Table 4: Test of the model significance

Source	Master Model					Predictive Model				
	DF	SS	MS	F	Pr > F	DF	SS	MS	F	Pr > F
CUTTER	1	144	144	59.58621	<.0001	1	144	144	59.58621	<.0001
SHIFT	1	1	1	0.413793	0.5322	1	1	1	0.413793	0.5322
CUTTER*SHIFT	1	4	4	1.655172	0.2225	1	4	4	1.655172	0.2225
Model	3	149	49.66667	20.55172	<.0001	3	149	49.66667	20.55172	<.0001
Error	12	29	2.416667			12	29	2.416667		
Total	15	178				15	178			

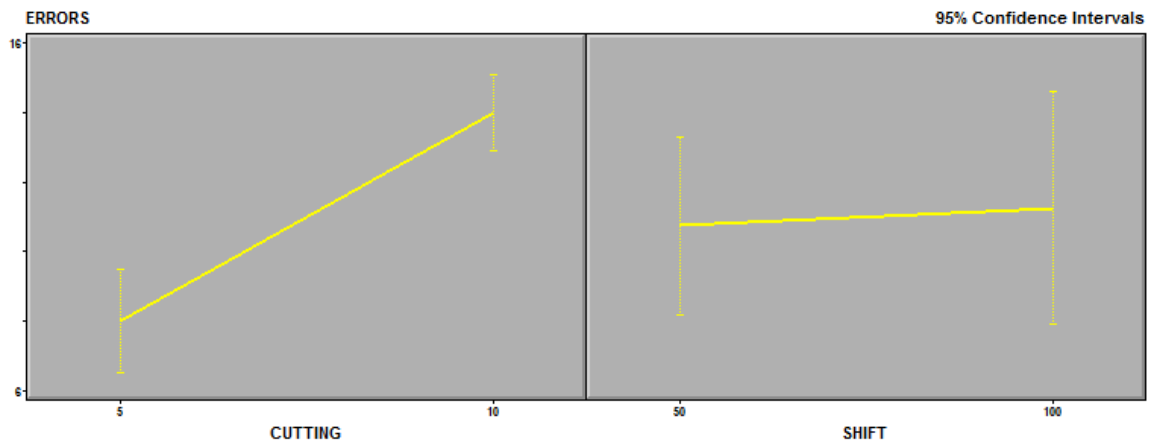


Figure 7. Graphs of main factor's affect

In doing so from the perspective of the experiment, it is important to monitor not only themselves but the effects of these factors and their interactions. Therefore, we follow the following picture, where we find that the individual curves intersect each other and thus the interaction between variables is significant. This being so, then it is necessary for the subsequent analysis, consider the representation of the interaction and inclusion in the final regression model.

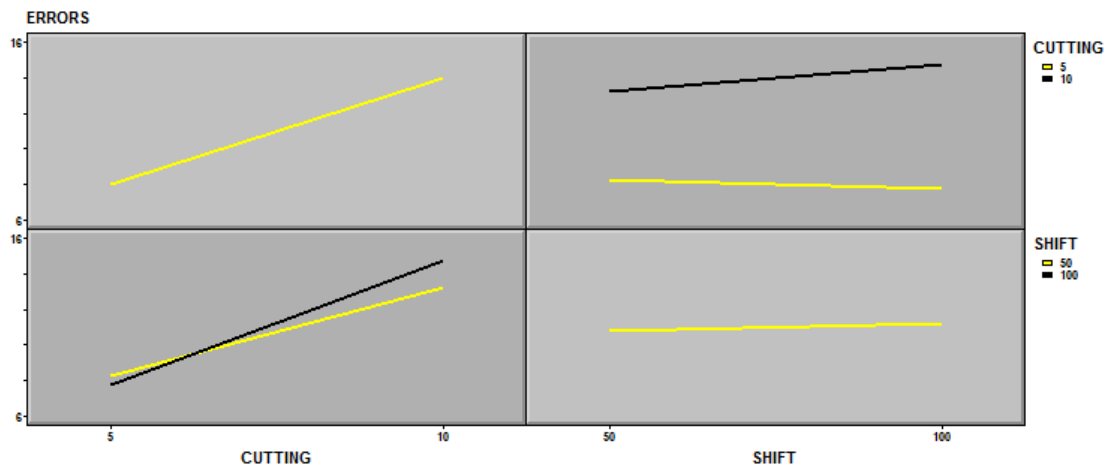


Figure 8. Graphs of interactions

In addition to this investigation's impact factors, we decided to analyze directly the already value of errors. We show results not only through the average, but also through boxplots that can also display the approximate shape of the distribution of the file where it shows first, minimum and maximum as well as intermediate value. We can see that at low settings cutters achieve better results than in the case of higher values.

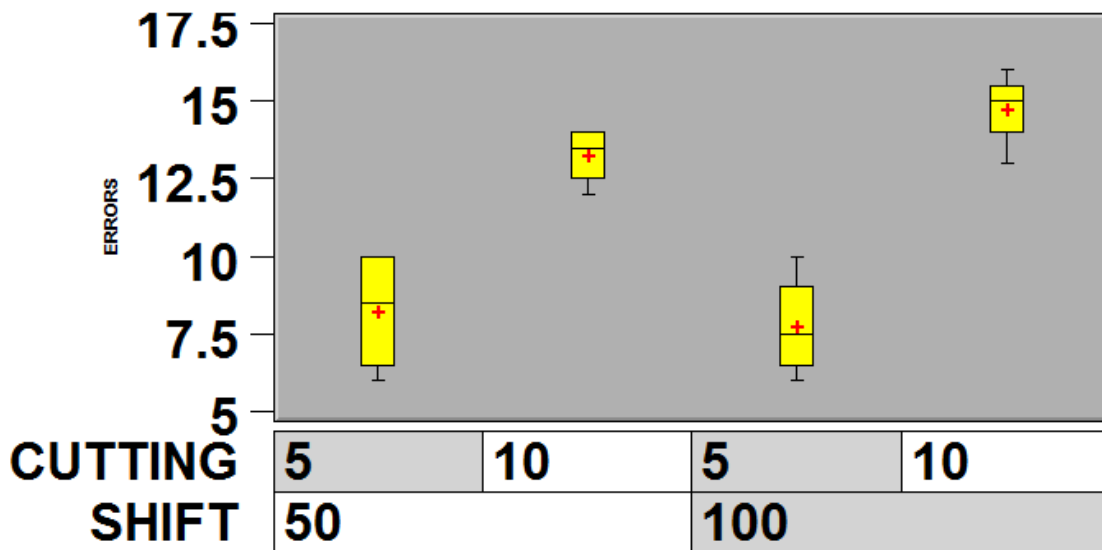


Figure 9. Boxplots of particular groups of measurements

Consequently, we thus show a count and interval estimates of the number of errors for each setting of the parameters. However, as the production of life-threatening directly, we decided to consider the significance level of 5%.

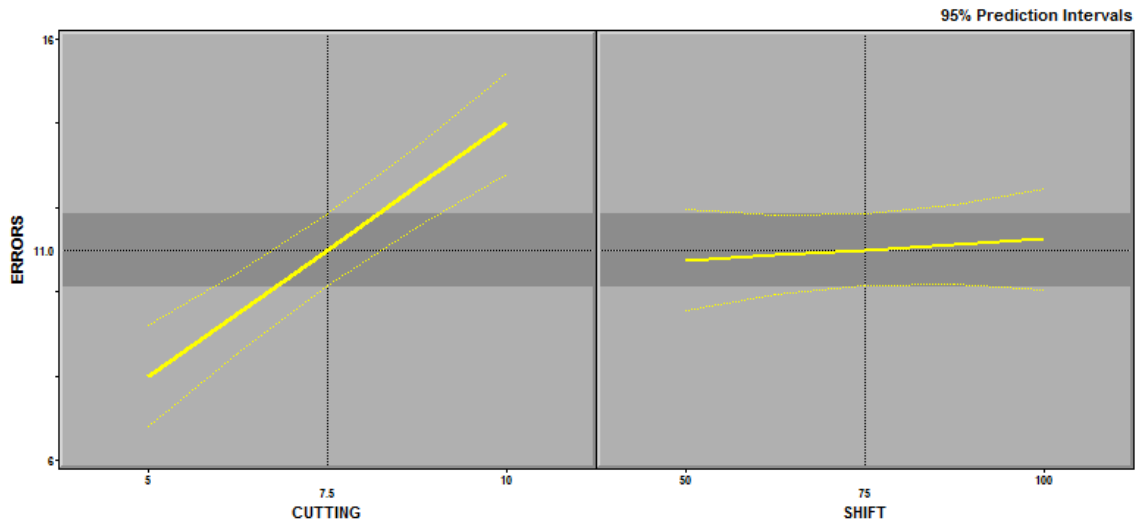


Figure 10. Display of individual confidence intervals

These results have been used for the production of the prediction model. The prediction model represents the linear regression, which yet contains a parameter interactions. In this case, we show the result as follows.

Predictive Model for ERRORS	
Coded Levels(-1,1)	ERRORS = 11 + 3*CUTTER + 0.25*SHIFT + 0.5*CUTTER*SHIFT
Uncoded Levels	ERRORS = 5.75 + 0.6*CUTTER - 0.05*SHIFT + 0.008*CUTTER*SHIFT

Figure 11. Predictive model

The results of the regression models for predicting values can also displayed by following surface chart that displays the values. Thus we have found the following facts that the highest error rate has been recorded at the highest setting. However, the graph does not show interactions.

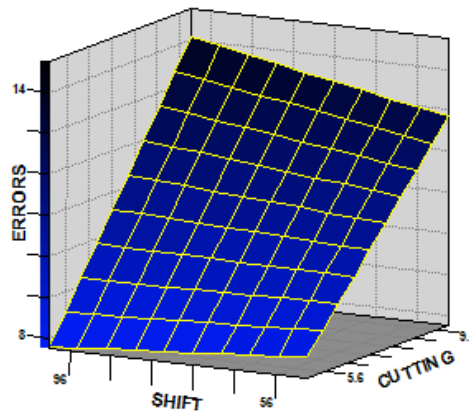


Figure 12. Surface graph of number of errors in the process

The best setting is concurrently because of the strong interaction at intermediate settings. In this case it comes to the point of setting the value and minimizing the errors.

Factor	Optimal Setting	Response	Estimated Value
CUTTER	7.5	ERRORS	11 [10.15322,11.84678]
SHIFT	75	Desirability	50.00%

Figure 14. Optimization of the settings
 Prediction Profile Settings

7. APPLICATION'S PROPOSAL

The pilot application of mentioned results has happened in April 2014 in the company. Subsequently, the monitoring of economic and technical contribution of individual measures will be monitored in next time. We have found that a decrease repair products has happened to around 13% of total production. Previously in 2013 there has been a finding necessary repairs to approximately 27% of products. Stated value should therefore provide operational cost savings of around 140000 euro per year. The mentioned benefits represent a significant cost savings considering the total volume of profits, whereas the savings should represent the finality of revenues, since sales volumes have remained unchanged.

8. CONCLUSION

Quality improvement is historically very actual as well from the point of continuous competitiveness of the company and its products on the market. We found out, that despite the on-going quality improving program in selected company in the past, we noticed a problem in the realm of profit volume, which was found in the year 2013. In this case, the

situation made an impulse on finding the problem in production. We identified the problem where the products, which have already been produced, must be repaired to be sold as faultless. This fact caused the slump of the profit in 2013. We solved this problem afterwards by the use of planned experiment, where we firstly analyzed the economic factors of the company and identified the problem, which in our case was, that instead of producing new items, the company had to repair already made production. We identified the main problem in milling the grooves in parquets. For this operation, we created a planned experiment. Its outcome is the identification of settings, which are suitable for production. Using these settings we can achieve improvement of current state aiming at minimization of the need to repair products and so achieving better economic results. The verification of advantageousness was realized only in short term monitoring. Considering the first results, there should be a decline in the need of product repairs to the level of 2011, and so to the level of 13 % from the current level of 27 % in 2013. This 50 % savings can have a significant economic contribution and therefore help to decrease the operational costs.

REFERENCES

1. A. V. Feigenbaum, Total Quality Control. McGraw-Hill, New York, 1983.
2. B. El-Haik, K. Yang, Design for Six Sigma: A Roadmap For Product Development, McGraw-Hill, New York, 2003.
3. M. Phadke, Quality Engineering Using Robust Design. Prentice Hall, New Jersey, 1989.
4. M.J. Anderson, P.J. Whitcomb, DOE Simplified: Practical Tools for Effective Experimentation. Productivity Press, New York, 2007.
5. JMP. Design of Experiments. SAS Institute, Cary, 2005.
6. R.A.Bailey, Design of Comparative Experiments, Cambridge University Press, Cambridge, 2008.
7. V. Anderson, T. Lorenzen,, Design of Experiments, CRC Press, New Jersey, 1993.

ATTITUDE OF YOUNG SLOVAK PEOPLE TOWARDS FAMILY ENTERPRISES IN CONNECTION WITH WOMEN'S LEADERSHIP

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Abstract

On the labour market, young people and women are the most disadvantaged. There are two types of active employment options: being employed or self-employed. The question is that, apart from the competences, how prejudices against women – if there are any at all – affect women's career. Another intriguing question is that how the opinions regarding the women's roles affect women's career plans in any field but mostly at family enterprises. A quantitative research, carried out among young people in Slovakia (Generation Y) at the beginning of 2014, has confirmed that young women and men still think that women should primarily fulfill their family roles. However, women wish to have a career, and every third woman out of all the respondents is planning to take over their family business. On the other hand, the attitude of men represents the masculine values regarding both the roles and the male-female leadership.

Keywords: family business, generational change, career attitude, labour-market entrants

1. INTRODUCTION

According to Hofstede's model, on the basis of the estimated values, Slovakia is characterized by extremely high power distance (PDI 104) and strong individualism (IDV 52). The model also shows excessive masculine values (MAS 110), average uncertainty avoidance (UAI 51) and is characterized by short-term thinking (LTO 38). The national culture, as software of the mind, pervades our lives [0]. Values belonging to the culture are acquired during socialization and every declared and followed value helps the individuals achieve their goals [0,0].

Competition within the culture is sensible on the labour market, too. Graduation itself is not enough for an entrant [0,0]. In the time of their grandparents, a freshly acquired diploma guaranteed well-paying jobs, but nowadays, contacts, luck and perseverance are the most important factors [0]. Young people feel that they have to work even harder in order to excel among their peers. The main problems the entrants face on the labour market is the lack of experiences and plans or even their over-qualification, though many of them can become a leader within a short period of time. This is partly related to the fact that this generation has grown up in the age of technological boom. Leaving their schools, they are open-minded and full of energy and new ideas. Another big advantage is that the freshly graduated people possess the most recent professional knowledge; they know the latest techniques, methods and technologies [0].

2. LITERATURE BACKGROUND

The effects of the sub-prime crisis are still felt in every countries, especially in Visegrad-4 countries too.[0] Slovakia has one of the highest unemployment rates (13.6% in 2013) in the European Union [0,0]. One of the most endangered groups is young people aged 15-24 years and people aged 25-34 years. These two groups add up to almost 50% of all the unemployed people (48.6%) in the country.

Different age groups (generations) have different attitudes, behaviour, expectations, habits and characteristics [0,0] Characteristics of today's young people, also called Generation Y (born between 1979-1994):

- Ambition: 84% profess to be very ambitious,
- Loyalty vs. Quest: 45% expect to work for their current employer for their entire career,
- Multicultural Ease: 78% are comfortable working with people from different ethnicities and cultures,
- Healing the Planet: for 85% it is important that their work make a positive impact on the world,
- Networking by Nature: for 48% to have a network of friends at work is very important [0].

The second most concerned group is women. Hardly more than 50% of female employees are actively present on the labour market. Although men's activity rate is higher, this rate has shown a slight decline between 2009 and 2013. (*see Table 1*)

Table 1: Activity rate in Slovakia

Gender	2009	2010	2011	2012	2013
Female	54.4%	54.9%	53.6%	53.6%	54.6%
Male	71.5%	71.6%	70.0%	70.6%	70.3%

Source: own compilation on the basis of the data of the Statistical Office of the Slovak Republic <http://px-web.statistics.sk/PXWebSlovak/>

Among active employees, the number of unemployed people had shown increase until 2012. From 2010 to 2012, the number of unemployed men increased by 1%, while in 2013, it decreased in the same proportion. Although the number of unemployed women had shown more significant changes, in 2013, it also started to a decrease compared to the previous year. (*see Table 2*)

Table 2: Number of unemployed in Slovakia, 1000 people, unemployment rate %

Gender	2010		2011		2012		2013	
	people	%	people	%	people	%	people	%
Female	212.9	11.9	203.6	12.9	203.9	13.74	210.5	12.7
Male	176.2	13.1	161.2	14.4	173.8	15.3	175.7	14.5

Source: own compilation on the basis of the data from the Statistics Office website <http://px-web.statistics.sk/PXWebSlovak/>

The number of women possessing academic qualification – as well as the number of men – has been rising continually (see Table 3). As a consequence, their economical activity has been rising too, [0] improving women’s chances of getting to leading positions. [0]

Table 3: Number of employees with higher education in Slovakia, 1000 people

Gender	2009	2010	2011	2012
Female	201.5	232.7	234.4	242.2
Male	205.9	217.1	225.4	223.2

Source: own construction according to data of the Statistical Office of the Slovak Republic
<http://px-web.statistics.sk/PXWebSlovak/>

However, a phenomenon, labelled as “glass ceiling” is also prevalent in the Slovakian economy. Females, although possessing the same qualifications and skills as males, tend to end up in lower positions and very few can achieve real leadership positions in large companies [0,0].

3. IMPORTANCE OF FAMILY ENTERPRISES

In Slovakia, family enterprises provide 49% of the added value by employing 71% of the labour force [0]. Besides the assets, social aspects also play an important role in the operation of family business. The ‘caring type’ of leadership is also frequent. [0]. That is why it is even more important for small enterprises to maintain the competitiveness, since this way it can be ensured that the businesses provide predictable livelihood for their owners and employees in the long run [0].

A group of experts set up by the European Commission has defined family enterprises regardless of size as follows:

„-The majority of decision-making right is in the possession of the natural person(s) who established the firm, or in the possession of the natural person(s) who has/have acquired the share of the firm, or in the possession of their spouses, parents, child or children’s direct heirs.

- The majority of decision-making rights are indirect or direct.
- At least one representative of the family or kin is normally involved in the governance of the firm.
- Listed companies meet the definition of family enterprise if the person who established or acquired the firm (share capital) or their families or descendants possess 25 per cent of the decision-making rights mandated by their share capital.” [0].

In Slovakia, business means that the employer, performs regular economic activity independently, on his/her own responsibility, in his/her name in order to make profit (513/1991 Commercial code). On the other hand, there is no any official, statistical definition for family business – neither in the majority of the states of the European Union. Family businesses are commonly regarded as a property possessed by one family that plans to hand over the business to the next generation. There are some subtypes of family businesses like the one owned by the family only partially, and where management control is quite dominant. They are typically managed by the family, and they employ family members [0].

The proportion of family enterprises is estimated to be approximately 80-95%, but it might be even higher in Slovakia [18,0]. According to their sizes businesses can be micro, small or medium-sized enterprises and their economic importance for the country is undisputed [0].

As far as our study is concerned, we are interested in young people's and mainly female young people's future ideas and opportunities on the labour market. There are two types of active employment options: being employed or being self-employed. The central question is that, beyond the competences, how prejudices against women – if there are any at all – affect women's career in any field but mostly in family enterprises.

As mentioned in the introduction, Slovakia

- is a strongly masculine-minded country and they do not mix the roles of genders;
- has high power distance value (the number of hierarchies established in the society and in organizations is high, and people accept the ways the power is exercised and the related rules of conduct);
- is also a highly individualistic society and, although they aspire for a balanced business and family life [0], individual actions and performances are only appreciated;
- characterized by short-term thinking and setting short term goals and, typical of the former Socialist countries;
- adapts to changes relatively quickly and tolerates environmental uncertainties relatively well.

In business life, the judgment of women's work, their place and role depends:

- on their sex,
- on general appreciation of the work,
- on the social norms of the era,
- on the social stratification,
- on the economic conditions of the country,
- on the strength of female equality struggles and movements [0].

Organizations use different factors for considering potential employees' and the disadvantageous position of women can be explained by these factors [0]. The "Can Do" factor is formed by knowledge, skills, abilities, aptitude and talent. The group of "Will Do" factors consists of motivation, interest and personal characteristics. These "Can Do" and "Will Do" factors influence the job performance. In women's case, these factors change more times and more significantly during their life than that of men's, for example because of having children.

Men and women have different characteristics not just in their personal life but in their business life and leadership roles as well. Women know themselves, their social and personal relationships better. They are also much better at decoding facial expressions and gestures. They weigh the risks of a start-up company, the amount of capital just as the possibility of failure. Women – compared to men – take over functioning companies after a longer trial period, after they had got to know the company's activities. On the other hand, men are more aggressive, more self-confident and they have a strong fighting spirit. For them, it is more important to comply with the rules, to set a hierarchy and to take the lead

[0]. However, Covin [0], in his research carried out among high school students and fresh graduated people, has found that gender is not significantly affects the way they see family enterprises.

Fresh graduates appear as potential heirs in business life who may get a leading position after a generation change. Gennaioli and Caselli [0] demonstrated in their work that if in the family there is no talent for managerial decision making then the wrong dynasty management reduces the financial performance of the company.

Research questions formulated on the basis of the above mentioned:

- 1) Do young women and men with family business background think differently about female roles (family and/or career)?
- 2) Do young women and men think differently about women's leadership?

We would like to find the answer to the research questions by elaborating the following hypotheses:

H1 Young people with family business background acknowledge women's career roles to the same extent as their family roles.

H2 Young people with family business background are indifferent to the gender of their leader.

4. METHODOLOGY OF THE RESEARCH

For the quantitative research, we used a structured questionnaire which included close-ended questions (respondents had to choose from the list of given answers). The questionnaires were distributed randomly among students who were going to graduate from university in the near future and who were getting out to the labour market or had just got out. Typically, they are graduates from the J. Selye University or young people who have finished high school and who have some family business background. The query was carried out at the beginning of 2014. 151 entrants filled out the questionnaires, and 148 out of the questionnaires were suitable for further elaboration. Due to its size, the sample is not representative.

The questionnaire included 31 questions; most of them were close-ended questions. The questionnaire was divided into 5 sections:

- questions regarding starting a career,
- questions regarding generation shifts,
- role of women in business life,
- the basic characteristics of business,
- demographic features of the respondents.

The acquired data were analyzed with Excel and program SPSS.20. In addition to the descriptive statistics of frequency, repartition and average, cross analysis was also carried out.

4.1. RESULTS OF THE QUESTIONNAIRE RESEARCH

Almost every third company from the list (29.7%) is relatively young. This means that they were established in the last five years. 61 businesses (41.2%) have operated for 6-10 years

and the rest has been on the market more than ten years (29.0%, 43 enterprises). Leaders are typically men (84.5%, 125 businesses), women's leadership was found in a significantly lower proportion (15.5%, 23 enterprises). Fields in which the businesses operate are more varied in the non-manufacturing sector than in the manufacturing sector. (see Table 4)

Table 4: Operating field of enterprises

Operating field	Number of enterprises	Rate, %
Financial	26	17.6%
Energy, gas, steam and water services	2	1.4%
Building industry	15	10.1%
Informatics	12	8.1%
Industry, processing industry	46	31.1%
Health care	3	2.0%
Tourism, catering	14	9.5%
Commercial services and other	30	20.3%
Altogether	148	100.0%

The survey was completed by 52 men (35.1%) and 96 women (64.9%). 46.6% of the respondents (69 people) belong to the age group 18-24; 34.5% (51 people) aged 25-30 years; and the smallest proportion (18.9%, 28 people) belongs to the age group 31-36. The majority of the respondents have college or university qualifications (96 persons, 64.8%), one-third (33.5%, 51 persons) have secondary school leaving qualifications.

Analysis of H1: Young people with family business background acknowledge women's career roles to the same extent as their family roles.

Regarding previous career plans, there is no significant difference between the genders. The only difference is in the willingness to enterprise, young men having greater than young women (men 17.3%, women 10.4%). Being employed at a multinational company is more appealing for women (men 7.7%, women 13.5%). Less than half of young people imagine their future in their family business (men 40.4%, women 45.8%).

Table 5: The importance of the successor's gender of according to the gender of the respondents %

Gender	Female successor					
	Not important at all	Less important	So-so	Less important	Very important	Altogether
Female	41.1%	33.7%	22.1%	3.1%	0	100.0%
Male	27.5%	49.0%	15.7%	7.8%	0	100.0%
Gender	Male successor					
	Not important at all	Less important	So-so	Less important	Very important	Altogether
Female	42.6%	34.0%	18.1%	5.3%	0	100.0%
Male	31.2%	33.3%	22.9%	12.5%	0	100.0%

In connection with the takeover of the family enterprise leadership, we asked the participants how important they think the gender of the successor of the family business is. Results show that there is no significant difference between men's and women's opinions regarding the leader's gender. (see Table 5)

We wondered how young people feel about female roles. The majority of the respondents consider traditional family roles (housekeeping and child rearing) to be the women's task. However, in connection with business life, a significant difference was confirmed: much fewer men regard career or any other role as women's task. Smaller but not negligible is the difference regarding corporate leadership. Barely one third of men think that women should occupy leading positions. Regarding money making, traditional thinking dominates: 20 % of women and 10 % of men think that it is a women's task. (see Table 6)

Table 6: Attitude to roles according to the gender of the respondents, %

	Men	Women	Altogether on the average
Housekeeping	82.7%	84.4%	83.8%
Child rearing	86.5%	84.4%	85.1%
Career building*	46.2%	79.2%	67.6%
Leadership	28.8%	45.8%	39.9%
Making money	11.5%	20.8%	17.6%

* 2 old. sign. $p < 0.000$ Cramer's $V = 0.337$

Analysis of H2: Young people with family business background are indifferent to the gender of their leader.

Hereafter, we asked the participants what their opinion was about female leaders and in which field they thought women could prevail as leaders. Based on the received responses, few respondents think that women are not good managers; however, only one-sixth of men and one-third of women think that women are really good managers. There is also a significant difference between men's and women's opinion about male managers. Nearly half of the men think that men are better leaders while only a quarter of women share this view. (see Table 7)

Table 7: Considering male and female leaders according to each genders, %

	Men	Women	Altogether on the average	Sign.	Cramer's V
Women are bad leaders.	3.8%	1.0%	2.0%		
Women are good leaders.	13.5%	34.4%	27.0%	0.007	0.225
Women are better leaders.	25.0%	31.2%	29.1%		
Men are better leaders.	48.1%	20.8%	30.4%	0.001	0.283

Although most of the principal leaders are men, lots of respondents have already met female managers. In general, a remarkable majority of both genders acknowledge female

leaders. However, for the next question whether they would work with female leaders or not, there was a slight decline in the number of positive answers, though the majority still answered 'yes'. At the same time, half of the respondents think that besides acknowledging female leaders, it would be good to raise the number of female leaders. The difference between men's and women's opinions here is not remarkable but visible. (see Table 8)

Table 8: Acknowledging male and female leaders according to the gender of the respondents, %

	Men	Women	Altogether on the average	Sign.	Cramer's V
There is a female leader in his/her environment.	42.3%	71.9%	61.5%	0.000	0.290
Acknowledge female leaders.	80.8%	95.8%	90.5%	0.004	0.246
Acknowledge that female leaders can have prestige.	80.8%	93.8%	89.2%	0.024	0.200
Would work with female leader.	69.2%	81.2%	77.0%		
It would be good if there were more female leaders.	38.5%	55.8%	49.7%		

So women are much more open regarding the gender of their leader, and the same tendency appears in the next question as well. (see Figure 1)

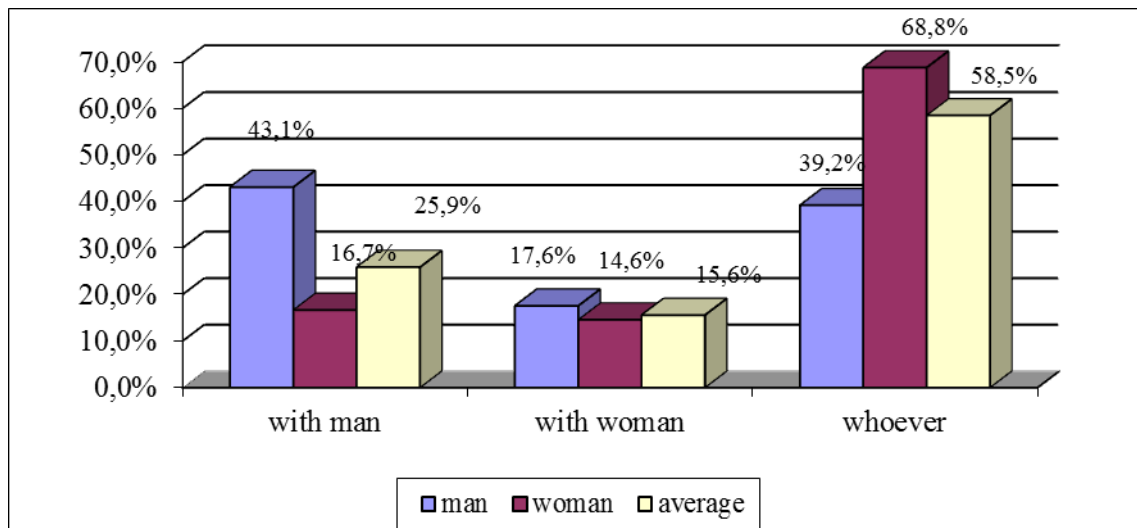


Figure 1. Which gender do you prefer to work with?

Generally speaking, female respondents do not make much difference between leaders, and they would cooperate with them regardless their gender, while men are more 'selective', only 39.2% are neutral in this case. Men prefer male managers (43.1%) to women (16.2%). On the other hand, just few respondents answered that they specifically prefer female leaders (average 15.6%).

After all, we asked what kind of plans young people have regarding their family business. Surprisingly, only one-sixth of the men and one-third of the women are planning to take over the leadership of the family business in the future. In connection with being employed in the family business, we get reversed results: every third man and every sixth woman would like to work as an employee in the company. A significant number of the respondents still do not know what they want to deal with after leaving school.

Willingness to enterprise is very low. Regarding this question, the difference between genders is almost unperceivable. Any type of role or activity in a family enterprise would be rejected by 13.5% of the respondents. (see Table 9)

Table 9: Plans regarding family enterprises, %

	Men	Women	Altogether on the average	Sign.	Cramer's V
Takeover the leadership of enterprise	15.4%	31.2%	25.7%	0.048	0.173
Being a full-time employee in a family enterprise	28.8%	17.7%	21.6%		
Unsure, still do not know	32.7%	27.1%	29.1%		
Establishing a new enterprise	9.6%	10.4%	10.1%		
Do not want to work in family enterprise	13.5%	13.5%	13.5%		

5. CONCLUSIONS

We analysed the characteristics of the Slovak labour market, focusing especially on women's and young career starters' situation through certain features of the Slovak national culture. We were motivated to analyse, through primary research, the more disadvantaged groups' employment possibilities, more precisely, their career plans in relation with their family business by the significance and the role family businesses play in the national economy.

As a starting point, we can state that men's and women's career plans before acquiring qualification are highly similar; their attitude to the family business is almost identical. This finding corresponds to those of Covin's [0] research.

Our first question surveyed whether men and women, both with family business background, think differently about women's roles differs or not. We assumed that young people with family business background attribute career to women just as much as family roles.

According to our results about the professed values (How important is the gender of the successor to you), young people are indifferent to the gender of the successor. Reality, however, shows something else.

The majority of the leaders of family businesses are men (84.5%), which confirms Hofstede's research which finds that Slovak national culture is relatively male-centred and

they do not mix up the roles. Our research's results confirmed that today's young people (Generation Y) – think similarly. They primarily attribute tasks connected to family to women, while tasks connected to business life (career, corporation leading, money earning) are ascribed to men.

Despite the family ties, our first hypothesis was not confirmed. The traditional approach, according to which raising children and leading a household are the women's tasks, while creating financial safety is the task of men, is still alive. This attitude has various unfavourable consequences, for example the chronically low number of births. [0]

Our second question was meant to survey young men's and women's opinion about female leadership. We assumed that for young people with family business background it is neutral whether they have a male or female leader.

This hypothesis was refuted as well. Our results are in accordance with our first hypothesis' results. A smaller number of the respondents – regardless of sex – think that female leaders are good or even better than male leaders. Furthermore, in the judgement of male leaders, masculine values are showing an increasing tendency. Although, according to men's professed values, female leaders can be as successful as male leaders, almost half of the male respondents (48.1%) think that male leaders are better than female leaders. This fact confirms that these respondents prefer to work with male leaders (43.1%) rather than to work female leaders (17.6%). In contrast to this opinion, female respondents do not distinguish sharply between men and women in leading position. In summary, the majority of the respondents of both sexes prefer male leaders.

Furthermore, one third of the female respondents plan to take over the leadership of the family business, and 10,4% of them are planning to establish their own enterprise. We can derive this result from the fact that this age group is rather ambitious [0], after acquiring qualification they become economically active [0]. Also, there is intense competition on the labour market, as the economy activity rate presents.

REFERENCES

1. A. Jarjabka, Similarities and Differences in the National and Organizational Culture of the Central and Eastern European Countries (in Hungarian) Magyar Tudomány Ünnepe, BGF, Budapest, 2010, p. 178-194. http://elib.kkf.hu/okt_publ/tek_2010_15.pdf, 2014.05.03.
2. G. Hofstede, G. J. Hofstede, M. Minkov, Cultures and Organizations: Software of the Mind, Third Edition, McGraw-Hill, New York, 2010.
3. I. Marosi, The Value-Creating Role of Family Socialization in Operating Family Businesses, in Csata, A., Fejér-Király, G., György, O., Kassay, J., Nagy, B., Tánczos, L.J. (Eds.), Challenges in the Carpathian Basin. Global challenges, local answers, Risoprint, Cluj-Napoca, 2014, p. 488-502.
4. I. Marosi, The Role of Family Values in the Knowledge Transfer between Generations (in Hungarian), XXI. Század Tudományos Közlemények, Általános Vállalkozási Főiskola, Budapest, 2014, p. 121-132.
5. K. Lazányi, Study for nothing? Literature overview of labour market opportunities for individuals with tertiary education, in Michelberger, P. (Ed.) FIKUSZ 2012, Óbudai Egyetem, Budapest, 2012, p. 37-46.

6. K. Lazányi, What lays in the background of labour market imbalance? The overview of the economists' situation, (in Hungarian) *Munkaügyi Szemle* 57 (2013) (3), Struktúra Munkaügy Kiadó és Tanácsadó Kft. Budapest, 2013, p. 50-62.
7. Hungarian Chamber of Commerce and Industry. Perspectives: Graduates and School leavers (in Hungarian). Magyar Iparkamara, Budapest, 2009, http://neon.hu/karrier/kilatasok_palyakezdo_es_diplomasok-145150, 2014.06.01.
8. E. Gyimóthy, Choosing a Career and Growin Up: Panicking Youth? (in Hungarian) <http://www.hrportal.hu/hr/palyavalasztas-es-felnotte-valas-panikban-a-fiatalok-20120831.html>, 2014.02.15.
9. A. Csiszárík-Kocsir, M. Fodor, A. Medve, *Inter. Proceed. Econ. Devel. Res., Econ. Market.Manag.* (edited by: Yan Han), Vol. 59. (2013), IACSIT Press, <http://www.ipedr.com/vol59/040-ICEMM2013-P00033.pdf>, 2014.06.12.
10. M. Martišková, EU's Youth Guarantee is Unlikely to Dramatically Help Slovakia's Young Unemployed V4 *Revue*, 2013, <http://visegradrevue.eu/?p=1398>, 2014.03.28.
11. Eurostat, 2014, www.eurostat.com, 2014.04.30.
12. I. Marosi, The Family as a Place of Tacit Knowledge Transfer (in Hungarian) in Takácsné György, K. (Ed.) XIV. Nemzetközi Tudományos Napok publikációi, Károly Róbert Főiskola, Gyöngyös, 2014, p. 1007-1014.
13. S. A. Hewlett, L. Sherbin, K. Sumberg, *Harvard Business Review*, July-August 2009, Boston, 2009, p. 71-76.
14. Cs. Czeglédi, The Nature of Women Leaders' Role in Hungary (in Hungarian) Doctoral Dissertation, SZIE, Győr, 2008.
15. B. Nagy, *Female Managers* (in Hungarian) Aula Kiadó, Budapest, 2001.
16. K. Lazányi, Obstacles on the way to female leadership, in Nábrádi A, Borsos J, Lazányi J (Ed.) AVA II. Conference Debrecen: DE ATC Agrárgazdasági és Vidékfejlesztési Kar, Debrecen, 2005, p. 1523-1536.
17. K. Lazányi, The impediments of Hungarian females becoming leaders, in Nábrádi A, Borsos J, Lazányi J (Eds.) AVA II. Conference Debrecen: DE ATC Agrárgazdasági és Vidékfejlesztési Kar, Debrecen, 2005, p. 1063-1074.
18. J. Poledna, M. Polednová, Overview of Family Business Relevant Issues Country Fiche Slovakia. Peritus, KMU Forschung Austria, Vienna, 2008.
19. R. Carlock, J. L. Ward, *Strategic Planning for The Family Business – Parallel Planning to Unify the Family and Business*, Palgrave Macmillan, New York, 2001.
20. F. Katona, Online J. Modelling the New Europe issue no. 10, Cluj-Napoca, 2014, p. 29-41.
21. European Commission, Final Report of the Expert Group. Overview of Family-Business-Relevant Issues: Research, networks, policy measures and existing studies. November 2009. European information Directorate - General for Enterprise and Industry., 2009, http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/familybusiness/family_business_expert_group_report_en.pdf, 2014.04.28.
22. Mandl, I., Overview of Family Business Relevant Issues Contract No. 30-CE-0164021/00-51 Final Report. KMU Forschung, Austria, Vienna, 2008.
23. E. Dobai, Korcsmáros, E. Huszárík, Seres, SME in the Economic Sectors ov The Slovak Republik (Malé a stredné podniky v jednotlivých ekonomických odvetviach v SR), *Acta Oeconomica*, 1(2)., Univerzita J. Selyeho v Komárne, Komarno, 2012, p. 41-46.
24. MTI, Enterprise Culture and Expansion – How it Works at MOL (in Hungarian), the Hungarian Oil and Gas Group Financial Times, Budapest, 2003.08.20.

-
25. A. W. Sherman, G. W., Bohlander, S. A. Snell, *Managing Human Resources*, South-Western College Publishing, Cincinnati, 1998.
 26. European Commission, *Women Mentors – Support for Women to Start an Enterprise (Női mentorok)* (in Hungarian), 2011, http://ec.europa.eu/magyarorszag/press_room/press_releases/20111116_noi_mentorok_hu.htm, 2014.01.09.
 27. T. J. Covin, *J. Small Bus. Manag.*, July 1994, Malden, 1994, p. 29-39.
 28. F. Caselli, N. Gennaioli, *Dynastic Management, Economic Inquiry*, vol. 51., no. 1., Fountain Valley, 2013, p. 971-996.
 29. V. Szekeres, *8th Management, Enterprise and Benchmarking International Conference*, Óbuda University, Budapest, 2010, p. 217-224.

DETERMINANTS OF SME INNOVATIVENESS IN SERBIA

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Abstarct

Small and medium enterprises are the engine of economic growth in all developed countries. Understanding the factors that contribute to their success is important in both developed, but even more in developing countries. Since innovation is one of the most important means for achieving economic growth, there is large number of studies dealing with this issue. In this paper, we investigate the determinants of innovative activities in SME in Serbia. Out of 56 organizations which were surveyed, 21 were micro-firms, 28 small firms and 7 medium size firms. The factors were divided into two major groups, external and internal, and then we examined the impact of each factor to one of five possible types of innovations in the organization. For data processing bivariate correlation and binary regression analysis were used. The results have shown that some external and internal factors have positive impact on some type of innovations, but negative on others

Key words: determinants, SME, innovativeness

1. INTRODUCTION

SMEs are considered the driving force of economic development in any country. One of the most efficient ways to fulfill this task is to develop and commercialize innovations [1]. The ability to innovate is essential factor in maintaining a competitive advantage and survival of modern organizations [2,3]. Most authors agree that innovations are even more important for development of SMEs than for large organizations [4,5], due to more severe competition in SME sector. Namely, in the modern business conditions large corporations are interested in the greater product standardization and typification and mass production, which allows them to lower the cost per unit of product, lower prices, greater market share and, consequently, a better financial result. On the other hand, consumer needs are greater and more diversified, so the market competition is more and more based on the differentiation of products and services than on the price reduction. Basic characteristics of SMEs - greater flexibility and propensity to innovative and risky ventures, enable these companies to be more adaptable than large organizations to the continuous changes in customer requirements and market conditions. This leads to increased competition in the SME sector, by improving the quality of products and services and the development of innovation and new technologies.

The importance of SMEs for economic growth and development firstly have been realized in the developed market economies, in which SME have a significant share in GDP, employment and exports. With the development of the transition process, the share of SME

sector in basic macroeconomic indicators in Serbia is becoming more similar to that in developed countries. In Serbia, SME sector accounts for 45.3% of the total employment, 39.1% of total investments, generates 49.8% of exports of the Serbian economy and accounts for around 33% of the national GDP. According to the size, in the structure SME sector the majority of them are micro enterprises (305,321), whereas small and medium-sized (11,841) dominated in all analyzed indicators (53.8% of employment, 60.7% of turnover, 61.6% of GVA, 77.0% of export, 74.5% of SMEs' import) [6]

Because of the high importance of the SME sector, both developed and developing countries are interested in finding ways to stimulate the SME sector to innovate more. Maybe if they could understand how SMEs innovate and what encourages them to innovate, it would be easier to give the answer to question how to motivate them to innovate. So, the first step towards taking the initiative to support innovative activities would be identification of factors that influence the development of innovations and in which way they do so. In addition, it should be mentioned that in this paper by innovations are considered new or significantly improved products or services, as well as new or significantly improved processes within the organization [1].

2. THEORETICAL MODEL

The most studies which analyze innovation in the SME sector come from developed countries [7]. In this paper, we investigate which factors significantly influence the innovative efforts in Serbia, as a transition economy. To examine the factors, we relied on existing literature in this field. Since this area is very interesting, a number of papers were published regarding this topic, but the data are mainly related to developed countries. According to Keizer et al. [7] factors affecting the innovation can be divided into internal and external. Internal factors are related to the characteristics and procedures of the organization and the external factors to the opportunities from environment that SMEs can exploit (Table 1).

External factors include municipal and government subsidies and cooperation with other organizations or research institutions and, also, the dominant market for the organization (local, national or international). It is obvious that factors in the external environment, such as the context in which the organization operates and the government system to encourage innovation, have a large impact on innovativeness, but internal factors should not be ignored [8]. In this paper two types of internal factors were analyzed. One of them is related to the characteristics of the organization (industry, firm age, number of employees, number of highly educated employees and the number of employees in the research department). Company ownership is not considered, because all organizations are private owned. The second group of factors is related to the implementation of significant changes in the marketing concept, the management concepts, organizational structure and esthetic appearance.

Table 1. List of factors [1]

Factors	Factor definition
<i>Internal factors</i>	
Firm age	1 if the firm was founded after 2000, 0 otherwise
Industry	1 if is production company, 0 otherwise
Number of employees with university degree	Number of employees with university degree divided by total number of employees
Number of employees in R&D department	Number of employees in R&D department divided by total number of employees
Implementation of new or significantly changed corporate strategy	1 if such change is implemented in 2009-2014, 0 otherwise
Implementation of changes in management strategies	1 if such change is implemented in 2009-2014, 0 otherwise
Implementation of changes in organizational structure	1 if such change is implemented in 2009-2014, 0 otherwise
Significant changes in marketing concept	1 if such change is implemented in 2009-2014, 0 otherwise
Significant changes in esthetic appearance	1 if such change is implemented in 2009-2014, 0 otherwise
<i>External factors</i>	
Subsidies from government	1 if the company received any subsidies, 0 otherwise
Subsidies from municipality	1 if the company received any subsidies, 0 otherwise
Cooperation with other organizations	1 if the company have a cooperation agreement with other organization, 0 otherwise
Cooperation with universities and institutes	1 if the company have a cooperation agreement with universities or institutes, 0 otherwise
Local market	1 if the dominant market is local, 0 otherwise
National market	1 if the dominant market is national, 0 otherwise
International market	1 if the dominant market is international, 0 otherwise

Earlier studies have shown that there is a difference between service and manufacturing organizations in the development of innovative activities [9]. Manufacturing companies are more likely to change organization strategy and structure when they are introducing some innovations. On the other side, service organizations are more likely to transform every innovation into a profit. In a study conducted by Warren and Susman [10] in 34 manufacturing companies, they came to the conclusion that the following factors have

impact on the success of innovative activities: focus on core competencies and market, maintaining close contacts with customers, setting a clear strategy and establishing a corporate culture open to innovation. Firm age, industry and firm size did not have any impact on the success of innovative activities in SMEs. Besides, a large number of researchers examined the correlation between innovativeness and the size of organization. According to Bertschek and Entorf [11], the link between innovation and size of the organization is not linear because small and large organizations are much more innovative compared to the medium size. In addition, the small organizations are generally characterized as resource-limited, so they have less innovative potential [12].

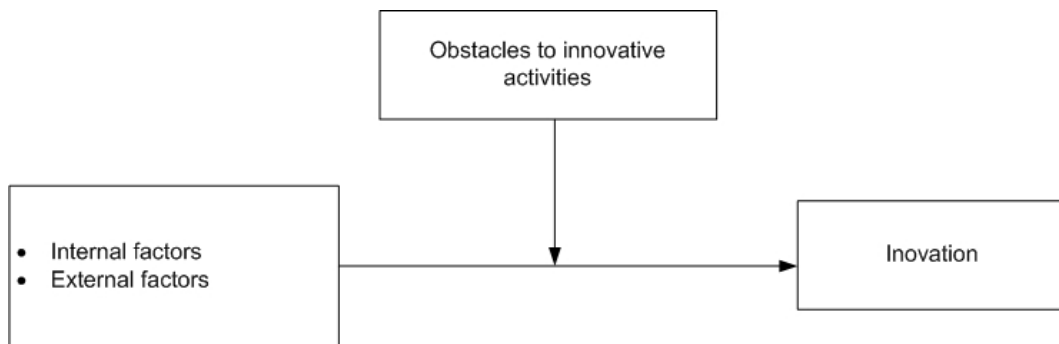


Figure 1. Theoretical model [1]

As an indicator of innovative activity, we used the data if organization developed or commercialized any kind of product or process innovation within the 5-year period (2009-2014). Each of the five types of innovation was included in the study (product innovation, process innovation, line extension, imitation of competitors and radical new product). In order to understand the innovative activities of SMEs better, we also considered the obstacles that affect the innovative activity (Fig. 1). The assumption is that SMEs have greater problems during the innovation development than large firms, due to the lack of adequate resources and expertise. High costs of innovative activities as an obstacle are most likely to be associated with a lack of private finances or lack of government support. Also, the lack of qualified staff can lead to problems in the execution of innovative activities and success of the innovations. The lack of information related to technology and market and, also, consumer habits may increase the uncertainty of innovation activities [13]. Obstacles are also classified as external and internal. External barriers are related to the supply, demand and finance, and internal barriers are related to the resources within the firm, including human resources. We measured these factors using two indices that are calculated on the basis of four statements that were evaluated on the scale from 1 to 3, where 1 means no significance to the innovative activities and 3 means high significance (Table 2).

Table 2. List of obstacles

Obstacles
<i>External obstacles</i>
Innovation costs are too high
Lack of appropriate source of finance
Insufficient support from state for innovation activities
Customers habits
<i>Internal obstacles</i>
Lack of qualified staff
Insufficient motivation of employees
Lack of information concerning technology
Lack of information concerning market

3. RESEARCH SITE AND DATA COLLECTION

The data used in this study were collected during 2014, in South-East Serbia. Companies were selected according to main activity and number of employees. Beside small and medium-sized enterprises, the survey also included micro-firms, and the total number of analyzed companies is 56. In total number of companies, there were 21 micro-firms, 28 small firms and 7 medium size firms. The response rate was 100%, because the authors personally conducted the survey, trying to explain to every respondent the meaning of every issue. In this manner, misunderstanding was averted and all questionnaires were properly filled.

We used as a pattern a questionnaire developed by Croatian authors, Radaš and Bozic [1]. The questionnaire consists of two parts, the first part is trying to investigate which factors affect the SMEs innovativeness, and the second part examines what are the most common barriers to innovative activities. Following the example given in the study, firstly, it was examined bivariate correlations between factors and dependent variables, and only those factors that are statistically related to the dependent variable were retained for further analysis. Then, these extracted factors are used in five new multivariable logit models. In the analysis of obstacles to innovative activities descriptive statistics was used.

Examination of the correlation between the independent and dependent variables showed that the following factors were not statistically significant: firm age, number of employees in the R&D department, the change of organizational structure, marketing concepts, corporate strategy and esthetic appearance (Table 3). In the group of external factors the municipal and government subsidies and marketing orientation have no statistical significance. Although previous studies [7], conducted in developed countries have shown that there is a connection between the government and municipal subsidies and innovativeness, this paper shows that connection between these two variables and innovative activities does not exist. Explanation for this can be the fact that the system of subsidies in Serbia is not very well developed, and that most of the surveyed organizations had not received any financial help that would boost innovation activities.

Table 3. Correlation coefficients

	Product innovation	Inovacija procesa	Line extension	Imitation of competitors	Radical new product
Industry	-0,224	,365**	-0,022	0,018	,343**
Number of employees	0,236	,323*	0,071	-0,072	0,149
Firm age	0,093	-0,189	0,046	0,173	-0,227
Number of employees with university degree	0,204	,340*	0,03	-0,172	0,198
Number of employees in R&D sector	0,246	-0,131	-0,092	-0,116	0,013
Implementation of new or significantly changed corporate strategy	0,115	0,227	0,001	-0,161	0,195
Implementation of changes in management strategies	,273*	0,103	-0,106	-0,191	0,215
Implementation of changes in organizational strategy	-0,036	0,045	-0,117	0,001	0,079
Significant changes in marketing concept	0,046	0,114	-0,098	-0,091	0,05
Significant changes in esthetic appearance	-0,146	-0,154	-0,185	-0,042	0,104
Subsidies from government	0,248	-0,155	0,202	-0,06	-0,059
Subsidies from municipality	0,05	0,037	-0,183	-0,053	0,153
Cooperation with other organizations	0,03	,273*	0,028	-0,084	0,046
Cooperation with universities and institutes	-0,007	,476**	0,066	-0,06	0,218
Local market	0,013	-0,31	-,039	,116	-,322*
National market	,105	,337*	,067	-,111	,091
International market	,123	,221	-,015	-0,73	,359**
Marketing orientation	,149	-200	-,093	-,099	,008

The extracted internal and external factors have been used in further analysis. We used a binary logistic regression, because it is the most appropriate solution for this type of survey [14]. Table 4 shows the results of regression analysis.

The results showed that industry has a positive impact on product innovation, but a negative impact on process innovation and creating a radical new product. The company size has a weak positive impact on product innovation. Number of employees with university degree does not have a significant impact on any type of innovation. The implementation of a new management strategy has a negative effect on product innovation.

Table 4. Regression coefficients

Factor	Product innovation	Process innovation	Line extension	Radical new product
Industry	2.002*	-3.00*	-0.037	-1.451*
Number of employees	0.015*	0.005	0.007	-0.002
Number of employees with university degree	1.922	5.827	0.141	1.491
Implementation of new or significantly changed strategy	-1.259*	1.521	0.894	-0.134
Cooperation with other organizations	-0.192	-0.246	-0.452	1.465*
Cooperation with universities and institutes	0.918*	-1.682	-2.061*	-0.938
Local market	-2.719*	-0.664	0.161	1.518
National market	-2.790	-2.507*	0.424	0.944
International market	-1.857	-1.258	2.002	-1.455

The cooperation with other organizations has a positive impact on the radical new products, and cooperation with universities and institutes has weak positive impact on product innovation and a negative impact on the modification of existing products. The influence of the local market on product innovation is negative, and a national market on the process innovation also negative. The interesting fact in this study is that none of these factors have any significant impact on the type of innovation “imitation of competitors”, because only two companies have reported this kind of innovation in the last five years. For that reason, the results are not shown in the table.

4. DISCUSSION AND CONCLUSION

Summarizing the results of this study, it can be concluded that most of the factors that have been shown to be important in developed countries have significance impact on innovation activities in this study, primarily cooperation with other companies and cooperation with universities and institutes. Unlike developed countries, there is no connection between the municipal and government subsidies, having in mind the fact that there are only a few companies which have received any kind subsidies. Also, a link between the number of employees in R&D department and innovation is not discovered, especially in small and micro companies, because examined firms do not have R&D departments since they have the small number of employees, so that the employees that are responsible for innovation perform some other business activities, too.

It was shown that significant external factor is market scope, which has an impact on innovative activities and negative on product and process innovation, indicating that companies concentrated predominantly on local or national market have no need to innovate. Their access to a wider market would probably force them to innovate, because of the severe competition. Regarding the obstacles that hinder innovation activities, it appears that the owners considered finance as significant limiting factor, above all insufficient financial support from the state, which is consistent with similar research in

Croatia [1]. Consumer habits and motivation of the staff proved to be the least important barriers to the innovativeness.

Implications of this research for policymakers are suggestion that they have to develop the patterns of financial support for innovation activities in SMSs. Having in mind that the survey showed that different factors affect differently incremental and radical innovation, it could be concluded that they could form different subsidy patterns depending on the type of innovation they want to encourage. But, even if they do so, the financial resources for such purposes in Serbia are insufficient which implies the need for some additional sources. One of solution is, certainly, applying for EU funds. Innovative activities of SMEs within EU funds are financed by Horizon 2020 program, which actively supports SMEs by providing both direct financial support, and indirect in order to support the increase of their innovation capacity. Within Horizon 2020 there is a special segment “Innovation in SMEs”, aims at “creating a bridge between the core of the framework program - support to research, development and innovation projects - and the creation of a favorable ecosystem for SME innovation and growth.” [15]. So, it could be concluded that besides financial support, this program encourages cooperation between basic actors involved in this process, which is not currently developed well. In order to maximize the advantage of such potential funding opportunities, it is necessary to inform SMEs about the conditions for applying to this program.

REFERENCES

1. S. Radas, Lj. Bozic., *Technovation* 29 (2009).
2. C.J. Chen, Y.F.Huang, *Journal of Business Research* 63 (2010)4.
3. M. Subramaniam, M.A. Youndt, *Academy of Management Journal* 50(2005)2.
4. W. Fritz, *Journal of Marketing* 23 (1989) 10.
5. G.P. Sweeney. *New Entrepreneurship and Smaller Firm*, Campus, Frankfurt, New York, 1983.
6. Report on small and medium sized enterprises and entrepreneurship, 2012. <http://narr.gov.rs/index.php/Dokumenta/Istrazhivanja-i-analize>
7. J. Keizer, L. Dijkstra, J.I.M. Halman, *Technovation* 22 (2002).
8. M.S. Nagano, J. P. Stefanovitz, *Journal of Engineering and Technology Management* 33(2014).
9. J.E. Ettlie, S.R. Rosenthal, *Journal of product innovation management* 28 (2011).
10. A. Warren, G. Susman, Review of innovation practices in small manufacturing companies. Tech.rep., National Institute of Standards and Technology, United States Department of Commerce.
11. I. Bertschek, H. Entorf, *Empirical Economics* 21 (1996) 3.
12. J.A. Wolff, T.L. Pett, *Journal of Small Business Management* 44 (2006) 2.
13. F. Galia, D. Legros, *Research Policy* 33 (2004).
14. R., Ho, *Handbook of Univariate and Multivariate Data Analysis and Interpretation with SPSS*. Chapman & Hall/CRC, Taylor & Francis Group, Boca Raton, (2006).
15. <http://ec.europa.eu/programmes/horizon2020/en/h2020-section/innovation-smes>

EXAMINATION OF TIMELINESS OF SMALL BUSINESSES' MARKETING PLANNING

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Abstract

Several researches have confirmed that short term approach is a general characteristic of Hungarian small businesses. In addition to short-termism, risk avoidance is also a common behaviour among Hungarian SMEs. Taking these two factors into consideration already leads to a contradiction, since short-term thinking significantly increases the level of future risks for the business. The marketing planning of SMEs and more structured, and more comprehensive revision of those plans may lower those risks dramatically. In my study, I analyse the characteristics of Hungarian small businesses' marketing planning, particularly in terms of its time frame.

Keywords: marketing, marketing planning, marketing-controlling, SME, small business

1. INTRODUCTION

Economy on a global level is facing a number of difficulties and challenges. The same statement applies for European and Hungarian economy as well. The leeway of macroeconomic players, such as households and business ventures are drastically reshaped by the crises, as it is proved by many [1]. In order to be able to confront challenges and give adequate answers to the emerging problems, companies have to be prepared [2,3,4].

There is a vast number of small businesses operating in the European economic space. Their impact is quite considerable. Although the isolated impact of an individual business is unnoticeable, a lot of small businesses together bears great influence to the economy [5]. It is therefore essential for the representatives of the SME sector to acquire the proper professional knowledge, skills and practices, in order to be more effective in their job.

According to Duma [6] the key to solving economic problems lies within the stimulation of enterprises. In his opinion, the most effective way of the stimulation is to involve colleges and universities.

Several professionals emphasize the importance of financial and economic education, starting at a young age, officially introducing it in high school education. Moreover, it is important to ensure a more definite role for economic education and improvement of entrepreneurial competencies in higher education. It is vital to understand that entrepreneurship is a skill that is needed not only for those who operate the businesses, but also for those involved in other fields. In my previous studies [7], I have already highlighted the importance of improving professional knowledge; where educational

institutions and professional organizations play a significant role. The European Union also pays attention to the development of entrepreneurial mindset and emphasizes its significance [8].

Special attention is also due to the fact that 99.8% of the businesses in the European Union belong to the SME sector, 92.2% of which are actually micro-enterprises with only a few employees [9,6]. According to the EU categories [10], businesses with 1-9 employees considered as micro-businesses. Professional terminology places these businesses in the SME sector as well, therefor somewhat "misclassifies" them as small and medium sized businesses.

2. PLANNING AT HUNGARIAN SMALL AND MEDIUM BUSINESSES

Kadocsa [11] examined the characteristics of Hungarian small and medium-sized businesses, covering the SMEs planning activity as well. According to the quoted study, 37% of the surveyed SMEs had a written strategy and 46% of them had a written business plan. The results of the study have shown that entrepreneurs do not lack strategic thinking, however they do not stress put enough emphasis on writing their strategic plan down. In the author's opinion, the low prevalence of annual business planning is a more serious deficiency. He explains their negligence with insufficient professional knowledge, lack of experience and underestimation of the importance of strategic planning within the SME sector in general. In my research, the composition and magnitude of the sample was different, since it did not include large corporations, 51% were micro enterprises, 43% small businesses and 6% medium enterprises. Assumedly, this partially explains the differences between the results of the two studies. The different nature of the questions included in the survey might also have played a role in forming the end results. The Kadocsa [11] research also reveals significant difference between the short and long term planning among the SME sector. While 46% of businesses created a short term plan, the proportion of those who also had a long term plan was only 37%. This supports the conclusions of researchers previously investigating small businesses (see e.g. [12]) namely that small businesses prevalingly prefer short term approach.

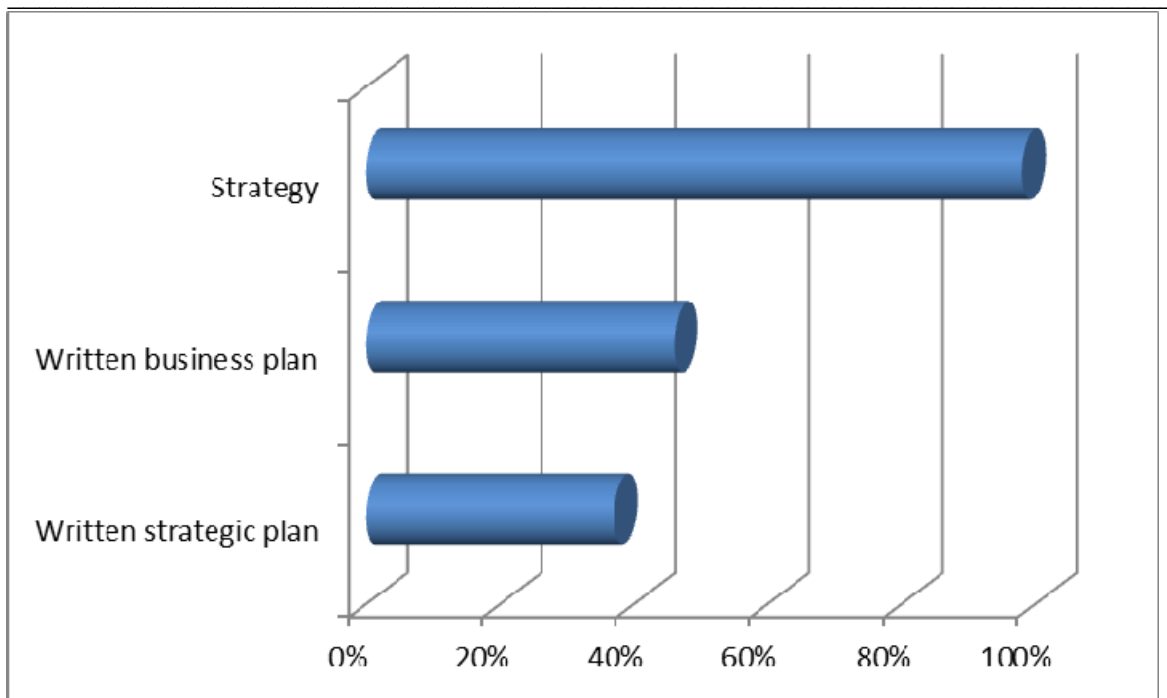


Figure 1. Strategic business planning [11]

The study covered only a narrow range of marketing related topics, however it did take into consideration whether the company employs a person or have a dedicated department responsible for marketing, or not. From that aspect, 40% of the examined businesses stated that they do employ marketing staff, however, 18% of those who currently do not, is planning to do so in the near future [11]. In spite of the fact that these numbers are regarded low by the author, in my opinion, - considering the composition of the sample (51% micro businesses), - the results are actually quite favourable. It is hardly probable that companies employing only a few or a few dozen people (94% of the sample) would take the effort and extra costs of hiring marketing professional(s). I presume that psychological aspects, namely supposed outside expectations might also have played a role in forming the answers. Entrepreneurs could have felt the urge to live up to implicit expectations, so they indicated their choices in the questionnaire accordingly. The above displayed results of a Szonda Ipsos [13] survey are assumedly more accurate, 7% of the SME sector's companies do have some sort of marketing department. The picture is further chiselled by the fact that marketing workers of the studied companies often do not have professional qualification or experience. In my research, 57% of the businesses did not employ marketing professionals. Narrowing the analysis to small businesses, this value modifies to 72%.

Negricea et al [14] presents a complex methodology of strategic marketing planning for small- and medium sized businesses in his study. However, it is quite complicated and time consuming for entrepreneurs who run a micro or small business, consequently they most probably will not apply this method in most of the cases. In my opinion, micro businesses need to utilize a substantially simplified toolkit, that can be easily interpreted by non-marketing specialist business leaders as well. It is vital that they should be able to create a complex corporate strategy within a short period of time, and this strategy should be suitable to support the business leader in his future decisions. Moreover, it should be

flexible, in order to adapt to possible environmental changes and amend corporate strategy accordingly.

3. STRATEGIC PLANNING FROM A MARKETING CONTROLLING ASPECT

I approach the description of strategic and operative marketing planning from the aspect of a special field; marketing-controlling. Marketing-controlling is a toolkit that supports leaders' decisions by providing information through planning and measuring analysis and controlling functions, in order to make the decision process more effective [15];[16]. Time frame of marketing-controlling is divided into two categories; strategic- and operative planning.

The primary goal of strategic marketing planning is to secure the long term operation of a company. On the other hand, short term operative marketing-controlling is targeted to analyse profitability of the actual marketing activities [17]. Strategic marketing-controlling tools consist of:

- SWOT analysis,
- Portfolio techniques,
- GAP analysis,
- Scenario techniques,
- Benchmarking,
- Positioning analysis,
- Life-cycle and experimental curve analysis

While operative-marketing toolkit includes:

- Margin calculation
- Process cost calculation
- Target cost calculation
- Turnover Earnings calculation

In my survey I utilized the elements of the above approach regarding strategic planning.

4. METHODOLOGY OF PRIMARY RESEARCH AND PARAMETERS OF THE SAMPLE

I based my research upon the examination of both primary and secondary sources. The final results are a mixture of this dual investigation. The below introduced results reflect the answers of 272 enterprises. The method of the research covered personal and electronic data collecting as well. I utilized the principals of the snowball method during the sample selection.

One part of the survey consisted of closed-format questions, while another part of the questionnaire, included statements to be evaluated on a five point Likert scale.

The size categories of the survey were based on the number of employees. I followed the recommendation of the European Union regarding small and medium sized business categories [10,18]:

- a) up to 49 people: small business ,
- b) 50-249 people: medium business,
- c) more than 250 people: large enterprise.

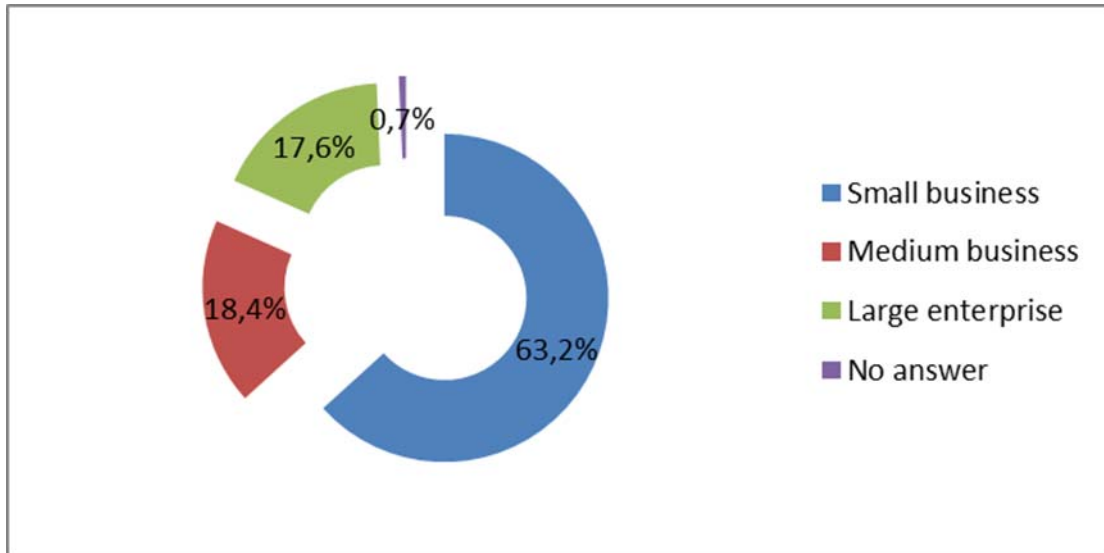


Figure 2. Distribution of sample according to size categories

5. EXAMINATION OF TIMELINESS OF SMALL BUSINESS MARKETING PLANNING

Through the examination of the tools used for marketing planning, differences between small businesses and large enterprises are clearly noticeable, in terms of the timeframe of marketing planning. Taking all the examined companies into consideration, a large number of enterprises do not create any marketing plan (37%). Narrowing the research to the small business segment, almost half of them (45%) (3. Figure) do not create a marketing plan. Regarding the medium and large companies, the proportion of those who do not make marketing plan is notably smaller, 22% and 21%. I was able to statistically verify the significant differences in point of distribution. Pearson correlation coefficient showed slightly moderate correlation on high reliability level ($p=0,000$) between the company size and the prevalence of a marketing plan.

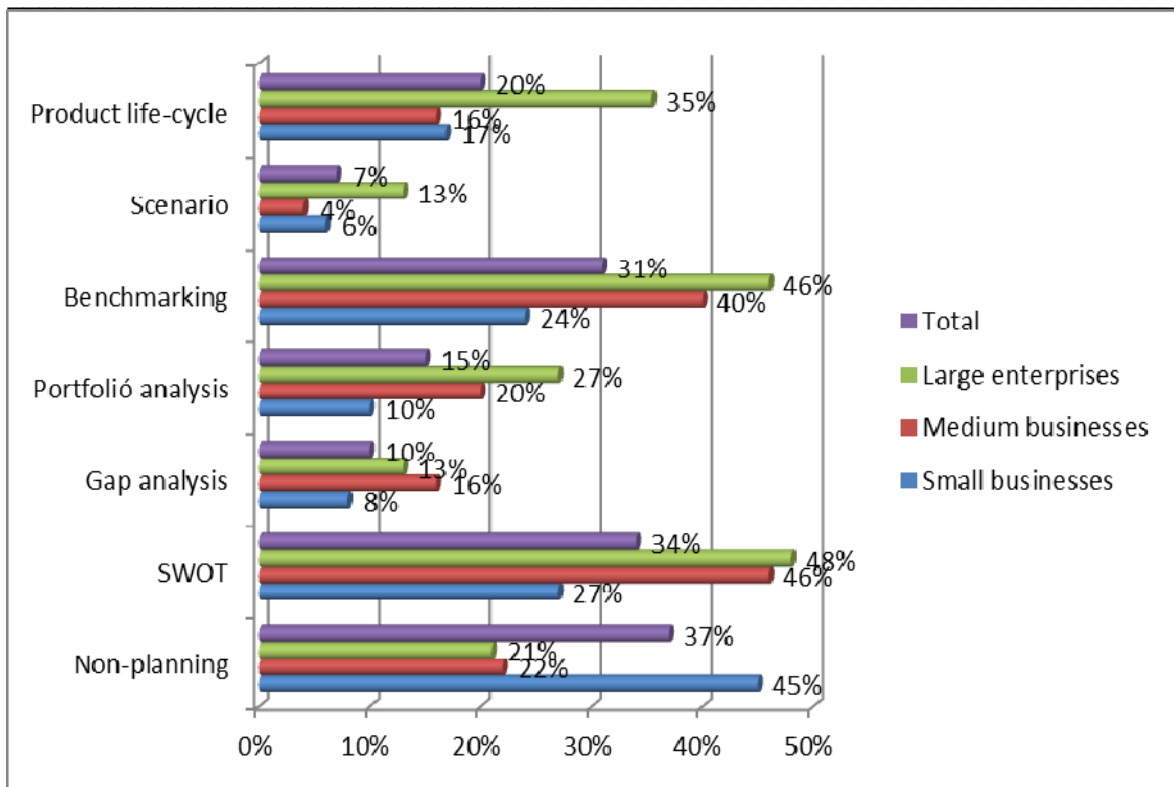


Figure 3. Marketing planning and distribution of the applied planning techniques

The applied questionnaire did not pan out about the timeframe of planning in particular, however the analytical techniques used in the process of marketing planning were all serving the purpose of supporting the strategic marketing plan. In case of the majority of the analytical techniques, it can be successfully verified what was already foreshadowed by the distribution ratios; application of the techniques and company size do correlate. The correlation strengths for each of the four techniques are the following:

- SWOT: $p=0,002$, $r=0,188$
- Portfolio analysis: $p=0,001$; $r=0,193$
- Benchmarking: $p=0,002$; $r=191$
- Product life-cycle analysis: $p=0,012$; $r=0,153$

The nature of the strategic objectives also reflects the businesses' approach. Two of the four examined strategic goals (survival, short-term profit maximization) (Figure 4) represent a short-term approach while the other two (increasing market share, enhancing capital strength) represent a long-term corporate aspect. The results of the research show that the strategic goals of the companies have been reorganized. In regard to the next three years, the importance of short term objectives has been reduced in favour of long-term goals. The number of companies who defined survival as a strategic goal has decreased by 25%, for those who indicated short-term profit maximizing the decrease was 15%. Slightly fewer companies aim to focus on increasing capital strength in the near future, while the majority will focus on increasing their market share. Therefore it can be pointed out in general, that the number of companies following long term strategic objectives has increased, while the number of businesses focusing on short-term goals has fallen back significantly.

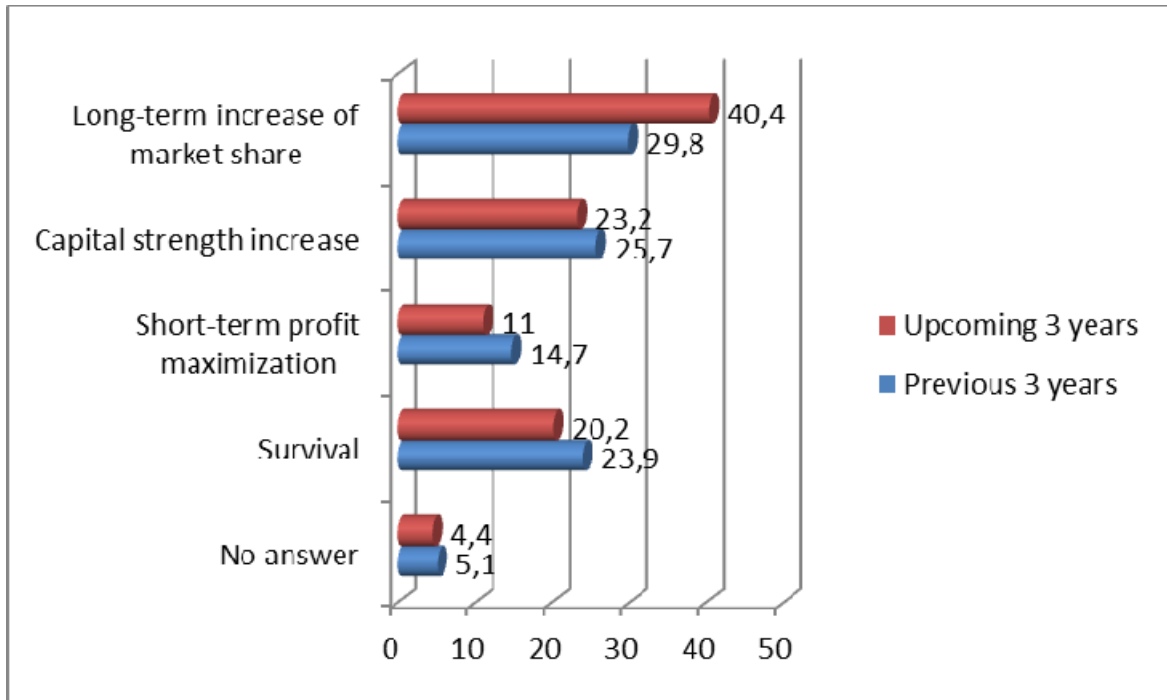


Figure 4. Exfoliation of strategic goals (%)

Examining the strategic goals according to the company size, significant shifts can also be observed into the direction of short-term goals among small businesses (Figs. 5 and 6). The phenomenon applies for the previous 3 years and the upcoming 3 years alike. Correlations shown by the distribution ratios are statistically verified regarding both periods. Company categories according to number of employed personnel show poor correlation with the chosen strategic goal, both for the previous three years' (N = 270, $r = 0.178$, $P = 0.003$) and the following three years' term (N = 270, $r = 0.165$, $P = 0.007$) as well.

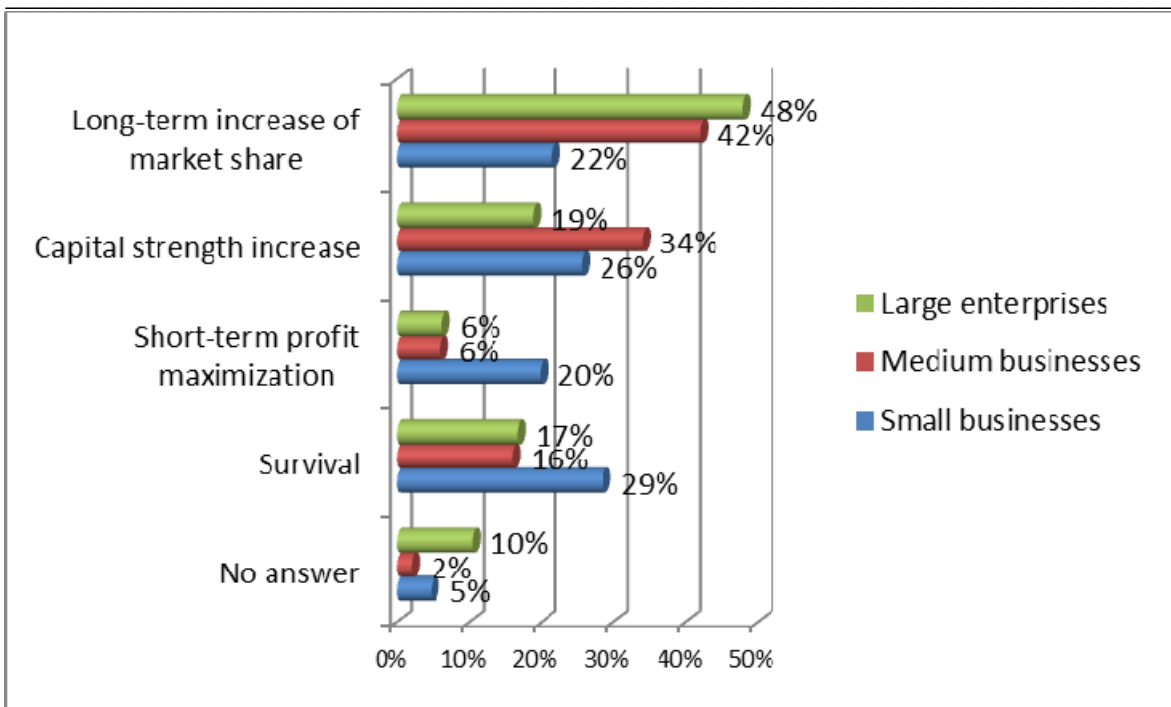


Figure 5. Distribution of strategic goals over the past three years according to size categories

In terms of the two time intervals, discrepancies appear regarding the next three years. Long term strategic objectives become conspicuous in businesses life. This assumedly relates to the favourable economic progress, as the rising optimism of businesses [20] brings long-term strategic goals into prominence.

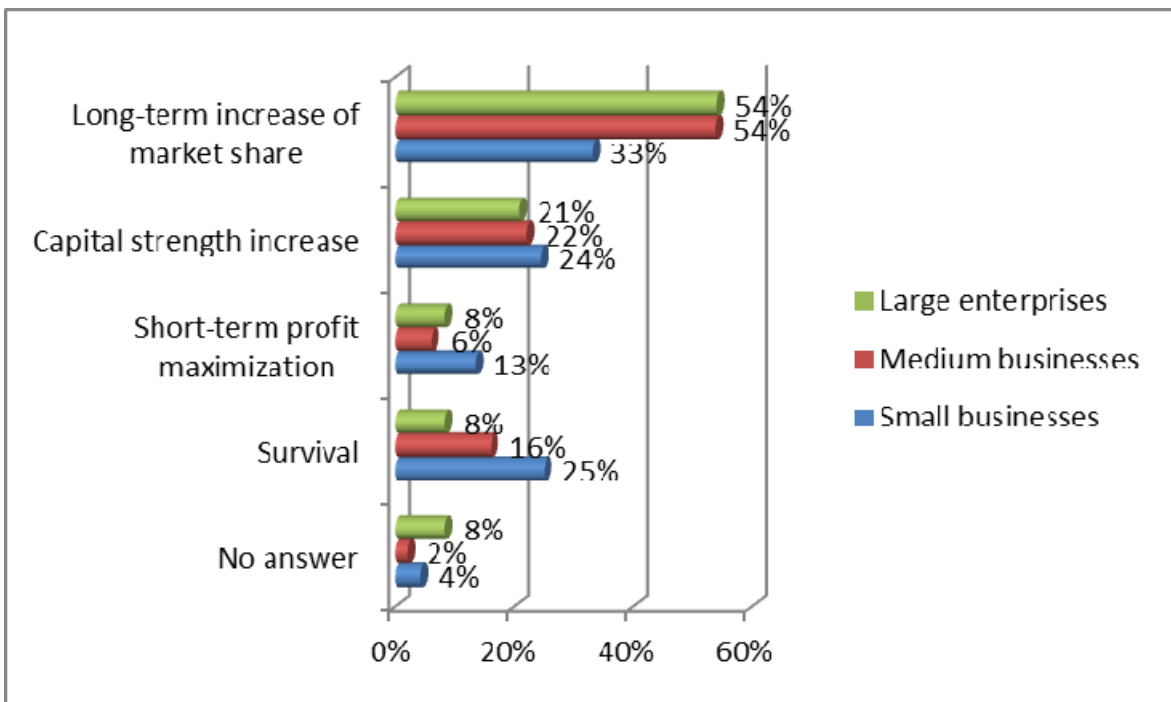


Figure 6. Distribution of strategic goals over the next three years according to size categories

6. CONCLUSIONS

Marketing planning applied by micro- and small businesses has its own advantages, such as easy implementation, monitoring and supervision, and also the fact that the coordination of the operation of departments does not take up managerial resources. However, business leaders tend to look only at the extra work involved with marketing planning and other marketing-controlling functions, and the possibly occurring additional costs. They usually do not take the potential benefits into account, since they are difficult to calculate.

In my study I have presented a part of my research, attempting to highlight the short-term orientation of Hungarian businesses. During the process, I verified the fact that company size does affect corporate marketing activity. It has been demonstrated that the smaller a company is, the less likely it is to create a marketing plan or utilize techniques that support planning. As a final conclusion I would not only like to state that it is essential to improve knowledge and skills of small businesses, but also point out the necessity to reshape the whole mind-set of entrepreneurs, that leads back to the roots of entrepreneurship as a life style. In order to achieve this, „nurturing” of future entrepreneurs has to take place starting from the higher educational institutions.

REFERENCES

1. A. Csiszárík-Kocsir, The perception of the recession formed by the economic downturn in the light of a survey, *Humánpolitikai Szemle*, 2012/3, 2012, p. 52.-60.
2. K. Lazányi, *Entrepreneurs*, 11th International Conference on Management, Enterprise and Benchmarking Budapest: Óbudai Egyetem, 2013a, p. 157-166.
3. K. Lazányi, *ERENET Profile*, 7(2), 2013b, p. 15-19.
4. I. Marosi, Trust and innovation in Hungarian SMEs. *Economists' Forum*, 2013/6, 16(115), 2013, p. 117-133.
5. I. Tóth Bordásné Marosi, A. Bencsik, *Organisational Behaviour – the force of trust*. Győr: Universitas-Győr Nonprofit Kft., 2012. 229 p.
6. F. Duma, *Online Journal Modelling the New Europe*, issue: 10/2014, 2014, pp. 67-79., <http://neweurope.centre.ubbcluj.ro/wp-content/uploads/2012/05/Online-Journal-No.10-March-2014.pdf>, downloads: 2014.05.26.
7. F. Katona, *Online Journal Modelling the New Europe*, issue: 10/2014, 2014, pp. 17-28, <http://neweurope.centre.ubbcluj.ro/wp-content/uploads/2012/05/Online-Journal-No.10-March-2014.pdf>, downloads: 2014.04.22.
8. European Committee, *Improvement of Entrepreneurial Mindset*, Publications Office of the European Union (A vállalkozói szemlélet fejlesztése az Európai Unióban. Európai Unió Kiadóhivatala), 2013, http://ec.europa.eu/enterprise/policies/sme/regional-sme-policies/documents/no.1_entrepreneurial_mindsets_hu.pdf; downloads: 2014.06.09
9. Ecorys, *EU SMEs in 2012: at the crossroads. Annual report on small and medium-sized enterprises in the EU*, Rotterdam, 2012, p. 9.
10. EC Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises, C(2003) 1422, Official Journal L 124 , 20/05/2003 P. 0036 – 0041, 2003, <http://eur-lex.europa.eu/legal-content/HU/ALL/;jsessionid=gTYxTm8BS2pqVKmMhKk2KWKN4zB0BShfYhnWRZQnGQJwBQtxgzwY!1854877348?uri=CELEX:32003H0361>, downloads: 2014.04.29.

11. G. Kadocsa, Competitiveness of Small and Medium Businesses in the First Decade of the 21st Century. Research report. (Kis- és közepes vállalkozások versenyképessége a XXI. század első évtizedében. Kutatási jelentés.) Óbuda University, Keleti Károly Business Faculty, Budapest, 2012
12. A. Hofmeister-Tóth, K. Kopfer-Rácz, D. Sas, *Sci of Manage*, 2013, season 44. series 10, page 2-12. (A hazai kis- és közepes vállalatok szociokulturális beállítódása a Hofstede-dimenziók mentén. *Vezetéstudomány*, 2013, 44. évf., 10. szám, 2-12. old.)
13. S. Ipsos, Two-thirds of businesses in the SME sector does not do marketing (A KKV vállalatok kétharmada nem marketegek), 2009.09.15, <http://www.szondaipos.hu/site/akkv-k-k-tharmada-nem-marketingezik/>, downloads: 2014.05.28.
14. C. Negricea, N. Dumitru, T. Edu, *Holistic Market. Manage*, vol. 1(2), 2011, pp. 36-45, June. <http://holisticmarketingmanagement.ro/RePEc/hmm/v1i1/2/6.pdf>; downloads: 2014.04.30.
15. H. Ehrmann, *Market. Control*. Kiehl Verlag, Ludwigshafen, 1991
16. J. Link, C. Welsner, *Market. Control*. München. (2006)
17. T. Reichmann, *Controlling mit Kennzahlen und Managementberichten*. Verlag Vahlen, München, 1995
18. Law about small and medium businesses, and the support of their development (2004. évi XXXIV. törvény a kis- és középvállalkozásokról, fejlődésük támogatásáról)
19. A. Chikán, *Bus. Econom (Vállalatgazdaságtan)*, Aula Publishing, Budapest, 1997
20. Napi.hu, Sudden burst of optimism in the SME sector (Hirtelen kitört az optimizmus a kkv-szektorban), 2014.04.24, http://www.napi.hu/magyar_vallalatok/hirtelen_kitort_az_optimizmus_a_kkv-szektorban.580438.html; downloads: 2014.04.30.

MODELLING THE DETERMINANTS OF SMES' CUSTOMER LOYALTY: FINDINGS FROM SERBIA

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Abstract

The objective of this study is to propose and empirically examine a model of SMEs' customer loyalty in Serbia, based on previously established relationships among the antecedents of customer loyalty and their effects on loyalty. The study has been performed in Serbia, as majority of previous examinations of the drivers of customer loyalty were performed in the context of the US and Western Europe, whereas loyalty drivers in the context of Serbian economy and SME sector have remained largely under-studied. Hypothesized relationships have been examined on a sample of customers of small and medium-sized retailers in Serbia, by means of structural equation modelling (SEM), using maximum likelihood as the method of parameter estimation. Results of the study indicate direct and most significant impact of customer satisfaction on loyalty, followed by market orientation and service quality as indirect determinants of customer loyalty. Implications and limitations of the study are discussed and directions for future research are highlighted.

Keywords: market orientation, service quality, customer satisfaction, loyalty, structural equation modelling, SME sector, Serbia

1. INTRODUCTION

Small and medium-sized enterprises (SMEs) are regarded as important drivers of economic well-being of European Union (EU) member countries. This category of enterprises, which is defined by European Commission as enterprises which employ up to 250 persons and generate an annual turnover up to 50 million, or which have an annual balance sheet total not exceeding 43 million euro [1], according to the latest Eurostat's data comprises 99,8% of total number of enterprises operating within total business economy [2]. Small and medium-sized enterprises which provide employment to 67,17% of people employed within total business economy are also considered as dominant employers in the EU area. Somewhat weaker but still not negligible is SMEs' contribution to value added (57,92%) and turnover (55,06%) of total business economy, including repair of computers, personal and household goods and excluding financial and insurance activities, generated by the EU-28 countries in 2011. Micro enterprises, employing fewer than 10 persons, account for 92,54% of enterprises within non-financial business economy and as such represent prevailing size class of SMEs. In 2012, SMEs in Serbia accounted for 99,8% of the total number of business entities and by hiring 782.026 people it provided engagement to 65,1% of employees in non-financial business economy [3]. The structure of SME sector is dominated by micro enterprises, which account for 96,1% of enterprises. The contribution of SME sector amounted to 65,4% of turnover and 55,8% of gross value added of non-financial sector. It is estimated that SMEs accounted for 33% of Serbian Gross Domestic

Product (GDP) in 2012. SMEs achieved productivity growth, measured by GVA per employee, in 2012 in comparison with 2011, of 3,8%, which is higher than in the non-financial sector (2.4%) and large companies (0.4%). SME sector also realized above the average growth of earnings, 6,5% in comparison with the growth of total non-financial business economy (4,3%) and large enterprises (2,1%). However in order to take more active role in economic progress of Serbia SME sector has still to resolve certain issues. The level of competitiveness of Serbian SME sector significantly lags behind the European average and most comparable countries [3]. According to the study conducted by National Agency for Regional Development in Serbia on a sample of 8000 economically active SMEs in 2013, high competitive pressures have been recognized as one of the main obstacles towards better business performance [3]. Most respondents (57%) have recognized lack of finance as one of the leading impediments towards better business performance. Therefore majority of enterprises and entrepreneurs (53%) intend to maintain the same level of business activity in the following three-year period.

Some empirical studies have reported that building customer loyalty ultimately leads to company's long-term profitability [4,5]. Previous research on market-based performance measures for firms, industries, economic sectors and national economies have relied on customer loyalty as the ultimate dependent variable in the model, as the construct of customer loyalty has been generally regarded as the proxy for profitability [6,7,8]. Customer loyalty results in a number of positive consequences for companies. Building a loyal customer base is considered as an important source of sustainable competitive advantage [9]. Loyal customers are willing to recommend a product or service [10,11] and generate higher revenues for companies due to their readiness to repurchase and buy additional goods and services from the same company [12,13]. Building and maintaining customer loyalty also impacts company's future profitability, as it is five to nine times more expensive to attract a new customer than retain a loyal customer [8]. Previous studies have reported that the reduction of customer churn by 5% can yield profit improvements of 25% to 85% [14]. Customer loyalty can offset competitors' efforts in attracting new customers and boost employees' morale and productivity [15]. Due to its relevance for companies' performance the construct of customer loyalty has been the subject of extensive examinations in previous empirical studies. Most studies investigating the determinants of customer loyalty have reported significant impact of the delivery of high quality service and satisfying customers on building loyal customer base [16,17,18]. Recent empirical evidence also provides support for the impact of company's market orientation on customer retention and business performance [19,20]. However the studies on the determinants of customer loyalty have been mainly conducted in the context of the US economy and Western Europe. Great attention has been also paid over recent years to the influential factors of customer retention in developed Asian economies, whereas the determinants of customer loyalty in the context of transitional economies have been largely under-studied. This is especially pertinent to Serbian economy and its SME sector. Due to the fact that SMEs generate one third of Serbian GDP, and expectations regarding their even more prominent role in the revival of Serbian economy, it is especially relevant to investigate the determinants of customer loyalty as the proxy for enterprises' profitability. Therefore by examining relationships among key determinants of customer behavioral intentions and their impact on customer loyalty this study aims to fill this void in the literature. Examination of dependence relationships among the constructs will be performed in the context of retailing, as almost one third of SMEs in Serbia (30,3%) operates in the field of wholesale and retail trade.

The remainder of the paper is organized as follows. The following section provides theoretical background of market orientation, service quality, satisfaction, their interrelatedness and impact on customer loyalty. Methodology is discussed subsequently, followed by the results of the empirical examination of hypothesized relationships. Implications of the study are highlighted and limitations and suggestions for future research are indicated.

2. CONCEPTUAL FRAMEWORK

According to the most widely accepted notion of service quality the construct is defined as „the customer's judgment about an entity's overall excellence or superiority“ [21, p.15]. It has been generally regarded as the construct which is especially difficult to define and measure, as it is not based on some objective criteria, but impressions of service quality depend on a discrepancy between customer's expectations formed before service experience and his perceptions of delivered service. This construct is related to, but not equivalent to satisfaction, which is defined as „the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience“ [22, p.27]. As both constructs are based on the comparison of expectations and perceptions early studies often used them interchangeably. However, Parasuraman et al. (1988) provided evidence of the difference between the constructs stating that service quality depends on ideal expectations, whereas predictive expectations act as the standard of comparison in the formation of customer satisfaction [21]. Service quality has received much prominence in Service Marketing literature to date. Its conceptualization and measurement across service industries have been dominated by Parasuraman et al.'s (1988) multiple-item scale. According to this approach service quality is a multidimensional constructs whereas customers' expectations and perceptions regarding five service quality dimensions, reliability, responsiveness, assurance, empathy and tangibles, shape customers' impressions of service quality. The construct of service quality has been regarded as a key variable in strategic planning, as in increasingly competitive business environment it serves as an important factor in achieving a differential advantage over competitors [23]. A number of empirical studies have found support for significant impact of service quality on customer loyalty. Results of a multicompany study, including retailing, provide evidence of significant impact of service quality improvements on customers' willingness to repurchase and spread positive word of mouth, whereas delivery of quality service curtails customer switching intentions. Positive influence of service quality on customer willingness to make the same choice again and recommend the service provider to a friend, as indicators of customer loyalty, has been also supported in several multi-industry studies [24,17]. Based on previous research findings the following hypothesis is proposed:

H1: Service quality is positively related to customer loyalty.

Due to its potential influence on customer purchase intentions and willingness to spread positive word-of-mouth the construct of customer satisfaction has also been the subject of much research attention. A considerable number of authors have argued that that service quality, in addition to its direct impact on customer loyalty, adds to future behavioral intentions of customers through its positive influence on customer satisfaction. Results of the study conducted in the context of high-contact service shops in Hong Kong provide

evidence of significant impact of service quality on customer satisfaction, which further leads to customer readiness to consider the service shop as the first choice in future purchases, say positive things and recommend the service shop as well as encourage others to use the services of the same provider [5]. According to this study's findings customer loyalty exerts positive influence on firm profitability, measured in terms of return of assets (ROA), return of sales (ROS) and return on investment (ROI). Empirical verification of positive impact of service quality on customer satisfaction and its influence on customers' willingness to use services of the same facility again and recommend the service provider to a friend have been also evidenced in a study conducted on a sample of North American and Ecuadorian fast-food customers [25]. Positive effect of service quality on customer satisfaction and its relatedness to customer behavioral intentions, i.e. revisit and repurchase intentions and customer willingness to recommend, have been also supported in a study conducted on a sample of e-retailing customers in Greece [12]. Strong impact of service quality on customer satisfaction and its considerable influence on loyalty have been supported in a study conducted in the travel agency sector in Spain [26]. Likewise, empirical examination conducted in the context of tourist destinations in Slovenia offers support to the impact of service quality on customer satisfaction and its relatedness to customer loyalty [18]. Evidence in support of these relationships has been also provided by a number of studies conducted across service industries [16,17,27,28,29]. Therefore, the following hypotheses are proposed:

H2: Service quality is positively related to customer satisfaction;

H3: Customer satisfaction is positively related to customer loyalty.

Small and medium-sized enterprises are usually regarded as more innovative and flexible than their larger counterparts. Establishment and maintenance of close relationships with customers is one of the key distinctive traits of small companies. Adoption of market oriented practice is what enables SMEs to compete effectively with larger companies [30]. The construct of market orientation first emerged in the 1990s. It is considered as the foundation of sustainable competitive advantage. According to one of the most widely accepted conceptualizations of the construct, market orientation is „the business culture that most effectively and efficiently creates superior value for customers,, [31, p.20], whereas the delivery of superior value is considered to be the cornerstone of true customer loyalty [14]. Market orientation consists of three behavioral components - customer orientation, competitor orientation, and interfunctional coordination. Customer orientation implies sufficient understanding of one's target buyers, their current and latent needs, in order to deliver superior value and retain customers, whereas competitor orientation entails knowledge of short-term strengths and weaknesses and long-term capabilities of current and potential competitors. In addition to customer and competitor orientation the delivery of superior value for customers necessarily requires interfunctional coordination, i.e. concerted efforts of all company's departments in the creation of superior value for customers. There are a number of positive effects of market oriented business practice. According to a meta-analytical study conducted by Cano et al. (2004) on a sample of 53 empirical studies spanning five continents, adoption of market orientation positively affects business performance and the results are generalizable across countries and socioeconomic contexts [32]. Review of recent studies conducted in the context of SME sector also provides support for positive impact of market orientation on a firm performance, i.e. revenue growth, market share, return on investment, new product success

rate [30]. An essential factor in the implementation of market oriented practice is the attitude of people who make up the organization, especially top management support [33]. In addition to its impact on financial performance, market orientation also exerts positive influence on customer-related outcomes. An empirical study conducted in the context of business-to-business banking services provide support for the positive impact of market orientation on customers' perception of service quality and customer satisfaction [34]. Results of the study conducted in Spain in the context of tourist agencies also indicate positive effects of market orientation on service quality [35]. Empirical support has also been provided for the direct impact of market orientation on customer satisfaction [34,36,20]. Taken these arguments into account, the following hypotheses are proposed:

H4: Market orientation positively affects service quality;

H5: Market orientation is directly related to customer satisfaction.

Conceptual model comprising hypothesized relationships is presented in Figure 1.

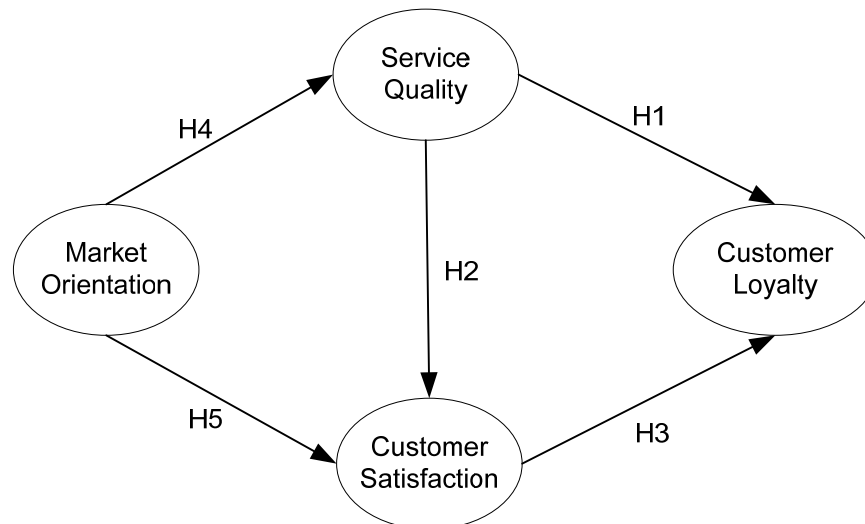


Figure 1. Conceptual model

3. METHODOLOGY

The study has been performed on a convenience sample of customers of non-specialized grocery retailers operating in Eastern Serbia. Data have been collected in personal interviewing, by means of structured questionnaire. After brief explanation of the aim of the study, respondents have been asked to rate the retailer at whose stores they make majority of family purchases for groceries and related assortment. As it has been the part of a larger study, only responses relating to small and medium-sized retailers have been taken into account for the examination of proposed hypothesis. The deduction resulted in 276 usable responses, out of 568 complete questionnaires.

The questionnaire consisted of five sections. First section dealt with respondents' overall perceptions of service quality whereas in the following sections respondents were asked about their satisfaction with service provider, loyalty intentions and perceptions of service

enterprise market orientation. Final section of the questionnaire consisted of demographic questions. A review of large body of literature suggests that conceptualization and measurement of service quality have evolved within two schools of thought, Nordic and North American. According to both streams of research service quality is a multidimensional construct. However, consensus between the two has not been reached yet regarding content and number of service quality dimensions. According to the Nordic perspective customers' impressions of service quality are shaped by technical, functional and corporate quality, whereas the North American perspective and its widely known SERVQUAL measurement instrument contend that service quality judgements are based on the difference between customers' expectations and perceptions regarding five service quality dimensions, reliability, responsiveness, assurance, tangibles and empathy. However, literature provides evidence of modelling multidimensional constructs as reflective and unidimensional, if the construct is not the focal variable in the model, but the study aims to examine causal relationships among multiple constructs [37]. Therefore respondents in this study were asked to indicate their overall quality perceptions, by rating on a seven-point semantic differential scale four pairs of attributes adopted from previous service quality studies [24,25]. As for customer satisfaction, the construct was measured by adapting three items used in previous studies [17,26]. Respondents were asked to indicate the extent to which they find that the retailer meets their needs and to what extent they find that they are satisfied, i.e. very satisfied with the service. Customer loyalty was measured on a 4-item scale, adapted from previous studies [10,17,15]. Respondents were asked to indicate likelihood of saying positive things about the retailer, recommending the retailer to a friend, buying again from the same retailer and likelihood of buying from the same retailer in future household purchases, even if the prices were somewhat higher than competitors' prices. Market orientation was measured on a 3-item scale. Whereas interfunctional coordination is not exposed to customers' direct observation, other two traits of the constructs were measured by asking respondents to indicate their level of agreement with the statements regarding retailer's understanding of customers' needs, its continuous commitment to meeting customer needs and retailer's superiority in meeting customer needs in comparison with competitors' efforts. With the exception of service quality, all constructs were measured on 7-point Likert-type scales ranging from 1-strongly disagree to 7-strongly agree.

Relationships among the constructs were examined by means of structural equation modelling (SEM), using maximum likelihood as the method of parameter estimation. Two-step procedure proposed by Anderson and Gerbing (1988), implying estimation of measurement model, followed by the examination of structural relations, was utilized [38]. Data analysis was performed using SPSS 18 and LISREL 8.80.

4. RESULTS

Confirmatory factor analysis (CFA) was performed for the estimation of measurement model. The overall model fit as indicated by the χ^2 statistic ($\chi^2 = 186.83$, $df = 69$, $p < .01$) was unsatisfactory. However, given the sensitivity of χ^2 test to sample size, attention was paid to other absolute and incremental fit measures, namely, goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), root mean square residual (RMSEA), standardized root mean square residual (SRMR), comparative fit index (CFI), normed fit index (NFI), non-normed fit index (NNFI). Whereas SRMR and RMSEA values up to 0.08 indicate acceptable fit of the proposed model, values of other fit measures equal to or higher than

0.90 indicate that specified model fits the data [39,40]. Fit indices of the proposed model and their recommended values are presented in Table 1.

Table 1. Measurement model fit

Fit indices	GFI	AGFI	RMSEA	SRMR	CFI	NFI	NNFI
Measurement model	0.91	0.86	0.08	0.05	0.96	0,94	0.95
Recommended value	≥0.90	≥0.90	≤0.80	≤0.80	≥0.90	≥0.90	≥0.90

Acceptable fit of the proposed model allowed for the assessment of construct validity, which refers to the degree to which a set of measured variables appropriately represent the latent construct they are designed to measure [41]. Construct validity entails the assessment of convergent and discriminant validity. Strong evidence in support of convergent validity is provided by average variance extracted (AVE), i.e. the magnitude of shared variation for two or more measures of a latent factor, higher than 0.50 [42]. All constructs, except market orientation with slightly lower than recommended AVE (0.49), fulfill this condition. Statistically significant factor loadings higher than 0.50, as presented in Table 2, also indicate convergent validity of the constructs. Indirect evidence in support of convergent validity is provided by internal consistency (Cronbach alpha>0.70) and composite reliability ($\rho>0.70$) of the constructs.

Table 2. Assessment of convergent validity

Constructs	St. factor loadings	t-values	Cronbach alpha	Composite reliability
Market orientation	0.68-0.73	10.02-10.70	0.74	0.75
Service quality	0.68-0.90	13.11-19.08	0.89	0.88
Customer satisfaction	0.88-0.91	21.07-22.37	0.92	0.92
Customer loyalty	0.68-0.94	14.18-27.39	0.90	0.90

Table 3. Assessment of discriminant validity

	Market Orientation	Service Quality	Customer Satisfaction	Customer Loyalty
Market Orientation	0.49			
Service Quality	0.46	0.65		
Customer Satisfaction	0.48	0.57	0.79	
Customer Loyalty	0.38	0.48	0.69	0.69

Note: Correlations are significant at the 0.01 level (2-tailed)

Discriminant validity refers to the degree to which two conceptually similar constructs are different [41]. Evidence in support of discriminant validity of the constructs is provided by

squared correlations among the constructs which are lower than AVEs. Matrix of squared correlations together with AVEs on the diagonal is presented in Table 3.

Due to acceptable fit indices of the measurement model and fulfilled conditions of convergent and discriminant validity, structural model was assessed in the following stage. In spite of statistically significant and thus unacceptable value of chi-square test ($\chi^2=169.69$, $df=69$, $p<0.01$) structural analysis yielded an excellent overall fit of the model as indicated by other absolute and incremental fit indices. Fit statistics are presented in Table 4.

Table 4. Structural model fit

Fit indices	GFI	AGFI	RMSEA	SRMR	CFI	NFI	NNFI
Measurement model	0.92	0.88	0.07	0.05	0.99	0.98	0.98
Recommended value	≥ 0.90	≥ 0.90	≤ 0.80	≤ 0.80	≥ 0.90	≥ 0.90	≥ 0.90
Hypothesis testing				St. estimates	t-value	Results	
H1: Service quality \rightarrow Customer loyalty				0.05	0.51	Not supported	
H2: Service quality \rightarrow Customer satisfaction				0.63	4.91	Supported	
H3: Customer satisfaction \rightarrow Loyalty				0.89	8.14	Supported	
H4: Market orientation \rightarrow Service quality				0.87	14.38	Supported	
H5: Market orientation \rightarrow Satisfaction				0.29	2.25	Supported	

Given the satisfactory fit of the model structural relationships were then examined. Structural model is presented in Figure 2. Contrary to what was predicted in Hypothesis 1, service quality did not exert significant impact on customer loyalty ($\beta=0.05$, $t=0.51$). The results showed that customer satisfaction was directly influenced by service quality ($\beta=0.63$, $t=4.91$) and that customer satisfaction was a significant direct determinant of customer loyalty ($\beta=0.89$, $t=8.14$), thus supporting hypotheses H2 and H3. Examination of structural relationships indicated significant impact of market orientation on service quality ($\gamma=0.87$, $t=14.38$) and its somewhat lower but still significant influence on customer satisfaction ($\gamma=0.29$, $t=2.25$), thus supporting hypotheses H4 and H5. The estimated R^2 values of dependent variables in the model were quite high ($R^2_{sq}=0.66$; $R^2_{sat}=0.75$; $R^2_{loy}=0.86$) thus indicating high predictive power of the model. Results of the study indicated the most significant impact of satisfaction on customer loyalty (0.89), followed by the impact of market orientation (0.73) and service quality (0.56).

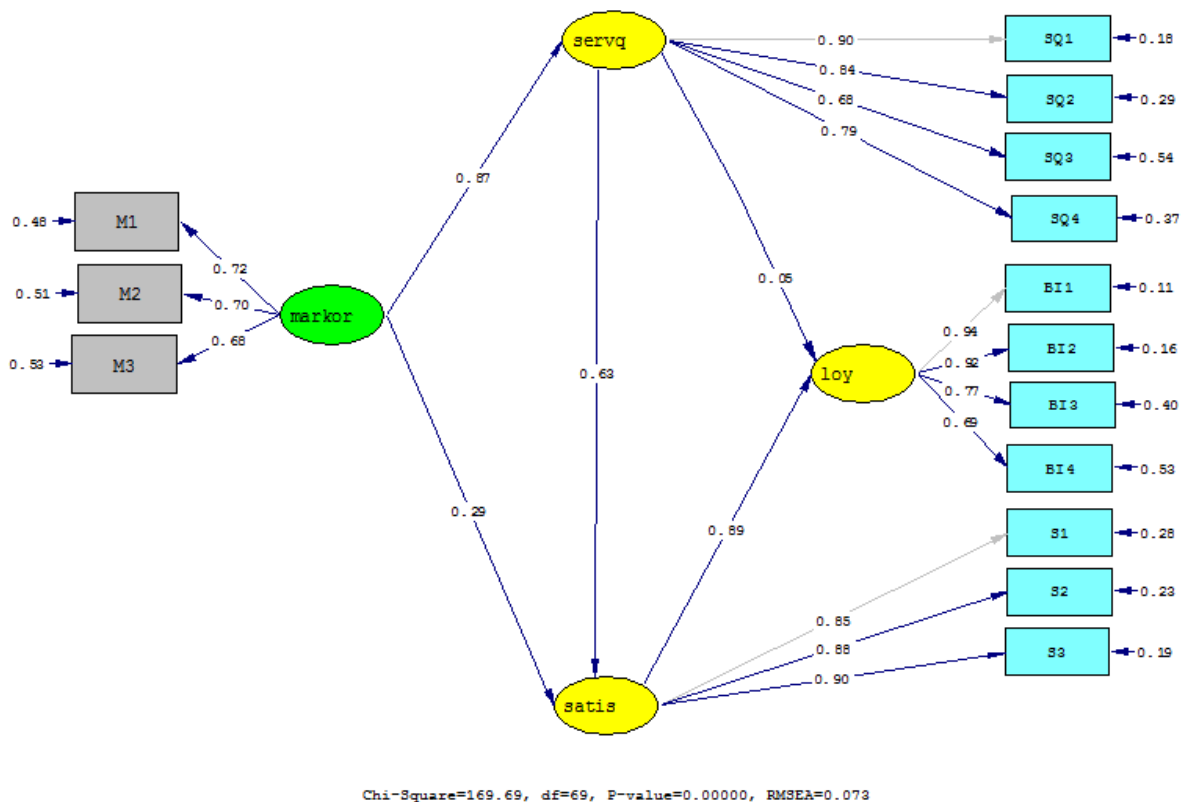


Figure 2. Structural model

5. DISCUSSION

The main objective of this study was to examine the determinants of SMEs' customer loyalty in Serbia and their relative impact on loyalty. The model which was the object of examination was based on established relationships among market orientation, service quality, customer satisfaction and loyalty across service industries. Results of this study clearly indicate the most significant direct impact of customer satisfaction on loyalty. In addition to customer satisfaction, due attention should be paid to market orientation and service quality which significantly impact customer satisfaction and further add to the development of customer loyalty intentions. As such, findings of this study bear theoretical as well as managerial relevance. From the theoretical perspective this study adds to the growing body of knowledge on SMEs' customer loyalty, especially addressing this significant issue in thus far insufficiently examined research context. Findings of this study also have managerial implications. As meeting and exceeding customer expectations significantly affect customer loyalty, management of SMEs is strongly advised to probe more deeply into the domains of service delivery deemed as satisfiers from customers' perspective. This is not expected to be an especially troublesome requirement, owing to the fact that SMEs usually establish closer communication with customers and know them personally. SMEs which are market oriented and devoted to understanding, anticipating and meeting customers' needs better than competitors are in a position to improve customers' perceptions of service quality and via customer satisfaction build a truly loyal customer base, which is expected to further add to company's future profitability.

In spite of its contribution, this study is not bereft of limitations either. The main drawback of the study is the size and scope of its sample. Taking into consideration only one service industry at one point of time precludes generalization of the findings, especially magnitudes of causal relationships among the constructs. Therefore, in order to improve generalizability of the findings research should be replicated on a more representative sample of SMEs' customers. Furthermore, research should be performed on a longitudinal basis, in order to reach more generalizable inferences regarding dependence relationships among the constructs. Although vast majority of previous studies were based on a multidimensional conceptualization of service quality [16,26,28,43], this study opted for customers' overall impressions of service quality. However, with regard to significant effect of service quality on customer satisfaction and indirect influence of quality on customer loyalty, future studies should take into consideration multidimensional perspective of quality construct and endeavor to examine the relative importance of service quality dimensions on customer satisfaction and loyalty intentions. Another fruitful avenue for future research would be more thorough examination of specific traits of the construct of market orientation, especially as shared variance among the traits used in this study was somewhat lower than 50%. Previous studies also provide evidence in support of positive impact of service quality on trust and relevance of trust in service provider for satisfying customers and building loyal customer base [44]. Therefore, more comprehensive models of customer loyalty in SME sector are worthy of further research.

REFERENCES

1. Eurostat, source:
http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Business_economy_-_size_class_analysis, retrieved: 09 June 2014
2. Eurostat, source:
[http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=sbs_sc_sca_r2&lang=en,\(sbs_sc_sca_r2\)](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=sbs_sc_sca_r2&lang=en,(sbs_sc_sca_r2)), retrieved: 09 June 2014
3. Report and small and medium-sized enterprises and entrepreneurship 2012, Ministry of Economic and Regional Development, National Agency for Regional Development, 2013, source: www.pks.rs, retrieved: 09 June 2014, (in Serbian)
4. E.W. Anderson, C. Fornell, D.R. Lehmann, *J. Marketing*, 58 (1994) pp. 53-66
5. R.W.Y. Yee, A.C.L. Yeung, T.C.E. Cheng, *Int. J. Prod. Econ.*, 124 (2010) pp. 109-120
6. C. Fornell, M.D. Johnson, E.W. Anderson, J. Cha, B.B. Everitt, *J. Marketing*, 60 (1996) pp. 7-18
7. M.D. Johnson, A.Gustafsson, T.W. Andreassen, L. Lervik, J. Cha, *J. Econ. Psychol.*, 22 (2001) pp. 217-245
8. S.I. Chiu, C.C. Cheng, T.M. Yen, H.Y. Hu, *Expert Syst. Appl.*, 38 (2011) pp. 9780–9787
9. R. Mandhachitara, Y. Poolthong, *J. Serv. Mark.*, 25 (2011) pp. 122–133
10. V.A. Zeithaml, L.L. Berry, A. Parasuraman, *J. Marketing*, 60 (1996) pp. 31-46
11. F.F. Reichheld, *Harvard Bus. Rev.*, 81 (2003) pp. 46-54
12. S. Gounaris, S. Dimitriadis, V. Stathakopoulos, *J. Serv. Mark.*, 24 (2010) pp. 142–156
13. H. Evanschitzky, B. Ramaseshan, D.M. Woisetschläger, V. Richelsen, M. Blut, C. Backhaus, Consequences of customer loyalty to the loyalty program and to the company, *J. Acad. Market. Sci.*, 40 (2012) pp. 625-638
14. F.F. Reichheld, *Harvard Bus. Rev.*, 74 (1996) pp. 65-69
15. B.R. Lewis, M. Soureli, *J. Consum. Behav.*, 5 (2006) pp. 15-31

16. K.S. Choi, W.H. Cho, S. Lee, H. Lee, C. Kim, *J. Bus. Res.*, 57 (2004) pp. 913-921
17. M.K. Brady, G.A. Knight, J.J. Cronin, G. Tomas, M. Hult, B.D. Keillor, *J. Retailing*, 81 (2005) pp. 215–230
18. V. Žabkar, M. Brenčič Makovec, T. Dmitrović, *Tourism Manage.*, 31 (2010) pp. 537–546
19. S.C. Chen, P.G. Quester, *J. Retailing Consum. Serv.*, 16 (2009) pp. 197-206
20. C.H. Wang, K.Y. Chen, S.C. Chen, *Int. J. Hosp. Manag.*, 31 (2012) pp. 119–129
21. Parasuraman, V. Zeithaml, L. Berry, *J. Retailing*, 64 (1988) pp. 12-40
22. R.L. Oliver, Measurement and evaluation of satisfaction processes in retail settings, *J. Retailing*, 5 (1981) pp. 25–48
23. B.R. Lewis, *J. Marketing Manag.*, 7 (1991) pp. 47-62
24. J.J. Jr. Cronin, M.K. Brady, T.M. Hult, *J. Retailing*, 76 (2000) pp. 193-218
25. M.K. Brady, C.J. Robertson, J.J. Cronin, *J. Int. Manag.*, 7 (2001) pp. 129-149
26. D. Setó-Pamies, *Total Qual. Manag. Bus.*, 23 (2012) pp. 1257-1271
27. J. Dado, J. Taborecka J. Petrovicova, S. Cuzovic, T. Rajic, *Ser. J. of Management*, 7 (2012) pp. 203-218
28. J. Dado, J. Taborecka-Petrovicova, D. Riznic, T. Rajic, *Ekon. Cas.*, 61 (2013) pp. 578-596
29. T. Rajic, J. Dado, *Total Qual. Manag. Bus.*, 24 (2013) pp. 1096-1110
30. P.S. Raju, S.C. Lonial, M.D. Crum, *J. Bus. Res.*, 64 (2011) pp. 1320–1326
31. J.C. Narver, S.F. Slater, *J. Marketing*, 54 (1990) pp. 20-35
32. R.C. Cano, F.A. Carrillat, F. Jaramillo, *J. Res. Marketing*, 21 (2004) pp. 179–200
33. C.B. Castro, E.M. Armario, M.E. Sánchez del Río, *Eur. J. Marketing*, 39 (2005) pp. 646–675
34. D. Webb, C. Webster, A. Krepapa, *J. Bus. Res.*, 48 (2000) pp. 101–112
35. E.J. Bigne, L. Andreu, I. Küster, A. Blesa, *Ann. Tourism Res.*, 32 (2005) pp. 1022–1038
36. A.H. Kirca, *J. World Bus.*, 46 (2011) pp. 447–454
37. C.P. Blocker, *J. Bus. Res.*, 64 (2011) pp. 533–540
38. J.C. Anderson, D.W. Gerbing, *Psychol. Bull.*, 103 (1988) pp. 411-423
39. R.C. MacCallum, M.W. Browne, *Psychol. Bull.*, 114 (1993) pp. 533-541
40. L. Hu, P.M. Bentler, *Struct. Equ. Modeling*, 6 (1999) pp. 1-55
41. J.F. Jr. Hair, W.C. Black, B.J. Babin, R.E. Anderson, *Multivariate Data Analysis: A Global Perspective*, 7th ed., Pearson Prentice Hall, Upper Saddle River, New Jersey, 2010
42. R.P. Bagozzi, Y. Yi, *J. Consum. Res.*, 17 (1991) pp. 426-439
43. R.K.Panda, R.K.R. Kondasani, *Serb. J. Manag.*, 9 (2014) pp. 91-103
44. J.S. Chiou, C. Droge, *J. Acad. Mark. Sci.*, 34 (2006) pp. 613-627

INFLUENTIAL FACTORS IN DEVELOPING COMMITMENT IN THE CUSTOMER-SUPPLIER RELATIONSHIP WITHIN SMES

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Abstract

In recent years, corporate sustainability has become standard topic in many small and medium size enterprises all over the world. In the last thirty years, SMEs sector has been successful in many countries in the world, especially in the newly industrialized countries in transition. Customer-supplier relationship management was always very important for the success of any company. The aim of this study is to perform strategic analysis of commitment in the relationships between customers and their suppliers concerning small and medium enterprises in Serbia. The research presented in this paper was conducted in period of 2013-2014 in SMEs. The main tool was the questionnaire based on a review of relevant literature, which was used as the concept of the study. The Structural Equation Modeling (SEM) and the path analysis are used in testing the research hypotheses applying LISREL software, version 8.0. The revealed results that customer's trust in supplier as direct factor, and h satisfaction as an indirect factor, have positive and meaningful impact on the commitment in this relationships.

Keywords: SMEs, Customer, Supplier, Relationships, Commitment

1. INTRODUCTION

Most researches have focused on building customer - supplier relationships, explaining how relation processes lead to outcomes such as satisfaction, trust, commitment. [1]. This paper describes the degree to which the development of commitment in the relationship between customer and supplier in the MSPs can improve the business and affect the achievement of competitive advantages.

The subjects of this research are small and medium enterprises included into industry sector process in Serbia. SMEs represents very important economy factor in all parts of Europe. Illustrative data shows that SMEs make about 99.8% of total number of enterprises in Serbia [2].

The global economic crisis still has a negative impact on the business volume of the majority of SMEs. Long periods of payment and short deadlines to meet liabilities represent one of the most common business financial problems especially for small companies. In Serbia, only 56% of SMEs as customers pay their financial liabilities to their suppliers within the stipulated period [3]. Therefore, building commitment relationship

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between customer and supplier in SMEs has been identified as one of the key characteristics of successful relationships in which trust plays a significant role as a key determinant of commitment relationship [4].

Any long-lasting business transaction between a company and supplier require mutual commitment in order to achieve their common goals within supplying chain to SMEs [5], based on the idea that social norms of trust and reciprocity improve co-operative behavior, which in turn initiate the accumulation of durable ties [6].

In an increasingly dynamic and globalized economic context, establishing and developing enduring relationships with suppliers and customers has become a key strategic concern in SMEs [7]. As such, the supplier is no longer a source for providing reproductive material, but he becomes the partner, who, in the long-term and commitment cooperation can greatly contribute to reduction of material costs, faster turnover of relatively limited working capital, rational development of production processes, resulting in more efficient operation of industrial small and medium-sized enterprises. However, the lack of commitment to the customer's supplier may limit the willingness of the supplier to reduce customer costs, which can lead to increasing of operating costs [1].

The aim of this study is to perform strategic analysis of commitment in the relationships between customers and their suppliers within small and medium enterprises in Serbia. The nature of this relationship (customer-supplier), becomes the subject of strategic analysis and decision-making. There can be the whole range of relationships between customer and supplier in the business market can be a [8], which attracted significant on academic and managerial attention in the last two decades [9].

Selection of quality suppliers in existing business conditions of fast development of small and medium enterprises in Serbia, as well as their growing into significant segment of economy, as a part of transitional process of Serbian economy, is not the simple task at all. Com the course of selecting their suppliers, may apply some additional measures, e.g. in case there are two suppliers they can buy greater quantities from the high quality supplier and less quantities from the less quality supplier, and make that information available to the suppliers that have interest to develop the product and to introduce allowances to the quality.

2. LITERATURE REVIEW AND DEFINITION OF HYPOTHESES

Small and medium size enterprises are focusing considerable attention on building sustainable, competitive advantages by developing and maintaining close, cooperative relationships with a limited set of customers, suppliers, and channel members. Through these relationships, SMEs create values by differentiating their offering and/or lowering their costs [10,11,12].

Small and medium size enterprises (SMEs) present one of the major generator of economic development in any market economy. Sector SMEs has been successful in the whole world in the last thirty years, especially in the newly industrialized countries in transition. The process of managing SMEs is very specific because the business activities are carrying out under conditions of scarce resources. The development of SMEs is one of the key development priorities in Serbia.

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SMEs played a very important role in the early transition period in all economic transformations. They were able to respond to the opportunities of created system changes better than the larger and numerous established firms. They also absorbed a significant number of employees laid off by larger firms in the restructuring and privatization processes. In developed market economies, of course, SMEs also played an additional and an equally important role in being the means for diffusion of innovation and technology [13]. In this paper, we have examined the customer- supplier relationship in order to analyze entrepreneurship and entrepreneurs working in different economy environments and stages of economy and institutional development, with the final aim to develop commitment.

In the existing literature, commitments in relation customer - supplier within SMEs is a multidimensional process. Many scientists have classified commitment into affective, calculated, and, sometimes, normative dimensions [14,15]. Other researchers explain commitment through dimensions of attitudes and behaviors, confirming that affective and calculated commitments are the part of a broader concept, depending on the attitude and / or behavior. [16,17].

Among the various relationships of marketing constructs, commitment is constantly cited as one of the key elements for successful relationship in the distribution channel in SMEs. Among several factors affecting the commitment ,perception of satisfaction between the customer - supplier and the level of trust can be specially noted. [17].

This study is focusing on some advantages that are believed to affect the commitment in relation customer-supplier within SMEs. They are the impact of satisfaction as an indirect factor and trust as a direct factor. Both concepts, trust and satisfaction, are similar as they represent some overall evaluation, feeling, or attitude about the other party in the relationship. Beside, these two concepts are closely connected, they are expected to have different antecedents and consequences [18].

2.1. SATISFACTION

Main subject in the literature concerning relationships is a review of factors necessary to achieve satisfaction in customer-supplier relationships. Customer satisfaction in a business context can be seen as a positive affective state, resulting from the estimation of values by customers in all aspects of his relationship with suppliers. [19,20].

The supplier will probably have to adopt some of his customers' needs if he wants to satisfy them and, hence, retain them in the customer's portfolio. The level of customer satisfaction is experienced by his assessment of the cumulative impact of suppliers over time in different products / services and quality of delivery. Therefore, quality is increasingly considered as an essential element that determines the degree of satisfaction perceived by the customer. [21]. Resulting from the above discussion we the following hypothesize:

Hypothesis 1. Experienced level of customer satisfaction in SMEs has a positive impact on trust in the supplier.

2.2. TRUST

Trust is a major determinant of commitment relationship. It is difficult to imagine a serious business commitment without trust. Accordingly, no commitment is consummated unless the partners feel that unbroken trust has been established. That is the reason why there should develop the framework to link the level of trust and the degree of commitment, whose actions in the SMEs will be benefiting to and to perform general performances in the supply chain. [5]. In the light of the above facts, it can be seen that the confidence is the indicator of commitment, leading to the following hypotheses:

Hypothesis 2. The level of customer trust in SMEs has a positive impact on the commitment in relationship with suppliers.

On the basis of the above given hypotheses, H1-H2, it can be defined the theoretical model of the influence of specific parameters relating to the commitment in relationship customer - supplier, as shown in Figure 1. The model is showing the indirect effect of satisfaction and a direct impact on the trust's commitment in relationship with the supplier.



Figure 1. Conceptual model

3. METHODOLOGY

The target population for this research was companies in Serbia buying products and services for use in their own production process, as well as for resale. The questionnaire was formulated on the base of a review of relevant literature including processed concepts used in this study [7].

From a total of 450 questionnaires, 356 of distributed were useable, resulting with the response rate of 79%. Companies responded the survey were SMEs. The questionnaires were completed by the procurement managers, and the survey itself was anonymous. For grading, we used a five-level Likert scale.

Examined determinants in this study, satisfaction, trust and commitment, are phenomena developing for many years, and very difficult to be manipulated with. Therefore, respondents were mostly competent to assess their relationships with company suppliers, separating those with whom they have frequent co-operation to the commitment of the relationship.

3.1. MEASUREMENT MODEL

The proposed model and hypotheses have been tested on data collected from the questionnaires. Measurement and structural models have been tested by software package LISREL (Linear Structural Relationship) v 8.8, using structural equation model (SEM) [22,23]. Maximum likelihood estimation method is used to analyze the data.

Before testing the structural model, it is necessary to define the correlation model (Figure 2), which establishes correlation connections between defined groups of questions in order to confirm that the 12 measurable variables reflect three latent variables in a reliable manner.

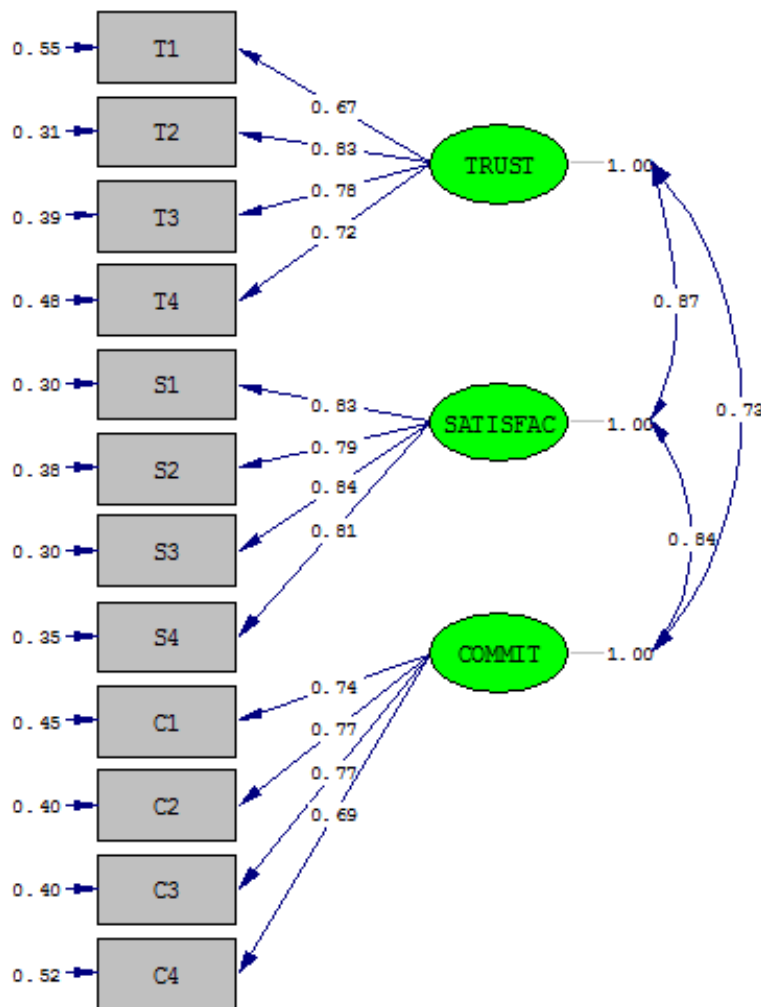


Figure 2. Measurement model tested in the CFA *Correlation Model

Unidimensionality within all three groups in the considered model was confirmed by using confirmatory factor analysis (CFA). Values obtained by confirmatory factor analysis are presented in Table 1. The internal consistency of a group of items relating to the concepts included in the research was tested. Cronbach's coefficient α was used to assess the internal

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consistency[24], recommending within each group of questions the values $\geq 0,7$ to be considered as priority, and values $\geq 0,60$ [25] to be considered as acceptable.

Cronbach's alpha factor for total population is 0.928, while the values per groups are shown in Table 1. CFA was used to estimate the convergent validity. All loading factor indicators on their structures were statistically significant, indicating that convergent validity is achieved [26].

Values of the factor loadings and a critical ratio are shown in Table 1, presenting that all structures are of highly convergent validity. Fitting the model indices and measuring statistically significant loading factors ($t > 1.96$, $p < 0.05$), shown in Table 2, demonstrate good fit between the measurement model and the data.

Table 1. The testing results of the measurement model

	Non-standard Loading factor	T-values	Standard loading factors	Convergent validity	Cronbach alpha (α)
TRU ₁	0.62	13.59	0.67	0.568	0.835
TRU ₂	0.83	18.37	0.83		
TRU ₃	0.78	16.72	0.78		
TRU ₄	0.69	14.92	0.72		
SAT ₁	0.73	18.90	0.83	0.668	0.889
SAT ₂	0.71	17.30	0.79		
SAT ₃	0.78	19.03	0.84		
SAT ₄	0.63	18.02	0.81		
COM ₁	0.70	15.44	0.74	0.558	0.832
COM ₂	0.67	16.43	0.77		
COM ₃	0.60	16.43	0.77		
COM ₄	0.56	14.05	0.69		

Table 2. Fit index of the measuring model

χ^2	χ^2/df	NFI	NNFI	PNFI	CFI	IFI	RFI	GFI	RMR
$\chi^2 = 210.74$ df=51 p<0.05	4.132	.97	.97	.75	.98	.98	.96	.91	.036
Recommended values	< 5	.90	.90		.90	.90	.90	.90	<.10

3.2. TESTING HYPOTHESIS

As the results measurement model is very satisfying, indicating the adequate fit, the structural model was tested in the next step, shown in Figure 3. All the loading factors (Table 3), and the Chi-square goodness-of-fit statistics of the structural model $\chi^2 = 243.33$, $df = 52$, $p < 0.05$ (Table 4) are statistically significant ($p > 0.5$).

Main fit indexes, (Table 4), shows that structural model is applicable mostly on the observed matrix of variation-covariation compared to the measurement model and compliance with conditions for interpretation of structural coefficient. [26].

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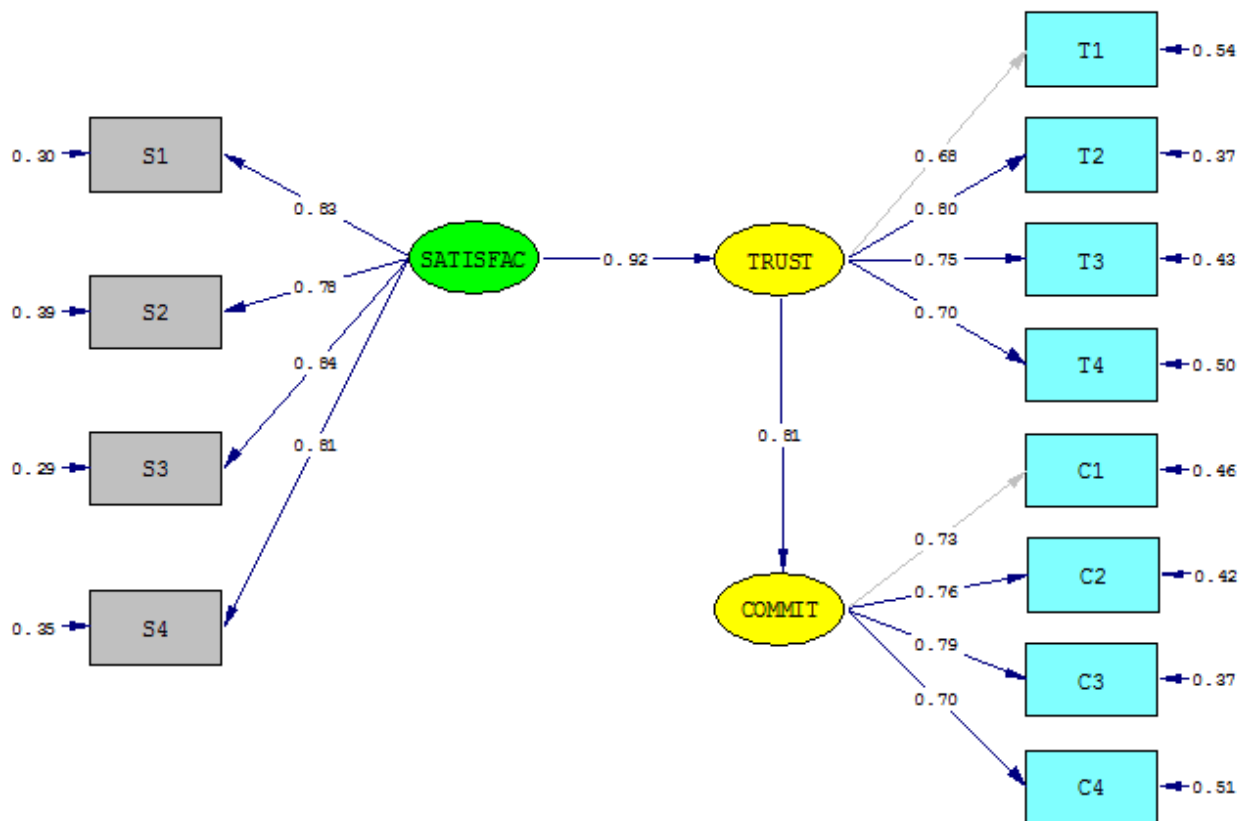


Figure 3. Structural model

Table 3. The testing results of the structural model

	Non-standard Loading factors	T-values	Standard loading factors	Convergent validity	Cronbach alpha (α)
TRU ₁	0.63		0.68	0.539	0.835
TRU ₂	0.79	13.22	0.80		
TRU ₃	0.76	12.62	0.75		
TRU ₄	0.68	11.90	0.70		
SAT ₁	0.73	18.85	0.83	0.665	0.889
SAT ₂	0.70	17.12	0.78		
SAT ₃	0.78	19.22	0.84		
SAT ₄	0.63	17.91	0.81		
COM ₁	0.69		0.73	0.556	0.832
COM ₂	0.65	13.30	0.76		
COM ₃	0.61	13.92	0.79		
COM ₄	0.59	12.36	0.70		

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Table 4. Fit of index of the structural model

χ^2	χ^2/df	NFI	NNFI	PNFI	CFI	IFI	RFI	GFI	RMR
$\chi^2=243.33$ df=52 p<0.05	4.679	.96	.96	.76	.97	.97	.95	.90	.043
Recommended values	< 5	.90	.90		.90	.90	.90	.90	<.10
Structural coefficients				Standardized ratings path		t-values			
H1: Satisfaction-Trust				.92 ^(a)		13.00			
H2: Trust- Commitment				.81 ^(a)		10.70			

^(a) The significance level 99%

For model testing, coefficients of regression (β coefficients) and determination R^2 were used. Coefficients of regression β explain strength and character of connections between dependant and independent variables, shown in Tables 4., and coefficient of determination R^2 shows the share of the explained variance in total, i.e. in which degree the variation of the dependent variable has been explained by the independent variable.

The results of path analysis show that the both hypotheses have been validated. Considering the commitment of customers to their suppliers, satisfaction as an indirect determinant of commitment has a very strong influence on trust ($\beta = 0.92$), as well as the confidence of customers, which as a direct determinant, also has a strong influence on commitment ($\beta = 0.81$). The calculated value of the coefficient of determination indicates that 75.5% of the variance of commitment with suppliers is the consequence of the joint effect of three latent determinants.

4. CONCLUSION

By examining the strategic importance of commitment in customer - supplier relationships within SMEs in Serbia, it is evident that the constructs influencing commitment in this relationship, are trust and satisfaction having direct and significant impact while satisfaction is an indirect determinant in this relationship.

Obtaining advantages in supply relationships is a fundament for understanding the success and survival of many companies, enabling companies (customers) to get greater value added, for the competition itself, through the management of positive and lasting relationships with both suppliers and customers [7].

The results obtained in this paper using the measurement and structural models suggest that satisfaction and trust have positive impact in the customer – supplier relationships, which describes the strength and character relationships, by which establishing hypotheses in conceptual model have been confirmed. To build trust in relation between customer - supplier it is necessary to achieve the strategic collaboration between the partners, which would be the best way to reduce uncertainty and increase the level of trust. The supplier should demonstrate commitment to the company (customer), to be honest with him, to

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keep his promise, and to be reliable in terms of relevant information. Otherwise, the barrier due to the uncertainty in the market will not be able to overcome. While customer satisfaction as a critical component of current and future performance of suppliers is an important source of competitive advantage, which is manifested through the fulfillment of the promise given at the beginning of the cooperation, their positive attitude, and the ability of both sides to meet the standards and thus manifest the commitment.

REFERENCES

1. J.P. Cannon, C. Homburg, *J. Marketing*, Vol. 65, No. 1 (2001), pp. 29-43.
2. Statistical Office of the Republic of Serbia. (2012) [Online] URL <http://webrzs.stat.gov.rs/WebSite/Default.aspx> Accessed 26.05.13
3. Ministry of Economy of the Republic of Serbia
http://www.privreda.gov.rs/UserFiles/File/1_PRIVREDA/Izvestaj_o_MSP_za_2012_godinu.pdf
4. J. Capo'-Vicedo, J. Mula, J. Capo', *Supply Chain Manag.*, 16(4), (2011), pp. 284-293
5. I. Whan, G. Kwon, T. Suh, *Supply Chain Manag.*, 10/1 (2005) pp. 26-33
6. G. Fehr, *J. Eur. Econ. Assoc.*, 7(2-3), (2009), pp. 235-266
7. Y. P. Redondo, J. C. Fierro, *Ind. Market. Manag.* 37 (2008) pp. 407-420.
8. M. D. Hut, T. W. Speh., *Bus. Market. Manag.* (2010)
9. J. M. Whipl, D. F. Lynch, G. N. Nyaga, *Ind. Market. Manag.*, 39(3), (2010), pp. 507-518.
10. R. Berling, *Bus Horiz.* 36 (4), (1993), pp. 16-27
11. Han, S. Lin, D. Wilson, S. Dant., *Ind. Market. Manag.* 22 (4), (1993), pp. 331-338;
12. A. W. Barton, K. D. Bradford, *J. Acad. Market. Sci.* 27, (1999), p. 241
13. K. Piech, University College London – School of Slavonic and East European Studies, London, (2004)
14. S. Ganesan, S. P. Brown, B. J. Mariadoss, H. D. Ho, *J. Marketing Res.*, 47(2), (2010), pp. 361-373.
15. S. P. Gounaris, *J. Bus. Res.*, 58(2), (2005), pp. 126-140).
16. D. I. Gilliland, D. C. Bello, , *J. Acad. Market. Sci.*, 30(1), (2002), pp. 24-43.
17. M. Jain, S. Khalil, W. J. Johnston, J. M. S. Cheng, *Ind. Market. Manag.*, 43 (2014), pp. 312-321.
18. F. Selnes, *Eur. J. Marketing*, 32, (1998), pp. 305-322.
19. I. Geyskens, J. E. M. Steenkamp, N. Kumar, *J. Marketing Res.*, 36(2), (1999), pp. 223-238;
20. S. D. Jap, *J. Marketing Res.* 38(1), (2001), pp. 86-99.
21. J. Briscoe, S. Fawcett, R. Todd, *J. Small Bus. Manage.*, 43, (2005), pp. 309-319.
22. K. G. Joreskog, D. Sorbom, *LISREL 7: User's reference guide*. Scientific. Software Inc., Chicago, (1989)
23. M. Savić, P. Djordjević, D. Nikolić, I. Mihajlović, Ž. Živković, *Serb. J. Manage.*, 9 (1) (2014), pp. 15 - 30
24. J. C. Nunnally, *Psychometric Theory*, Second ed. McGraw-Hill, New York (1978)
25. J. F. Hair, R.E. Anderson, R. L. Tatham, W. C. Black , *Multivariate Data Analysis*, fifth ed. Prentice Hall, New Jersey, (1998)
26. B. M. Byrne, *Struc. Equ. Modeling*, 11(2), (2004). pp. 272-300.

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THE EMBEDDED NATURE OF ENTREPRENEURSHIP

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Abstract

The characteristics of the organisational culture, which its roots in the national-cultural context may decisively influence the development of the companies and of the national economies.

At the same time, in the age of globalisation, the appearance of the most unexpected economic and social challenges - including the must of adaptation to the constantly changing external and internal environment and in connection with this the strengthening of the innovative forms of behaviour, facilitating competitiveness both on the national and organisational levels - became an unavoidable factor.

Culture, - namely the recognition and analysis of the supporting or pulling back role of the national and organisational characteristics - in another way than before, but still may be a fate deciding factor in developing the processes that facilitate the operation of the SMEs. The distinguished significance of the measurement methods and results derived from cultural models and research is due to the fact that they may provide assistance in supporting the different culture related management areas in increasing the efficiency of the Hungarian entrepreneurial sector.

Keywords: *Hungary, SME, innovation, culture researches, value preferences*

1. INTRODUCTION

Researches connected to the emergence, growth and development possibilities of enterprises became especially important because of the significance of the role of the SMEs and their decisive economic weight. This probably is even more so from the aspect of the future of the Hungarian SME sector if we start out from the fact that based on the assessments and research the majority of the Hungarian enterprises perform below their capabilities and their survival chances are also very low. Exactly for this reason, the continuous analysis of the relevant research data and incorporation of the findings of the additional results into the entrepreneur supporting processes is vital.

The SMEs exert a significant impact on the development of the domestic economic performance, and in addition to this they undertake a significant role in employment. There were 961,847 enterprises registered at the end of 2012, from this 99.9 % were SMEs. (According to their form of operation: 41.9 % were Ltd, 38.6 % were sole entrepreneurs, and 18 % were unlimited partnerships.) A significant proportion of tax revenues comes from SMEs, which makes SMEs valuable players of the Hungarian economy and major influencing factors of the budget [1]. 96.7 % of the SMES are micro enterprises. When

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compared to the 2010 data of the European Union, it can be seen that the ratios are similar: 99.7 % of the enterprises operating in the EU are qualified as SMEs. According to the preliminary data of year 2012, 58.3 % of the sales revenue of the enterprises may be connected to SMEs. In year the gross added value was 55.2 %. From the 2.7 million employees employed by the enterprises about 2 million had been working in SMEs in the very same year.

However, in spite of accentuated role of the SMEs, the survival capability of the SMEs is low in Hungary. In year 2006 close to 60 000 new SMEs had been established, but in year 2011 only 40.1 % of these had been in operation, since according to the year 2013 data of the Central Statistical office (KSH) the survival rate of the micro-enterprises that represent 98.5 % of the SMEs was 40.1 % (between 2006 and 2011)

The 2013 data of the SBA reflect a similar picture. The impact of the crisis continues to be present, although stagnation has already started 2-3 years before the financial crisis. The fallback reached the deepest point after 2011. According to the estimates, the Hungarian SMEs employed 82,000 less employees at the end of year 2013 than in 2008, and the total number of the SMEs was also 7500 less. (This generated an added value of about 26.6 billion EUR, which is 1.6 billion less than in 2008.) In order to have a permanent improvement starting with 2014, primarily the entrepreneurial environment needs to be developed, first of all in the area of entrepreneurial competencies and in the area of access to funding [2].

The SMEs – as each and every company – are embedded into the national culture, therefore it is important to know what this host-culture is in the case of the Hungarians. With the aid of the organisational models derived from the general culture researches the relevant characteristics of the Hungarian SMEs can be determined. In this regard based on the data of GEM [Global Entrepreneurship Monitor] (2012) and SBA (2013) the specific characteristics of the Hungarian entrepreneurs are also outlined. In the field of entrepreneurship related researches, the methodologies and results of both the behaviour sciences and the cultural approaches may be included in the examinations of the (domestic) SME sector.

In the recent years a part of the scientific research activities identified the entrepreneurial culture as an economic resource and they assume that a relationship exists between the economic changes of the nations (regions) and the characteristics of the entrepreneurial culture [3]. The analyses highlight e.g. what competences there are missing from the Hungarian entrepreneurial culture and what impact this may have on entrepreneurial competencies, that is, how the national culture is related to the Hungarian “entrepreneur mentality”.

The purpose of the present study is to compare the results of the national culture theories and the related researches and to overview the specialties and similarities of the organisational cultures that are characteristic of the Hungarian SMEs.

The hypothesis that is developed based on these is the following: the companies operating in the Hungarian SME sector carry the main characteristics of the dimensions and value preferences that are specific to the Hungarian (social) culture, and these may influence markedly the entrepreneurial behaviour and attitudes.

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The systematic grouping of the different typologies, theories culture researches is practically an impossible task. On one hand because the authors apply a confusing diversity of approaches - there is no single method for examining culture. On the other hand, the exploration and analysis of the different dimensions and factors display conceptual and chronological overlaps as regards to the intertwining of the specific dimensions and the societal and organisational approaches. Most of the models had been established by validating the theory through empirical methods and examination results, as descriptions that contain the most important relevant facts of the given context. The first table that focuses on the chronology of culture research has been created by Scholz [4]. The table of the original grouping had been further extended with events, culture theories/models, research methods/tools and some features of the newest age.

Based on the table the points of focus are the following:

Historicity, chronology

Human factor, value priorities

Research methods and means

In the research activities of the founders of the general cultural theories, e.g. Brinkerhoff, White, Schreyögg, Goldman, Bassis, Gelles, Levine, Hofstede, Trompenaars and Rosengreen, the following cultural elements appear in a summarised way: beliefs, values, norms, symbols, rituals, techniques, languages, heroes, art, literature, politics, economy, human and natural sciences, thinking patterns, basic assumptions [5].

Several international literatures support the statement that the organisational cultures - since embedded into the different national cultures - are significantly influenced by the macro-cultures that are located around them. The explanation of this may be given primarily by the history, the traditions, the sociography, the education, pedagogic system, etc. of a country, which deeply pervades the given society, by the value and norm system of the community that lives there and through this the behaviour and the attitudes of its members.

Smircih (1983) [6] said that company culture may be interpreted on the micro level exclusively as the subculture of the macro-culture that surrounds it. According to Sackmann (1990) [7] the organisational culture is an intern variable that may be changed, formed as a part of a complex system. An important role is played by the development of contents of common meanings, which contributes to the unified interpretation of reality.

The national and company cultures manifest the following identical features based on the list of Opresnik (1999) [8, 9]:

- They carry the characteristics of historic evolution
- Both have their material and immaterial elements
- They form a unified system, which consists of subsystems
- Each company is the part of a national culture, which directly, but also indirectly influences identity that originates from the place where its members do belong to
- The process operates the other way around as well: both cultural levels influence the identification of its members.

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Table 1: Chronology of Research Culture on the basis of Scholz (1990) (edited by Kertai-Kiss)

Time	Events	Examination level	Stage	Attitude	Culture theories / models	Research methods/tools
Until 1960			„cultural ignorance”	The context of organisational culture is irrelevant	Initial researches, Kluckhohn (1905-1960): American anthropologist	Empiric observation
From 1960	- Impacts of reconstruction following World War II: expansion - appearance of foreign subsidiaries - international projects	Macro level	Cross-cultural management	a/ culture free management model b/ culture dependent management model (national culture, as an independent variable) - appearance of culture in the organisational context: „corporate atmosphere”	E.T. Hall (1914-2009): anthropologist, culture researcher Triandis (1926-): inter cultural psychology	
From 1970	- decreasing growth rate - crises (oil, Vietnam war) - increasing unemployment	Macro level	Comparative management	Connection of varying direction between national culture and the management methods Definition of the cultural dimensions	Hofstede	Qualitative and quantitative, Questionnaire, observation, case study
From 1980	- stagnation (European markets, USA) - Increasing of the market share of Japan - weakening of the dollar - end of cold war - termination of the two pole Europe	Micro level	Corporate culture research	Examining and influencing the corporate culture disregarding the national cultural context a/ individual behaviour research model b/ organisational theory model c/ strategic management model - „soft factors” - values, news, beliefs, assumptions, convincement - Cultural and value dimensions	Deal-Kennedy: Corporate Culture (1988) Peters-Watermann (1986) Trompenaars Ouchi	
From 1990 After 2000	- increasing integration - globalisation - age of digital technology - appearance of the post-modern value order	Macro and micro levels	Cultural integration, Research	Connection of varying direction between the national culture and the corporate culture - holistic - „spiritual”, personal/individual - emphasis shift as regards the behaviour and/or cognitive/emotional characteristics	Schein Cameron ,Quinn Handy Bleicher Mintzberg	Quantitative: questionnaire qualitative: questionnaire, structured interview, focus group, script, case study

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The purpose of comprehensive, national based organisational culture research activities is to explore the specifics of a given cultural medium. For example, it may mobilize many different types of resources, if the leader of a company recognises and makes it conscious that the characteristics of the organisational culture is determined in a predominant way by the national culture [10].

2. THEORIES OF HOFSTEDE

According to the international literature several comprehensive and primarily quantitative researches deal with the characteristics and matching of the national and organisational cultures. The results of the comparative examinations of culture support in several different areas the interrelationships of economy and culture, and within it the interrelationships of the values.

The studies of Hofstede were carried out between 1967 and 1973 in the subsidiaries of IBM. He sent the questionnaires to 72 countries to 88 thousand workers. The basic concept started out from the idea that the responses of the workers working at the subsidiaries, at different points of the world, under close to identical conditions will be determined by their national and not by their organisational belonging. They published the results in a book titled „Culture’s Consequences” [11].

Based on the responses, with the aid of analysis done with statistical methods, Hofstede defined four main dimensions for describing the differences of the national cultures: power distance, uncertainty avoidance, individualism-collectivism and masculinity-feminity. The research substantiated that the national cultures may be differentiated along these four cultural dimensions. It was an additional result that the specialities of the national cultures do significantly influence the evolution of the organisational/company cultures.[12] From among the four indices primarily the power distance and the uncertainty avoidance may determine what type of organisations will evolve in a given country. Based on all this, the metaphoric names of the organisation types that are included in Hofstede’s model are the following: market, well-oiled machine, pyramid and family.

According to this division Hungary (Czech Republic, Austria, Germany, Switzerland) belongs under the category of „well-oiled machine”, (small power distance, strong uncertainty avoidance). Moreover, strong individualism is also characteristic of it [13], which is proven to be a barrier hindering both innovativity and the development of the atmosphere of trust that would support innovation [14, 15]. However, the results of other researches in addition to some identical conclusions also defined characteristics that are contradicting these. E.g. GLOBE listed Hungary among countries that may be characterised with having a low uncertainty avoidance.

2.1. GLOBE AND THE HUNGARIAN CULTURE

One of the widest ranging empiric researches of national and organisational culture studies was the GLOBE Project (Global Leadership and Organizational Behavior Effectiveness), which studied the comparative culture characteristics of 61 countries along nine dimensions. These dimensions were the following: power distance, uncertainty avoidance, collectivism I – institutional collectivism, collectivism II – in-group collectivism, gender

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egalitarianism, assertiveness, performance orientation, future orientation, humane orientation. The culture variables included the so far known empiric culture research antecedents and it supplements them with new ones. The definitions of the culture variants were introduced by the GLOBE monograph and the first methodological introduction of the research has been included in a study volume. [16]

For the survey they used questionnaires of two types: the ALPHA questionnaire measured the organisational cultural dimensions, while the BETA questionnaire measured the national cultural dimensions. Simultaneously with this, the survey examined on both cultural levels the perceived (descriptive, „AS IS”), and the desired (normative, „SHOULD BE”) characteristics. Respondents answered the way they see and the way they would like to see the core values of their own organisational and national cultures. For these two types of culture interpretations different literature sources use various terminologies. The practical characteristics “practices” of GLOBE are indicated by other literature under the names of empirical, descriptive or “theory in use”, while the value characteristics of the GLOBE “values” they call normative, prescribing or “espoused” values [17].

The Hungary related results of the research were the following:

The level of uncertainty avoidance is low, the employees endure easily the contradictory and changing rules and they try to adapt themselves fast to them. (The countries that endure uncertainty the best include among others e.g. Russia, while the countries that prefer stability the most are e.g. Switzerland, Sweden and Germany).

As regards “future orientation” people in Hungary rather prefer short term objectives, the immediate decisions and the ad hoc solutions. The analysis of the international study that was done by STRATOS (Strategic Orientation of Small and Medium Sized Enterprises) also supports this result, according to which the leaders of the domestic SMEs do not plan for the long term or in detail, nevertheless they are committed to the changes [18].

In connection with the ‘power distance’ culture dimension the Hungarians do not consider it ideal to accept the large power distance [19], however, on the organisational level the top managers do not involve the middle level managers in their decision making, and in addition to this the level of initiatives and undertaking responsibility is low in situations requiring decision.

As regards “individualism-collectivism” Hungarians are characteristically individualists, they highly appreciate independency contrary to the members of e.g. the Swedish, Danish and Bulgarian societies, who traditionally follow collective values [20].

As regards small community collectivism, Hungarians are characteristically proud of those micro communities, whose members they are, e.g. the family, the group of friends, professional groups, contrary to this in the Scandinavian countries people interpret group loyalty differently.

It is characteristic of the Hungarian society that the level of “human orientation” is low. (Similar values were seen in the case of e.g. Germany and France) This culture dimension reflects to what extent the community encourages, appreciates when its members are caring, selfless or tolerant. The attitudes that are characteristic of the Hungarians are the following: competing, mistrustful, objective, rigid and calculating.

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The extent of “performance orientation” in the case of Hungary at national level is low, while at the organisational level it is medium. The situation is also similar in the case of Russia, Greece and Italy. It is characteristic of the entrepreneurial “mentality” of Hungarians that for them the process of work implementation is more important than its result. [21]

“Assertivity” is contradictory in the case of the Hungarian culture. The members of the strongly assertive societies, as e.g. USA, Germany and Austria accept to a higher extent the confrontative forms of behaviours, individual interest enforcement, competing or pushiness than e.g. Sweden or Switzerland, where the extent of assertivity is low. Hungarians refuse harshness and aggressiveness; however they do not refuse assertiveness.

To sum it up, the main cultural characteristics of Hungary are the following (based on the GLOBE dimensions, in the ranking of 61 countries):

1. Very small uncertainty avoidance (60)
2. Thinking short term (58)
3. Low human orientation (58)
4. Low performance orientation (58)
5. Accepting feminine roles (3)
6. One of the most individualistic (2)

Hungarian society accepts only traditional roles for females. In line with this, females in engineering fields face mechanisms within their organisations and outside of them that question the very basis of their professional orientation. Female students in higher education also have it hard, since their environment regards their decision as abnormal [22]. Female students in „wrong” (not feminine) studies usually experience negative attitudes, mocking and negative comments incivility and isolation from their peers [23].

3. ORGANISATIONAL MODEL OF TROMPENAARS AND HAMPDEN-TURNER

The representatives of national and organisational culture researches, Trompenaars and Hampden-Turner, [24] based on a qualitative questionnaire based survey of more than 50 countries and 15,000 respondents elaborated their model of seven dimensions. From these attributes now I will only highlight those that had not been mentioned before, but may facilitate the deeper understanding of entrepreneur attitudes. The Hungarian culture in respect of the “time related attitude” dimension, is “backward-looking” and “polychronic”. The “environment related attitudes” are rather characterised by being directed from the outside and having a harmonic relation with the nature. [25] These properties do also support the final result of the GLOBE research.

In the organisational model derived from the analyses of the national culture (incubator, family, directed rocket, Eiffel tower) Hungary is within the segment of the Eiffel tower (hierarchic order, task based culture). Its characteristics are the following: logical, rational, analytical thinking, job descriptions, etc. The classification has some analogue characteristics with the previously mentioned “well-oiled machine” model of Hofstede.

3.1. ORGANISATIONAL CULTURE STYLES

Even from the aspect of the Hungarian entrepreneurial culture, the results of the study that has been executed with the application of the Circumplex organisational diagnostic model, deserves attention. The non-representative research identified the organisations that participated in the analysis along three types of organisational and management styles. [26]

a/ Constructive style: involving the colleagues into decision making, supporting the deviating opinions, freedom of experimenting, the mistakes are the starting points of learning and development, efficient teamwork, ability to adapt to the external impacts, quality, fewer stress and lower feeling of uncertainty, motivation, satisfaction (desired organisational culture to be followed)

b/ Passive-defensive style: retaining the personal contacts and security is a priority, development and innovation is not characteristic, little risk undertaking, strongly bureaucratic system, „policy culture”, which rewards compliance and subservience

c/ Aggressive defensive style: the most important is the retention of personal power and position, there are lots of destructive conflicts, internal fights, the desire of „frustrated performance”, perfectionism

In the aggregated final result the following style symptoms are most characteristic of the Hungarian organisational culture: perfectionism, unrealistically high targets set, mistake highlighting, stigmatizing, strong adaptation, the bureaucratic rules are more important than resultfulness, very strong drive towards preserving the status quo, resistance against innovations („let us do as we have been doing so far” attitude). Each of the listed properties belongs among the elements of the defensive cultures and they do not reflect the constructive style. [26] The research did not find any significant difference between the organisations of the private and the public sectors.

A part of the analyses dealing with Hungary drew some additional conclusions based on the data of international researches in connection with the domestic organisations, enterprises. Using multivariable statistical procedures they succeeded in identifying three significantly different culture clusters among the Hungarian companies. [27]

a/ Market oriented enterprises – characteristic features: the greatest value is performance and future orientation, small power distance, strong collectivism, assertivity, medium differentiation between the roles of the genders. (The companies owned by Hungarians and foreigners operating in the for-profit sector may be classified here. This cluster approaches the desired organisational culture the most.)

b/ Public service enterprises – characteristic features: the highest value is loyalty, proudness, human orientation, differentiates the least between the roles of the genders, at the same time the values of pushiness and assertivity do also appear. (Group of public service and non-profit organisations)

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c/ Traditional enterprises – characteristic features: great power distance and future orientation, individualist, differentiated in regard of the roles of the genders, dominance of the masculine values. (Ex-socialist large companies, a part of which is in Hungarian private hands, but there are also among them companies that are owned by foreigners.)

3.2. THE HUNGARIAN SMALL ENTREPRENEURS' WORLD OF VALUE AND THE CONTEXT OF SOCIETAL VALUES

The results derived from the data of Wave 4 of ESS using the Schwartz-type value test methodology indicated that the Hungarians are rather hedonistic, to a small extent non-conformists, and security is more important for them than in the case of the average Europeans. The most important finding of the study was the following: the individual values (e.g. independency, power, performance) and the community values (universalism, tradition, conformity, security) are strongly separated from each other on the level of the society. [28]

Also based on the data of Waves ESS 4 (2008) and 5 (2010) when comparing the value preferences of the Hungarian and of the “average” European small entrepreneurs the following characteristics of the Hungarian small entrepreneurs may be established: security is more important than universalism, in the ranking order the following are in the front: performance, hedonism and compliance with the norms. Tradition, respect, observing the rules and wealth are less important values. This latter one is surprising, because on societal level they consider wealth to be more important than in the majority of the European countries, and on the basis of the lower income level of the Hungarian entrepreneurs and the previous researches it was found that the main motivation of starting an enterprise was to increase the income. [29] Disregarding this difference there are no marked differences between the value order of the domestic entrepreneurs and that of the EU ones. [30]

According to researches done along the value priorities compared to the rest of the members of the society the following description reflects the Hungarian small entrepreneurs:

Independence is more important than stimulation

It is very important to “invent new things”, to be creative

It is important to “manage the matters in their own, individual way”

They like to decide what they will do freely, independently of others

On the other side:

They do not like very much surprises or to start new things

They do not think it to be important that „they should do different things in their lives”

They do not want to participate in adventures; they rather avoid the risks, the “thrilling life”. [3]

In addition to all the above, it is a specific Hungarian feature that the “community orientation” of the entrepreneurs is strong, they identify the concept of goodwill with fairness exercised in the area of personal relationships and with helpfulness. And in harmony with this it may be concluded that one of the most characteristic features of the entrepreneurial attitudes is the fact that the personal relations are especially important. [31,32]

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In summary the above attitudes and forms of behaviours, which are based on deep cultural foundations predestine entrepreneurs in a restricted way to operate as successful and innovative enterprises that operate according to the expectations of the newest era, which is open towards the changes.

4. CHARACTERISTICS OF SUCCESSFUL SMES

Researches that analyse the factors that influence the success of enterprises use two types of approaches. On one hand they examine the psychological and individual characteristics of entrepreneurial existence and entities [33], and on the other hand they implement the analyses from the aspect of the cultural patterns that are mediated by the given society, assuming its priority. [34]

Some of the researches examined the relationships of Hungarian SMEs with competitiveness and performance. (The indices of this are: sales revenue per employee and unit equity and the gross added value per employee). The most important attitude indices of performance based competitiveness [35] are the following:

Willingness to invest

Innovativity

Mobility displayed in the field of changing markets and products

Intensity of network relations

Using info-communication for business

The characteristic practice in Hungary does not display a favourable picture in respect of SMEs. The most important characteristic of this sector are the following:

1. The willingness to invest and the frequency of investment of smaller enterprises is far below that of the larger firms, and innovation is less, and R+D activities are implemented only in the case of 5 % of the enterprises. Few people think about extending their market and few plan the changing of the market [36]. (Altogether 7.5 % of the microenterprises and about half of the medium sized firms implement any significant innovations.)
2. It is a general phenomenon that the largest proportion of the small enterprises do not plan to implement any investments, they are careful as regards growth.
3. The chances of improving the competitive position are far smaller than in the case of the larger firms.
4. The market scope of 83 % of the domestic SMEs is small. (Usually it is within the borders of the county.) Presence in foreign markets is very low.

However, studying the different research results it may be seen that my two focus areas, namely culture and entrepreneurship, do overlap: the entrepreneurial behaviours are inseparable from the cultural dimensions.

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In the organisational cultures of the globalizing economy, where the cultures can be less and less typified, it may be assumed that the “universal” values that are independent of cultural embeddedness may be at least as decisive as the national cultural dimensions.

In line with certain results of culture related research activities, e.g. Benz and Frey [37] self-employed people’s characteristics of entrepreneurial habits that are independent from their national cultural embeddedness are categorised by three aspects. Those people have an entrepreneurial attitude, who:

a/ appreciate independence, autonomy and interesting work,

b/ in addition to real results, the process and the related challenges are just as important for them,

c/ according to the public opinion individualism is more characteristic of the Western attitude, however, the surveys done among the self-employed people do not support this

4.1. INNOVATIVITY RELATED PROBLEMS

Because of the high technology’s key sectors of the global economy it is worthwhile to highlight the following: within the Hungarian IT sector there are several even internationally acknowledged, successful “gazelle” enterprises, which prove that there are possibilities of development. However, general prosperity may only be expected if Hungary will achieve improvement in all the 10 SBA areas. From among these the relevant areas that are connected to culture are the following:

„Entrepreneurial spirit”: change for the time being may be experienced only in the enterprise related attitude e.g. 36 % of the Hungarian adult population considers self-employment a feasible opportunity (EU average 30%). Compared to this, based on the indices of entrepreneur activities the ratio of self-employment remained unchanged (12 %) and it does not reach even the EU average.

„Skills and innovation”: this continues to be below the EU average, which will have negative consequences in the long term, even from the aspect of the performance of the national economy. The report mentions that contrary to this it is a fact that in Hungary high technology manufacturing firms and knowledge intensive SMEs do operate in the same proportion as in the rest of the member states of the EU. However, if the SMEs will not invest into innovation and training, this performance will not be sustainable in the future.

The cultural embeddedness of the entrepreneurial sector is emphasised by the Global Entrepreneurship Monitor (GEM) research project as well, which studies the human factors of the enterprises. As regards Hungary the authors of the 2012 report raise the following question: whether this period is the starting of a stagnation or of a backsliding. [38] Based on the economic and geographical classification of the 69 countries that participated in the research Hungary belongs in the category of „efficiency driven economies”. (The following countries belong here: Estonia, Poland, Latvia, Lithuania and Romania, all the rest of the EU member states are „innovation driven”) [38]

The productive entrepreneurship index of the research (GEDI, Global Entrepreneurship and Development Index), based on the entrepreneurship attitude, native characteristics and aspirations ranked Hungary as Number 42 in the ranking order of the 60 examined

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countries. (The performance of most of the Central and Eastern European countries is better than this.) According to the aggregated results in the Hungarian SME sector (2008-2012) the extent of entrepreneurial aspirations increased (e.g. product and technology innovation, entering the international arena), and a smaller improvement was seen in respect of entrepreneurs' native characteristics (e.g. technology sector, human quality and competitive edge). However, as regards entrepreneurial attitudes, there is only a minimal change (e.g. recognising the opportunity, start-up capabilities, risk undertaking, getting organised into networks and cultural support). The report highlights that Hungary performs definitely weak in three areas, namely in the areas of: "recognition of the opportunities", "funding" and "product innovation".

The "entrepreneurship capital" [39] is the historically evolved institutional cultural medium in which the new enterprises are born and everything that stimulates this represents such an entrepreneurship infrastructure, which may be influenced by different factors, as e.g. the societal acceptance of the entrepreneur activity, the willingness to undertake risks, or the activities of the banks. All this is interrelated with the research area of the entrepreneurial culture, of the entrepreneurial society. The economic performance and competitiveness of Hungary may depend on the characteristics of this specific Hungarian "entrepreneurship capital".

In Hungarian relation it is characteristic that the starting of the enterprises is hindered by still many bureaucratic obstacles, the taxation and regulation system often changes, and there are lots of uncertainty factors which do not support the innovative developments.

4.2. THE CHANGING OF THE CULTURE IS AN INCREMENTAL PROCESS

The changing of the culture, the migration of the cultural dimensions is a very slow process. E.g. comparing the 2009 and 2013 data of the World Values Survey that was made in Hungary the analysis of TÁRKI concludes that on the value map of the world during both measurement periods Hungary was practically at the same place, the extent of change is small, therefore there was no change as regards the main characteristics of the value structure of the Hungarian society. [40]

Analysing the data of the 2004 Wave of ESS, Hungary is leading the list as regards security, however as regards the value judgement of stimulation it is at the end of the list. The traditional entrepreneurial values (independency, risk undertaking, performance) appear on the societal level at a low value, while the values of individual performance and self-care appear mostly only on the level of opinions. [41]

Thinking in historic perspectives a similar conclusion may be drawn. In Hungary the economic and societal development after the political system transformations may be characterised by a two-fold cultural impact. In addition to the economic and societal transformations and development, the historically predetermined heritage of the cultural super-strata preceding directly or indirectly the newest era "burdens as an inertial torque" the processes of change [42, 43].

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Traditions, customs and unconscious impact factors: „The way of thinking influenced by history makes the Hungarians ‘past oriented’ and the impacts often appear in the entrepreneurial behaviour as well. Some of the cultural roots that influence the present economy may be traced back to attitudes, “imprinted actions”, reflexes of the period that preceded the political system’s transformation. E.g. in the starting period of the market economy the Hungarian companies applied a reactive strategy: they took over the foreign methods without adaptation, which finally did not operate successfully in practice. [44]

Research concerning the interrelationships of culture and enterprises is important also because an outstandingly important opportunity of the growth of the Hungarian economy is hidden in the development reserves of the SMEs. [45] However a prerequisite of realising this hidden potential is that an increasing number of enterprises willing and capable of innovation should appear, the cultural inputs of which may be fate deciding.[46]

5. SUMMARY, CONCLUSIONS

Based on the research results introduced in the study we may say that the better we understand the interrelationships of the national and organisational cultures, the better we will be able to build on their comparative advantages.

The results of international and domestic researches show that for us as Hungarians it is difficult to become really creative, risk-taking, innovative entrepreneurs. Changes that take place in the national cultures are long term processes, however, independently of this there may be a hope, if in the mentioned entrepreneurial attitudes and in the factors of the immediate economic environment there will be a shift. It is also an important step of development if we make people aware of those values, priorities, implicit factors that influence the Hungarian SMEs and through this we may generate a demand for changing.

The analysis and comparison of the secondary data concerning the Hungarian culture and entrepreneurs certify that there is a very slow shifting of the different dimensions of culture, which may be considered to be a positive signal in respect of the strong embedment and predetermined nature of the SMEs.

REFERENCES

1. A. Csiszárík-Kocsir, M. Fodor, To what extent did the macroeconomic indicators influence the fiscal position before and after the crisis? - Results based on the data of the Visegrad Four countries *Vállalkozásfejlesztés a XXI. században III. – Tanulmánykötet*, Óbudai Egyetem, Keleti Károly Gazdasági Kar, p. 91.-101.2013.
2. K. Lazányi, *Ereget Profile* 7:(2), 2013., p. 15-19.
3. A. Luksander, K. Mike, A. Csité, Economics Institute Competitiveness Research Center, Budapest, 2010.
4. C. Scholz, *Personal Management, Informationsorientierte und verhaltensorientierte Grundlagen* 2. kiadás München, 1991.
5. I. Rudnák, *Challenges of multi-cultural environment among leaders of large companies in Hungary*, Ph.D thesis, Szent István University, Management and Organization Sciences Graduate School, Gödöllő, 2010.
6. L. Smircih, *Admin.Sci.Quart.*, 28. 1983.

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7. S. Sackmann, *J. App. Behav. Sci.* 27 3 1991.
 8. M. O. Opresnik, *Unternehmenskultur in den USA und Deutschland*, Rebo-Star Verlag, Hamburg, 1999.
 9. Z. Kovács, *Competition between cultures in the age of globalization*, Ph.D thesis, 2006.
 10. A. Jarjabka, *Similarities and Differences in National and Organizational Culture of Central and Eastern European Countries*, Budapest School of Economics – Hungarian Science Festival, Budapest, 2010.
 11. G. Hofstede, *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*, 2nd Edition, Thousand Oaks CA: Sage Publications, 2001.
 12. G. Hofstede, *Culture and Organizations: Software of the mind*, McGraw-Hill, London, 1991.
 13. K. Lazányi, *The role of social support in an individualistic society*, *Notices of Virtual Institute for research of Central Europe* 4:(2), 2012 p. 51-58.
 14. I. Marosi, *Symposium for Young Researchers : Celebration of Hungarian Science Budapest, Óbudai Egyetem*, p. 7-18., 2013.
 15. I. Marosi, E. Bezzeg, J. Csernák, E. Holló, I. Takács, *14th International Scientific Days, Papers of Scientific Days „Changing, Adapting Agriculture and Countryside”*. Gyöngyös: Károly Róbert Főiskola, 2014., p. 1015-1024
 16. R. House, M. Javidan, P. Hanges, P. Dorfman, *J. World Bus.*, 37. 2002., p 3-10.,
 17. C. Argyris, *On Organizational Learning*, 2nd ed. Malden, Mass: Blackwell Business, 1999.
 18. K. Barakonyi, *Hungarian corporate culture Turn of the Millenium*, KMK Essays, Pécs, 1995.
 19. Heidrich, B., *Manage.Sci.*, 1997/4
 20. I. Marosi, E. Bezzeg, J. Csernák, E. Holló, I. Takács, *14th International Scientific Days, Papers of Scientific Days „Changing, Adapting Agriculture and Countryside”*. Gyöngyös: Károly Róbert Főiskola, 2014., p. 1015-1024.
 21. S. Bakacsi, Gy.-Takács, A. Karácsonyi, V. Imrek, *J. World Bus.*, Volume 37, Issue 1, Spring 2002, p. 69-80
 22. V. Szekeres, E. Takács, L. Vicsek, “*Úristen! Te, lányként?!*” *A nemek kultúrája egy felsőoktatási intézmény műszaki karain – a hallgatók szemszögéből*, *Társadalmi Nemek Tudománya Interdiszciplináris EFolyóirat*, 3 (1), p. 125-144, 2013.
 23. V. Szekeres, *11th International Conference on Management, Enterprise and Benchmarking: Proceedings*, Budapest, Óbudai Egyetem, 2013. p. 241-246. (ISBN: 978-615-5018-58-9)
 24. F. Trompenaars, Hampden-Turner, C., *Riding the Waves of Cultures, Understanding Cultural Diversity in Business*, Nicholas Brealey publishing, 2002.
 25. L. Kállay, *SME sector: competitiveness, jobs, restructuring*, TM 58. sz. Working Paper, TÁMOP-4.2.1. project B-09/1/KMR-2010-0005, BCE World Economics Institute, Competitiveness Research Center, Budapest, 2010.
 26. I. Magura, *The characteristics of the hungarian organizational cultures*, https://www.google.hu/?gfe_rd=cr&ei=MVShU9CHFLDc8gfVm4H4Cw&gws_rd=ssl#q=magura+ildik%C3%B3+circumplex, 1010.
 27. A. Karácsonyi, *Types of organizational culture among Hungarian Companies*, *Management Science XXXVIII. évf. special issue*, Budapest, 2006.
 28. L. Füstös, *Value System of Europe: Value space of Hungary-Value space of Europe*, In: Füstös, L.-Guba, L. (szerk): *Changing Value System*, 2011/1, Budapest MTA PTI

**Possibilities for development of business cluster network between SMEs
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23-25. May 2014, Bor, Serbia*

MTA SZKI, 2011.

29. A. Csizse, Unhappy capitalism? In: Szalai, Á. (szerk): Capitalist expectations, p. 257-308, Budapest, Commonwealth and Capitalism Institute, 2009.
30. I. Füstös, L.-Szalma, Change in value in Hungary 1978-2009, Budapest MTA SZKI, 2009.
31. M. Mike, K.-Müller, Infrastructure trust of business relations in Hungary, Research Report, HÉTFA Institute, Budapest, 2011.
32. T. Keller, Values and Social position, Századvég Új Folyam 47. (1), p.151-187,2008.
33. K. Lazányi, Entrepreneurs, Not Lone Wolves In: Michelberger, P. (szerk.) MEB 2013: Budapest, Óbudai Egyetem, 2013. p. 157-166.
34. M. Császár, G. K. Horváth, Soul, value, strategy, About the basic dimensions of entrepreneurship, HÉTFA Research Institute Trust and Enterprise Program, Working Papers, V., Budapest, 2010.
35. D. Losonci, I. Jenei, Organisational culture researches in the area of organising the production processes – literature work, workshop study No TM 97, Competitiveness research Center of the BCE Corporate Economy Institute, 2010.
36. I. Marosi, Trust and innovation in Hungarian SMEs ECONOMISTS' FORUM 2013/6 December, vol. XVI., no. 115, p. 117-133, 2013.
37. M. Benz, S. Frey, Bruno, J. Econ. Beha. Organ. 68, 2008. p. 445-455,
38. B. Páger, L. Szerb, GEM 2012 Hungary: Slowing or start of setback? (Global Entrepreneurship Monitor) OTKA, Budapest, 2012.
39. B. Audretsch, David, Oxford Rev. Econ. Pol., Volume 23, Number 1, 2007.p. 63-78.
40. T. Keller, I. Gy. Tóth, Hungarian Value Map: normativity, individual performance, solidarity and adoption of self-care in the hungarian society Final study, TÁRKI Zrt., Budapest, 2008.
41. T. Keller, Values and Social position, századvég Új Folyam 47. (1) p. 151-187, 2008.
42. Gy. Bakacsi, Economy and Culture – cultural determination of future-oriented competitiveness (based on research of GLOBE), Research Report, OTKA, 2008.
43. Gy. Bakacsi, S. Takács, Management Sciences, XXIX évf. 2. sz. Budapest, 1998., p. 15-22,
44. K. Balaton, Leadership of the organization and development of organization theory formation, Aula Kiadó, Budapest, 1991.
45. J. Varga, Position of small and medium sized enterprises sector in Hungary, XXI Century, Scientific Publications 2012/27, Society, Economy, Law, Policy, 2012.
- [46] Lazányi, K., Entrepreneurial skills and competencies of students at Óbuda University On-line J. Mod. New Europe 10, 2014, p. 17-28.

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POSSIBILITIES FOR REGIONAL DEVELOPMENT OF THE SOUTH-ALFÖLD REGION IN HUNGARY WITH THE HELP OF TOURISTICAL SMES

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Abstract

As in other countries of the European Union, the role of SMEs in employment and creating value is quite significant in Hungary as well. And so it is extremely important for every country to develop their own regulatory system, supporting small and medium enterprises, which is able to properly handle regional differences as well. The purpose of present study is to examine the state of the Southern Great Plain region, which compared to its geological size, has a relatively small number of SMEs and this relative shortage unfortunately also manifests itself in the region's state of labour market and economic performance. Beyond introducing the regulatory environment, the study also demonstrates the local social, infrastructural and economic state, followed by providing a possible solution for the current suboptimal state by introducing the institution of rural tourism.

Keywords: Hungary, Southern Great Plain region, SME, rural tourism, rural development

1. INTRODUCTION

In April 2014 the number of registered companies in Hungary was 1694621; this data also includes companies, that are registered, however do not engage in actual economic activity. Distribution of companies according to employment:

- 0 capita or unknown headcount 519620 companies,
- 1-9 employees 1138646 companies,
- 10-19 capita 20693 companies 20-49 capita 10262 companies
- in the case of 50-249 employees 4527 and
- in the case of large enterprises employing more than 250 people, 873 companies.[1]

This clearly shows that 99.94% of companies in Hungary are small and medium enterprises. Considering the number of employees, it can be stated, that 74% of employees work in the SME sector [2,3].

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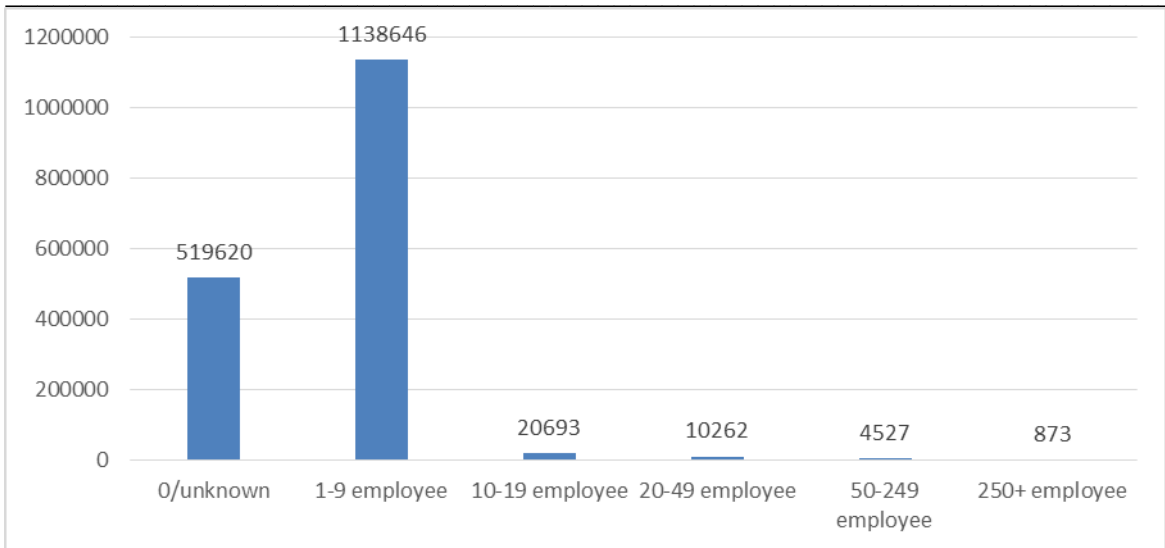


Figure 1. Number of registered companies in Hungary, April 2014 (according to the number of employees)[1]

There are serious differences with regional distribution as well when it comes to the number of companies in Hungary. Central Hungary undoubtedly stands out, thanks to the capital, there are twice as many companies here, than in any other region. It is followed by the two regions of the Great Plain, considering the number of SMEs. The Northern Great Plain region contains 261,517, while the Southern Great Plain region, examined by me, contains 240,905 SMEs. This is a huge difference compared to other regions, but it can be attributed to the probably much higher number of inactive companies, than other regions have. In 2012, SMEs provided 55,2% of gross value added and in terms of income 58% could be linked to SMEs in 2012 [1].

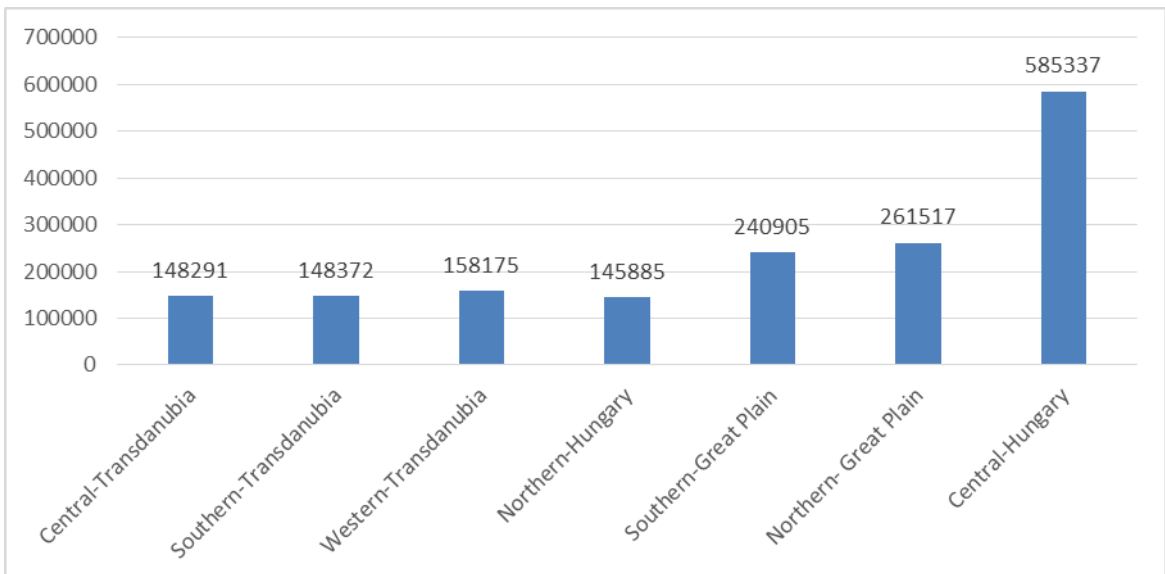


Figure 2. Number of companies per region, March 31st, 2014. [1]

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The Southern Great Plain region, compared to its size, has a relatively low number of SMEs and this relative shortage unfortunately also manifests itself in the region's state of labour market and economic performance

The purpose of the study is to identify market opportunities that can increase the number of SMEs and the region's economic power, if exploited, by examining the state of this disadvantaged region through economic, legal, social and regulatory aspects.

2. PEST ANALYSIS

2.1 REGULATORY ENVIRONMENT

I would highlight two laws. The first¹ one, whose 2010 alteration contributes greatly to people seeing more and more business potential in rural tourism. This law mainly applies to small producers and people offering services such as the so-called „falusi vendégasztal”. The part concerning small producers states that the basic product and a small portion of food it's made into, produced by the small producer can be directly delivered to the end user within a 40 km proximity zone of his farm. Thus the customers can access locally made, fresh food. The „falusi vendégasztal” (rural table for guests) service means the introduction of traditional home-made food in an area not considered public land. The seating capacity of „falusi vendégasztal” was limited to 15 people in the 2008 law, but was cancelled with the 2010 alteration. So anyone who operates a „falusi vendégasztal” can purchase traditional products from small producers, this way the catering of tourists in small villages is solved without their number being limited. [4]

The other law², altered in 2012, influences the state of rural tourism and related companies in a completely different way. Mandatory certification for accommodations and services was cancelled and a new, voluntary system was created called „Nemzeti Tanúsító Védjegy” (National Trademark Verification). The purpose of this trademark system is for everyone to receive proper quality accommodations, so it indicates a sort of warranty. Since we're talking about a voluntary system, it isn't obligatory for anyone, however if someone decides to take part of the trademark system and passes, gets access to legal protection. The trademark system distinguishes 5 types of accommodations with unique symbols

- rural accommodation: sunflower,
- camping: star or holiday camp,
- holiday site: Hotelstars,
- hotel: Hotelstars,
- private accommodation: crown.

Facilities, basic services and additional services are evaluated with each type of accommodation. The ministry creates a separate database of qualified accommodations.

¹ 52/2010. (IV. 30.) FVM decree: About the conditions of small producer food production, manufacture and sale

² 45/1998. (VI. 24.) IKIM decree

About the classification of commercial and family pension accommodations and the evaluation of rural accommodations

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This makes the system easily traceable, and enables the filtering of accommodations, which would possibly abuse the qualification without any right by deceiving unsuspecting consumers. However this qualification has quite high expenses, which differ with the type of accommodation and there's also a yearly fee for using the trademark after one qualifies. The rise of these expenses can easily result in few people using the trademark system, which could mean the reintroduction of a mandatory system.

2.2. SOCIAL ENVIRONMENT

One important social feature is the region's unemployment rate. The Southern Great Plain region is one of the three regions battling the highest rate of unemployment. High unemployment rate can mean migration in long-term, but also social dissatisfaction and the rise of crime rate. This is another reason to boost tourism, since the fast development of agricultural technology means the need for less and less people in that sector. In the region, mainly in smaller villages, agricultural work is the source of income. Boosting tourism would create many jobs, thus ensuring the future of the region and the decrease of unemployment and migration. Moreover the recovery and boom of tourism carries additional benefits for the region, like the rise of health-consciousness, the emergence of a more conscious consumer culture, which indirectly also leads to the improvement of ratios [5].

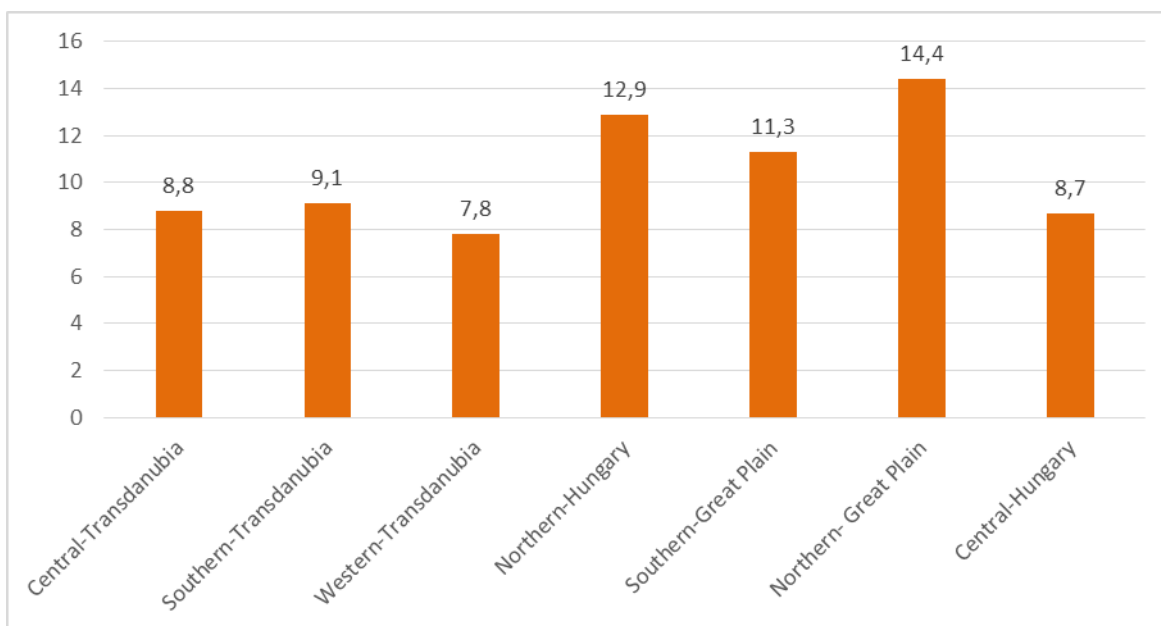


Figure 3. The rate of unemployment, 2013[1]

Another important aspect is the net average salary, where there's a contrasting difference between the three critical regions. In the Southern Great Plain, Northern Great Plain and Northern Hungary regions, people earn 15-30-40 thousand forints less, than people living in other regions. So it would be necessary to raise salaries to these regions', and one functioning way could be the launch and improvement of tourism. When launching an SME it's also an important aspect, that people in this region make do with a lower salary that can be raised eventually to the other regions' average. Gray and black economy can

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distort these salary levels, which presumably in these three highlighted regions, are present at a considerably higher rate, than in the other regions. [6]

When examining the social background of the region, it's also important to consider, that because of relative poverty and high unemployment rates, there's a bigger entrepreneurial inclination and tendency to avoid risks, than in other parts of Hungary. These personal traits could increase the number of SMEs in the regions and their long-term success. [7]

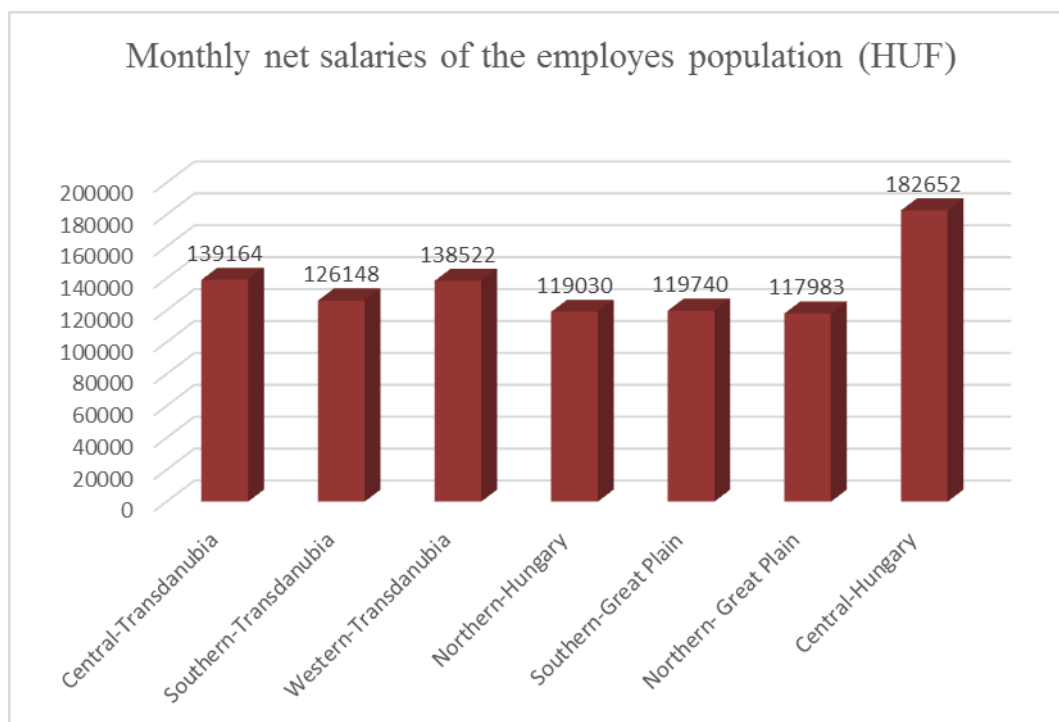


Figure 4. Monthly net salaries of the employed population[1]

2.3. TECHNICAL-INFRASTRUCTURAL ENVIRONMENT

The road network is a serious technological issue. For an SME, a modern road network means faster material procurement, less depreciation and less logistics costs. The destination of tourists coming by car (mainly ones from the west) also depends on which places they can reach on motorways or larger main roads, so the time of the journey can be minimized. I consider this an even more important aspect inside the country, because according to my survey, more than half of the people who responded would travel by car (59.2%), only 13.6% would travel by train and 27.2% would travel by other means of transport (probably bus, bicycle and motorbike). In contrast, there are serious shortfalls in the examined region, especially in Bács-Kiskun and Békés county. In Békés county, similarly to three other counties (Nógrád, Vas, Jász-Nagykun-Szolnok), there weren't any highways in 2011. This level of highway network can seriously decrease the demand for the region, since the consumer can only reach it slower and exposes the vehicle to a low-quality road, shortening the lifetime of the vehicle.

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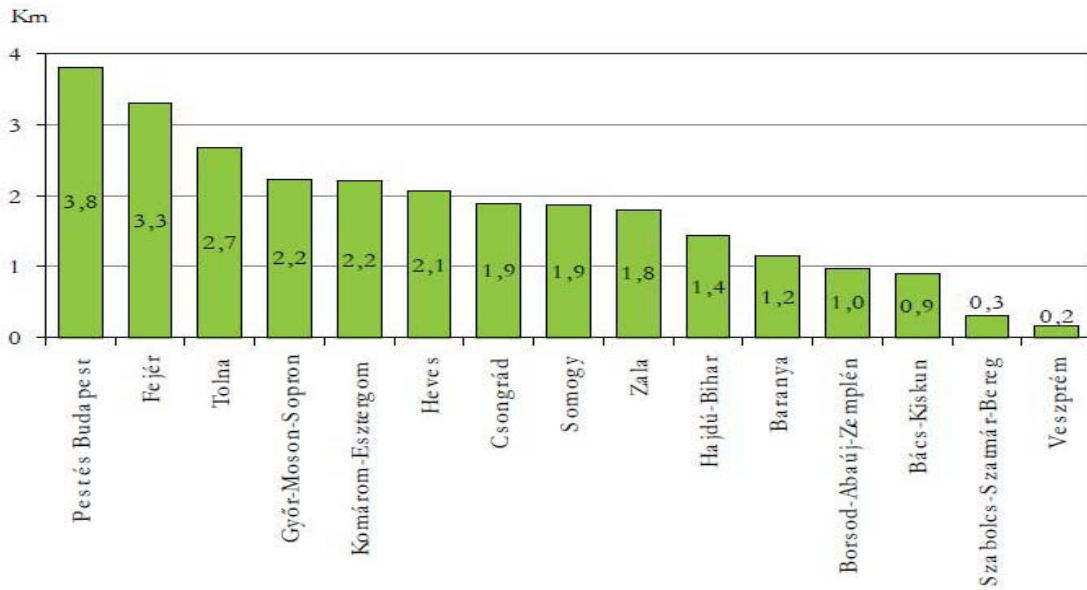


Figure 5. The length of highways in every 100 km² [1]

2.4. ECONOMIC ENVIRONMENT

The gross domestic product (GDP) per capita can be used, with a little exaggeration, to characterize average standard of living. With this realization, 4 regions produced a very similar result, with only a 1-2% difference, while the two western regions and the Pest region resulted in much higher values, which can be due to substantially higher average salaries and level of development in these regions.

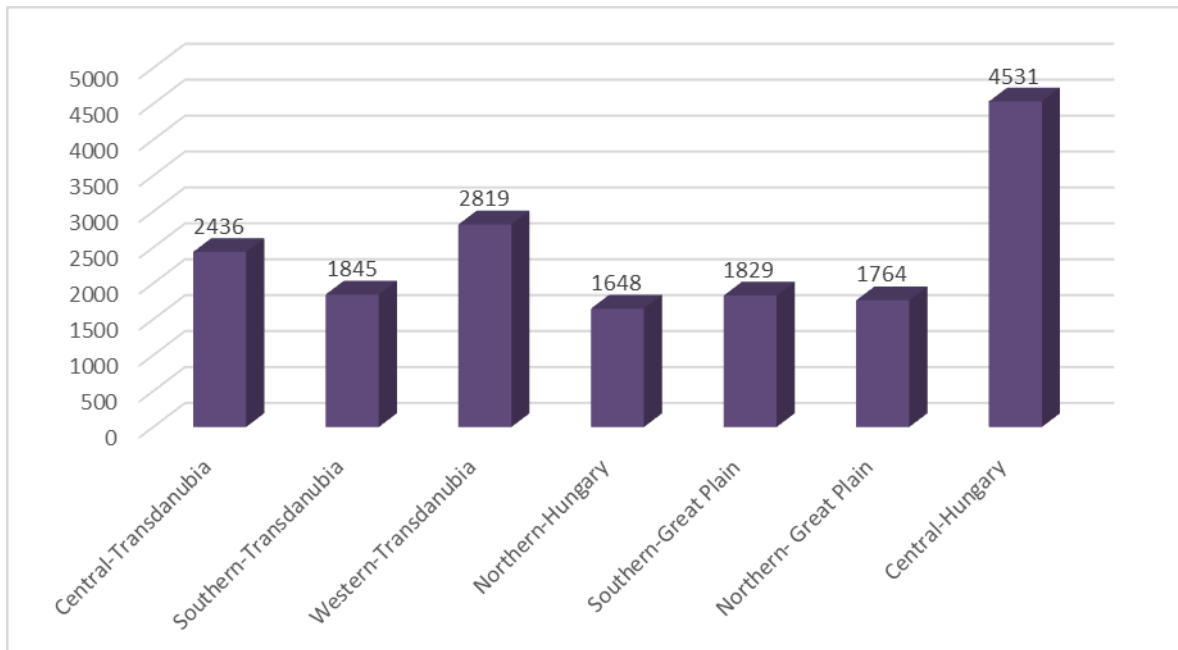


Figure 6. GDP per capita[1]

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In 2013 considering all the more than one day travels, 5533 thousand days were spent in the Southern Great Plain regions out of the total 59896 thousand days, which means a 9.24% share for the region, thus making it the third least popular among the people.

The most important thing, when founding a touristic company – especially in rural tourism – is to assess the environment and to create low investment cost companies with smart ideas given the circumstances. However a good idea in itself is often not enough, because some ideas require substantial funds. One of the best ways to get past this is the exploitation of tender opportunities. In the 2007-2013 EU tender term, one tender source was „Fiatalok vállalkozóvá válása a konvergencia régiókban” (Young adults becoming entrepreneurs in the convergence regions). The purpose of this tender was that younger people below the age of 35, who wanted to start a company in the convergence regions, could apply for the overall amount with just 10% self-financing; overall amounts for individuals were 3 million HUF, for joint ventures it was 6 million HUF. In the 2014-2020 tender term, the state would like to expend 60% of the 7500 billion HUF source on economic development, of which 15% would directly go to developing SMEs. [8] According to this, serious prosperity could be expected in this sector the next six years.

3. RESEARCH QUESTION

With the features so far shown in the study, it can be concluded, that it is essential for the region to create and run more and more profitable SMEs, but also, that their profile shouldn't be primarily industrial. It comes straightforwardly to operate places of catering and rural tourism, since these can exploit the region's attributes the best.

Therefore, during my research, I wanted to answer the question: is there a proper demand of people able to pay for the Southern Great Plain, as a tourist destination, in order to justify the founding of further SMEs and enable their long-term profitability.

During the research I tried to answer a couple of sub-questions. The first question was, is there at all a need for people mainly between the age of 18 and 30 for rural tourism, and in what fashion would they require it. The second question was, if they in fact require it, what sort of services would these potential subjects demand. I also wanted to find out, if the people I asked, had thought a „hungarikum”³ could be connected to the Southern Great Plain region, and if so would these hungarikums be considered traditional of the region in their minds.

3.1. METHOD AND PARTICIPANTS OF THE RESEARCH

My chosen research method was an online survey. The questionnaire contained 4 multiple choice and 2 five-level Likert scale questions, besides the questions about the participants' basic demographic data. I had the questionnaire filled out in two separate years: in 2011 and then in 2013 by a total of 150 people. The only difference between the two questionnaires was the question about the desired services (which I'm going to indicate later on). The attributes of the sample group (sample size, gender, education) could not be considered representative, but suitable for uncovering certain interrelations and hypothesis.

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The sample group consisted of 55% women and 45% men. As for their education, 4.17% had 8 years primary school at the most, 70% had a secondary school degree and 25.83% received higher education. In terms of our study this distribution was favorable, since the data of the KSH suggests that people who go on holiday inside Hungary are mainly ones with a secondary school degree, and less people with higher education, who even in this economic climate can afford to go abroad to spend their summer holiday.

The surveyed people's average age was 21.89 years, so approximately 22. The reason I chose this age group is because with older target groups, it can be presumed that they fundamentally show greater interest toward this kind of tourism by having formed an emotional attachment with the older, traditional world, as opposed to the younger generation. The younger generation's opinion is incredibly important, because in 10-15 years, they'll be raising the next generation, passing on knowledge of socialization processes values [9], [10], [11] and if they don't experience it now or don't deem it necessary, then rural tourism is shall slowly fade away and shall be doomed.

3.2. RESEARCH RESULTS

Demand

According to the result of the survey, 64.17% answered they are planning to participate in rural tourism in the next 2 years and only 35.83% said they're not. The next survey question was about the demand for the region. In both research years, one could pick two out of the seven regions. In 2011 20.87% chose the Southern Great Plain region, while in 2013 19.16% chose it, but in both cases the region ended up 4th in terms of popularity. The number 1 most popular region was Northern Hungary. Consequently it can be said, that the first question received positive feedback from the surveyed people.

How much time the guests plan on spending in the given accommodation is also relevant, to which we received an average of 3.75 nights as the answer. This means, those who wish to participate in rural tourism, would like to spend more than just a weekend there, so they would either use a long weekend with a public holiday or use a day off specifically for it. This is an important factor, you must construct the programmes and attractions according to this, so that there's something interactive every day for the guests, that amuses them and makes them a regular. The best sort of marketing is when someone spreads the word to friends and family, since people believe someone they trust much easier.

Services

At the start of every company, it is necessary to survey, which type of service it's worth heading towards. The next step in the survey was determining the demand of the services after determining the interests. In 2011 the subjects could choose four of the listed services. The following numbers resulted:

1. Traditional catering 52,17%,
2. Pálinka distillation 40,87%,
3. Folkdance 36,52%,
4. Thermal bath 32,17%.

The percentages reflect the ratio of the total sample compared to the ones choosing the given service.

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In 2013 I changed the method, where the respondents could rate their interest of the given service on a 1-5 scale. The results were surprising, because the first place went to the thermal bath with 4.3 points (next to a less than 1 dispersion rating, which can only be said about this one service). In second place came wine tasting with 4.25 points. While the 2011 survey's winner was traditional catering, in 2013 it was the third most sought after service with 3.9 points.

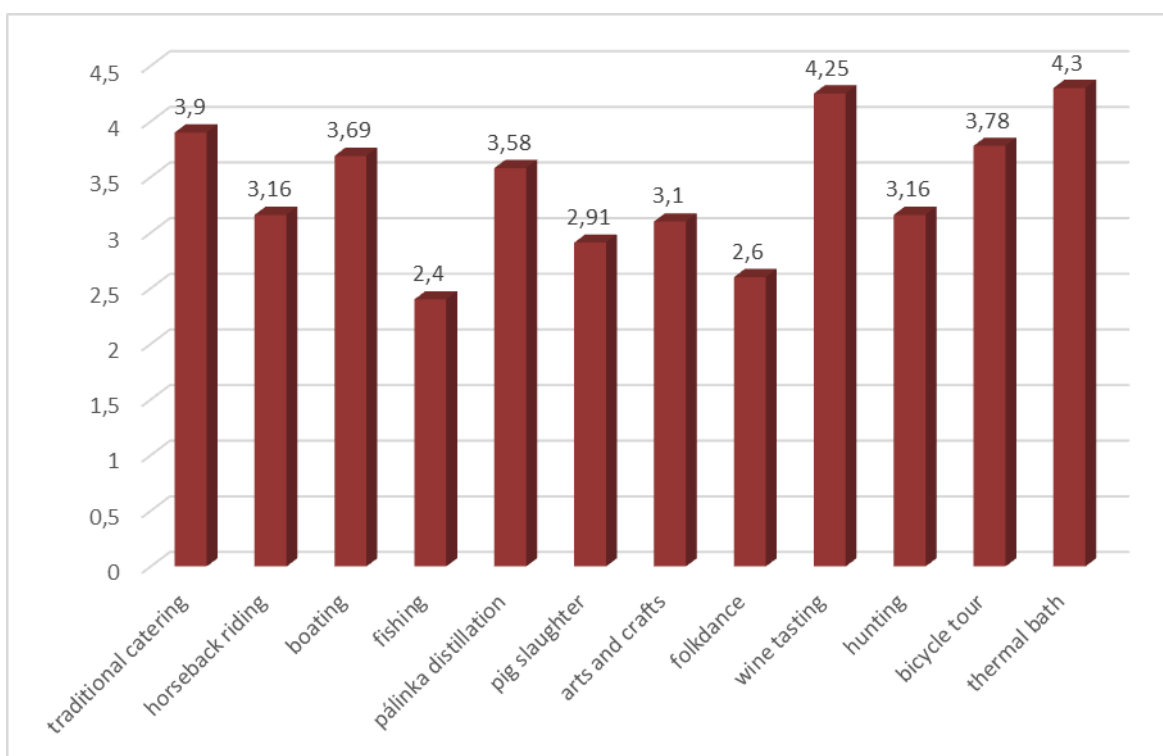


Figure 7. Demand for services, 2013[12]

From this data, it is clear that the most important thing for consumers was catering and gastronomy. When all the services were available to choose from, comfort and therapeutic programs took the lead. This can be thanked to younger people's habit of trying to preserve their health at a younger age.

Hungarikums

In case of hungarikums, we're always talking about a product and not a service, which is important to know, because many hungarikums are related to a certain landscape. Unfortunately the surveyed people, apart from one exception, could not name a hungarikum connected to a specific landscape. But when the hungarikums of the region were listed next to other products, with no connection to a specific region, the respondents evaluated them positively.

Of all the hungarikums, Túró Rudi⁴ won the popularity contest with a high score of 4.53 points (next to a dispersion of 0.88) This level of interest can be traced back to everyone's childhood and it is a cheap products, which doesn't belong in the category of luxury goods.

⁴ Túró Rudi A nearly cylindrically shaped type of cottage cheese dessert, made from cottage cheese, perhaps butter, cream, sugar, different flavoring agents and a chocolate or cocoa mass coating

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In second place came Tokaju Aszú (wine) with a score of 4.34 points, next to a dispersion of 0.97. Following the aszú comes Egri Bikavér (wine) with 4.025 points and the same 0.97 dispersion. As for me, these results were surprising, since none of the pálinkas managed to get into the top three places, even though they're considered to be the greatest hungarikums.

This could have several reasons, one is in my opinion, that home-made pálinkas are considered to be more popular, made by the people. In contrast, distilling wines is quite a lot more complicated, so much less households produce home-made wines. In summary, it can be stated, that the hungarikums of the regions are less known and popular, so their marketing and advertising need to be improved, while also other better-performing hungarikums need to be marketed more intensely.

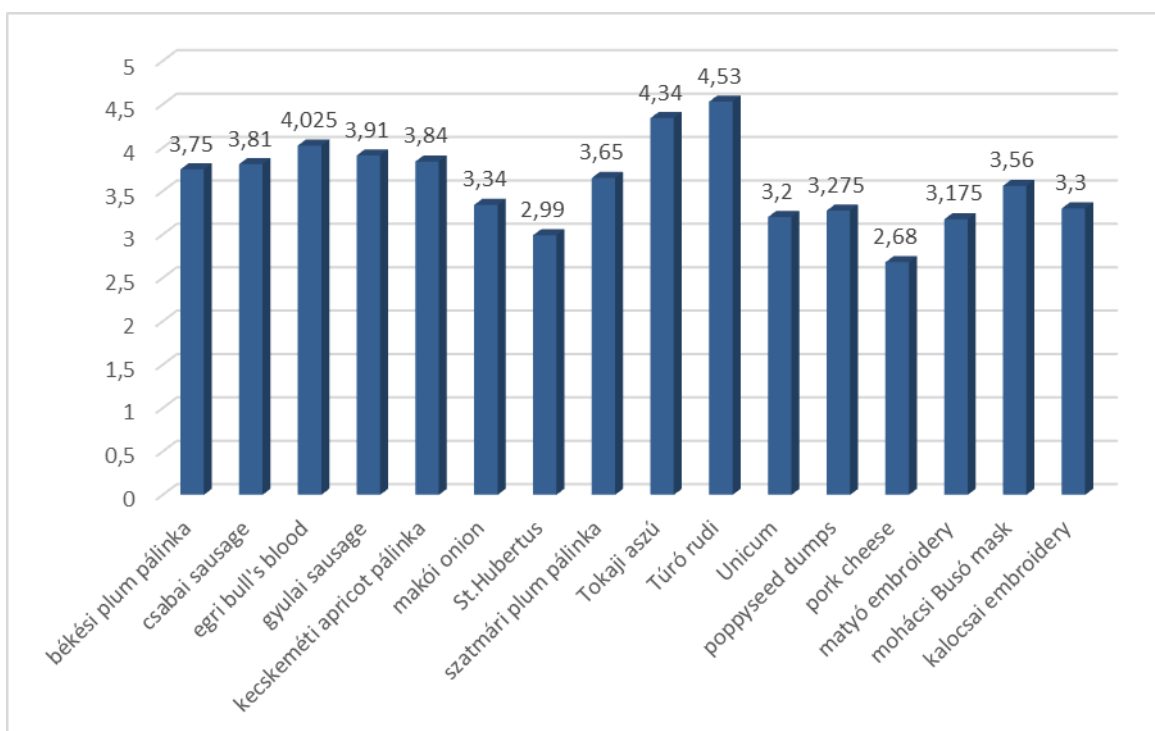


Figure 8. Demand for Hungarikums, 2013 [12]

4. CONCLUSION

The purpose of my study was to survey, what sort of future rural tourism has in the Great Southern Plain region, does a demand exist for it among the younger (Y generation) age group. According to the research results, it can be stated, that at this point the region isn't doing too well, although a demand exists among the younger generation. There's rather a short-term need to stay with recreational purposes, since the region's hungarikums are less well-known and accredited, so they don't necessarily mean the answer to bringing people closer to rural tourism, but rather things like home-made cheese and the opportunity to produce it yourself. So the need, although moderately, exists, and thanks to that, the future economy of the Great Southern Plain could recover and boom with the help of rural tourism. New jobs could be created, with the average salary rising alongside the standard of

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living. However in order to realize all this, new SMEs must be created and maintained, but the extensive marketing to promote regional hungarikums is vital as well.

REFERENCES

1. KSH: Hungarian Central Statistical Office (KSH): www.ksh.hu, 2014.
2. K. Lazányi, Study for nothing? Literature overview of labour market opportunities for individuals with tertiary education, in: Michelberger, P. (Ed.) FIKUSZ 2012, Budapest: Óbudai Egyetem, 2012, p. 37-46.
3. K. Lazányi, Lab. Rev. 57:(3), 2013a, p. 50-62.
4. FATOSZ: National Association of rural and agrotourism: www.fatosz.hu, 2014.
5. M. Fodor, A. Csiszárík-Kocsir, K. Medvéne Szabad, A. Medve, The Macrotheme Rev., 2(4), 2013, p. 137.-143.
6. KSH 2. Downloaded from:
http://www.ksh.hu/statszemle_archive/2008/2008_02/2008_02_113.pdf, 2008
7. K. Lazányi, Erenet Profile 7:(2), 2013b, p. 15-19.
8. Jaras. <http://www.jaras.info>. Downloaded from:
<http://www.jaras.info.hu/20140517/veglegesitette-a-kormany-a-2014-2020-as-unios-ciklus-operativ-programjait.html>, 2014.
9. I. Marosi, Global challenges, local answers, 2014a, Risoprint, Cluj-Napoca.
10. I. Marosi, The Role of Family Values in the Knowledge Transfer between Generations (in Hungarian), XXI. century Scientific Releases, Budapest College of Management, Budapest, 2014/30, 2014b, p. 121-132.
11. I. Marosi, The Family as a Place of Tacit Knowledge Transfer (in Hungarian) in: Takácsné György, K. (Ed.) XIV. Publications of International Scientific Days, 2014c, Károly Róbert College, Gyöngyös
12. Based on self-compiled material

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A COMPARATIVE ANALYSIS OF OCCUPATIONAL SAFETY IN SMES IN SERBIA AND EUROPEAN COUNTRIES

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Abstract

The largest number of companies of any national economy belongs to SME sector, which engages a significant part of labour force. Thus the safety of the employees has major significance. The paper deals with comparative analysis of occupational safety in SMEs in Serbia and other European countries, based on the level of occurrence of injuries at work. It is concluded that the occupational safety in the considered group of enterprises in Serbia is at a quite low level compared to occupational safety in SMEs in European states. It is suggested that the solution to the improvement of safety at work in Serbian companies should be international cooperation with the small and medium sized enterprises leading in this field from the territory of Europe.

Keywords: *SMEs, occupational safety, comparative analysis, Serbia, Europe*

1. INTRODUCTION

The sector of small and medium sized enterprises represents a significant contribution to economic activity and development of Serbia. The SME sector incorporates 45.3% of total employment in Serbia, achieves 39.1% of total investments, 49.8% of exports, 58.2% of imports and 33% of the gross domestic product of the Republic of Serbia.

The classification of organizations within the SME sector is performed by size, i.e. based on the number of employees, into micro enterprises with the number of employees not more than nine, small enterprises with the number of employees from 10 to 49 and medium sized enterprises with the number of employees from 50 to 249. Entrepreneurs (individuals who independently perform economic activity) are classified as micro companies. In 2012 in Serbia there were 317162 enterprises operating within the SME sector (99.8% of all registered companies), 305321 micro-enterprises and 11841 small and medium sized enterprises [1].

In the European Union around 99% of all registered companies belongs to the SME sector [2], which is very similar to the situation in Serbia. These facts are in favour of the importance of the SME sector, both in terms of its contribution to economic development, as well as in terms of engaging large numbers of labour force. However, the negative

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effects of the current economic crisis are reflected both in large companies, as well as in small and medium sized enterprises. The slow pace of development is apparent, as well as the reduced number of small and medium sized enterprises. These are the direct consequences of difficult business conditions, deficient opportunities for funding, and the decline of both domestic and foreign demand. For these reasons, the institutions of the Republic of Serbia are trying to implement a strategy of development of micro, small and medium sized enterprises, which is based on the EU document, Small Business Act [3]. The development strategy comprises five pillars: the promotion and support of entrepreneurship and the establishment of novel economic societies, improvement of human resources for the competitive SME sector, financing of the SME sector, improving the competitive advantage of SMEs in export markets and as the last pillar, the legal, institutional and business environment of the SME sector in Serbia [4].

In line with the improvement of human resources, occupational safety represents an important factor in achieving the competitiveness of SMEs. In order to select a specific strategy and adopt a plan for improving the state of health and safety at work in small and medium sized enterprises in Serbia, it is necessary to consider the current situation in this field and carry out a comparative analysis with the European Union member states, as well as with other European countries.

2. THE IMPORTANCE OF OCCUPATIONAL SAFETY IN SMEs

As an important part of the economic system of any country, micro, small and medium sized enterprises need to develop the occupational safety system performance and health similar to large companies. Moreover, small companies need to pay more attention to the safety of their employees in the work places than large companies. The reason is fairly simple. Smaller companies feel greater financial consequences of any injury, due to the smaller number of workers (the absence of an employee significantly reduces the potential of human resources), and also due to the modest financial resources compared to large companies [5]. Therefore, in order to establish an adequate system of health and safety at work, all the employees of SMEs must receive appropriate training in the area of occupational safety. In order to generate the knowledge required to modify existing or create new, adequate training on occupational safety, it is necessary to systemically analyze each position in the company. This involves a detailed study of all the activities and movements in a given workplace, analysis of the ergonomics of the work space, resources and tools etc., in order to establish a potential risk of injury. Only after the performed risk assessments of each position is it possible to create adequate training on occupational safety. It is hence clear that training should not be universal, but adapted to specific work conditions. Only in this way is it ensured that the company has a highly trained staff from the perspective of their own occupational safety. It is a necessary precondition for any future activity in the management system of safety at work.

Good business practice suggests that each company should implement an occupational safety management system according to its size and potentials. However, the implementation of such a system requires certain expenses that may become a serious limiting factor. Many SMEs are not able to provide the necessary funds, whereas the companies that are able to achieve this rather invest in regular business operations. In such

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circumstances, companies are advised to quantify all the costs associated with injuries at work (lost work days, medical costs, costs of additional hiring and allocation of resources, etc.) and to compare them with the cost of implementation of occupational safety management systems. Considering it on a short term scale, even if the costs of introducing such a system are greater than the cost of injuries at work, it is recommended that the aforementioned system be introduced.

The reasons are the following: in the long run, the implementation of occupational safety management system is a profitable investment, and the other reason is humane by nature - taking care of a man.

The classical system of occupational safety management consists of the following elements:

Management commitment and employee participation. Management represents an organ that leads the system in accordance with established policies and guidelines, which assigns and supports accountability in the safety system and sets a personal example that encourages the involvement and commitment of all employees.

The analysis of work positions in order to identify risks. The analysis of work positions is a continuous process because each novelty may lead to the appearance of new, or potential risks of injuries in the workplace.

The prevention and control of risks. It is necessary to establish and maintain appropriate methods for the prevention and control of existing and potential risks in every workplace.

Safety training of the employees, responsible individuals and managers. Managers, individuals responsible for safety, as well as all the employees of a company must receive adequate training in the area of occupational safety, in order to fully understand all the risks and hazards in the work places and to be able to perform their work activity in a completely safe manner. For this reason, the training should be adjusted to the person it is intended for (workers must be entirely equipped for working safely at their post, while those responsible for the safety and managers must be trained to regard the whole problem of safety as a whole, as well as from the aspects of a particular work place).

Analysis, control and corrective measures. In order to achieve improved safety in the work places, taking each post, as well as the system as a whole into consideration, it is necessary to carry out continuous analysis and control of the state in the subject area, with the aim of detecting flaws and finding appropriate corrective measures and actions [6,7, 8,9,10,11,12,13].

Judging by the previously stated, one cannot but recognize the complexity and significance of occupational safety in SMEs, both in terms of research in this field and in discovering ways to achieve improvements, as well as in terms of their practical application.

3. METHOD AND RESULTS

The method employed in the current paper is that of collecting, selecting, managing and comparing statistical data [14]. The comparative analysis is done with the data about the level of injuries at work of the employees in SMEs in European countries on the one hand, and the data about the injuries at work in SMEs in Serbia, on the other hand. The source of data for European countries is the Eurostat data base [15]. The data regarding Serbia represent the results of the previous research by the authors of the present paper [16]. The data regarding the injuries at work were collected by survey method (self-report) at the sample of 1011 employees in SMEs on the territory of Serbia.

The state of occupational safety was observed according to the number (percentage) of injuries. The comparison of Serbia and European countries was done based on four criteria of classification of the employees and the subgroups related to them (Accidents at work regarding gender, Accidents at work regarding age, Accidents at work regarding the position in the company, Accidents at work regarding the size of the enterprise).

3.1. ACCIDENTS AT WORK REGARDING GENDER

According to the results obtained in the conducted research in different areas of economy, one could say that the gender of an employee has significant influence on the performances of occupational safety, i.e. on the level of injury occurrence [17,18,19]. Physical, emotional and psychological differences between men and women cause the differences in the behaviour at work, as well. Additionally, the majority of work places is designed for an average male worker. Thus, the level of injuries among men should be significantly lower compared to the level of injuries among women. However, the statistics and results of the research demonstrate a completely different relation. Namely, women are far more devoted to occupational safety at their work places, in the sense of consistent application of safety procedures, involvement in the occupational safety management system, activities in the communication system regarding safety etc. For all these reasons, women endure considerably fewer injuries at work compared to men, judging by the percentage of injuries of women and men at work, as well as judging by the inter-comparison of the absolute number of injuries. The lower level of injuries at work among female workers is present in larger companies as well as in small and medium sized enterprises. Equal state of affairs is depicted by the data of Eurostat for small and medium sized enterprises in absolutely every observed state (Table 1), and according to the obtained data in our research the situation in Serbia is identical (Table 2).

Examining the relation of injuries at work among men and women in SMEs in Serbia, one notices that the percentage of injuries of men is drastically higher compared to women. Essentially, the relation is similar in all European countries, except that the percentage of injuries at work when it comes to women is the lowest in Europe. The state of affairs can be explained by the fact that the percentage of employed women in Serbia is slightly lower than the percentage in SMEs in other observed European countries. According to the Eurostat data, the relation of injuries at work among men and women in SMEs on Malta is most similar to the results of our research of SMEs in Serbia.

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Table 1: Accidents at work regarding gender – Europe (2008) [15]

Gender GEO	Males	Females
Belgium	83.94	15.99
Bulgaria	75.63	24.37
Czech Republic	76.56	23.44
Denmark	76.92	22.38
Germany	83.09	16.85
Estonia	73.59	26.41
Ireland	79.44	20.28
Greece	:	:
Spain	79.55	20.45
France	78.25	21.75
Croatia	:	:
Italy	82.68	17.32
Cyprus	81.15	18.85
Latvia	73.96	26.04
Lithuania	73.77	26.23
Luxembourg	86.71	13.29
Hungary	73.05	26.91
Malta	91.26	8.74
Netherlands	75.51	24.49
Austria	84.87	15.13
Poland	78.32	21.68
Portugal	79.17	20.83
Romania	79.26	20.74
Slovenia	81.20	18.8
Slovakia	73.83	26.17
Finland	82.08	17.92
Sweden	76.30	23.70
United Kingdom	:	:
Norway	81.89	18.11
Switzerland	83.78	16.22

: not available; Unit: Percentage

Table 2: Accidents at work regarding gender – Serbia (2012)

Gender GEO	Males	Females
Serbia	92.20	7.80

Unit: Percentage

Source: Authors research

3.2. ACCIDENTS AT WORK REGARDING AGE

The level of occurrence of injuries at work within different age groups of employees in large companies as well as in SMEs, was the subject of numerous studies [19,20,21]. According to Salminen, the level of injuries at work is the highest among the workers in the youngest age group, which is why programs of injuries at work prevention for this age group of employees represent a priority in many countries [21]. These programs are evidently beneficial in whole Europe, consequently the level of injuries among the youngest workers is very similar to the level of injuries of the most experienced workers and it is significantly lower compared to other age groups (Table 3).

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Table 3: Accidents at work regarding age – Europe (2011) [15]

GEO \ Age	Les than 24 years	From 25 to 34 years	From 35 to 44 years	From 45 to 54 years	55 years or over
Belgium	17.51	28.23	26.85	21.61	5.80
Bulgaria	9.15	20.77	23.91	28.66	17.50
Czech Republic	15.66	24.30	25.49	20.88	13.68
Denmark	13.21	19.33	26.04	25.44	15.71
Germany	17.51	20.76	22.23	25.29	14.02
Estonia	13.06	19.81	18.93	24.99	23.21
Ireland	8.13	32.39	48.03	0	7.93
Greece	6.57	29.53	31.84	23.29	8.78
Spain	8.35	28.82	30.76	22.31	9.77
France	17.02	27.83	26.00	21.20	7.95
Croatia	9.19	30.59	25.26	24.59	10.37
Italy	8.23	21.26	30.26	26.54	13.21
Cyprus	9.56	28.33	23.58	23.58	14.94
Latvia	15.62	22.29	20.38	25.24	16.47
Lithuania	14.85	19.54	22.18	27.94	15.45
Luxembourg	8.34	22.78	33.07	28.32	7.49
Hungary	12.89	26.61	27.39	21.05	12.05
Malta	18.29	26.21	21.45	22.02	12.02
Netherlands	9.47	24.06	23.22	28.43	14.83
Austria	22.84	21.90	22.25	23.19	9.83
Poland	12.64	30.68	23.48	21.92	11.29
Portugal	10.01	24.58	28.90	22.93	12.16
Romania	11.50	22.14	30.71	25.30	10.35
Slovenia	9.08	28.40	28.56	27.05	6.91
Slovakia	14.70	23.13	24.5	25.42	12.24
Finland	12.29	22.12	22.10	25.40	18.08
Sweden	13.87	19.43	21.54	25.00	20.16
United Kingdom	12.18	18.45	18.69	20.00	13.19
Norway	16.07	21.26	23.81	21.73	15.26
Switzerland	:	:	:	:	:

: not available; Unit: Percentage

Table 4: Accidents at work regarding age – Serbia (2012)

GEO \ Age	Les than 29 years	From 30 to 44 years	From 45 to 54 years	55 years or over
Serbia	16.50	36.90	32.00	14.60

Unit: Percentage

Source: Authors research

Observing the degree of injuries among different age groups of employees in SMEs in Serbia, the relationship is almost identical to the situation in European countries (Table 4). However, regarding the percentage of injuries in two compatible age groups according to our research and the research of Eurostat (From 45 to 54 years and 55 years or over) the following can be concluded: the level of injuries of workers older than 55 in SMEs in Serbia fits in European average, while workers belonging to the age group from 45 to 54 in SMEs in Serbia endure the greatest percentage of injuries in the whole Europe. Since we are dealing with the most experienced workers, on whose activities one should base the business conduct of the companies and whose behaviour should set an example for younger and less experienced workers, according to our research, there is real danger that

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the state of occupational safety in SMEs in Serbia sinks to an even lower level in the future. Hence it would be recommendable to adopt experience of successful European states in the field of occupational safety or enable factual cooperation with successful companies if possible.

The rest of the age group of employees in SMEs in Serbia are not directly comparable to the categories in SMEs in Europe because of the different range of age of workers inside the groups. However, generally one could say that the percentage of injuries among the youngest and the middle aged employees in SMEs in Serbia fits in European average, which could be regarded as acceptable.

3.3. ACCIDENTS AT WORK REGARDING THE POSITION IN THE COMPANY

In the sense of safety at work, work place is characterized by the type and intensity of its activities, as well as the types of risks and the probability of their occurrence [22,23]. Taking the aforementioned into consideration, production workers are exposed to the greatest risk of work place injuries, while managers are employed at work places where the smallest number of injuries occurs [23]. This situation is present in large economic systems, as well as in SMEs (Table 5 and Table 6).

Table 5: Accidents at work regarding the position in the company – Europe (2010) [15]

Position in company GEO	Production workers	Workers indirectly involved in production	Administrative workers and professionals	Managers	Unknown
Belgium	80.99	7.39	10.05	0.54	1.04
Bulgaria	73.17	7.86	15.19	3.77	:
Czech Republic	82.68	8.21	8.32	0.73	0.06
Denmark	64.41	6.65	10.92	1.44	16.56
Germany	75.31	9.34	12.46	0.56	2.31
Estonia	86.52	6.57	5.05	1.87	:
Ireland	55.51	14.25	10.35	2.25	17.55
Greece	:	:	:	:	:
Spain	78.82	14.15	6.42	0.46	0.16
France	:	:	:	:	:
Croatia	72.40	14.17	12.90	0.53	:
Italy	67.23	10.89	7.24	0.02	14.61
Cyprus	74.21	12.43	10.56	1.76	:
Latvia	73.73	12.11	12.32	1.84	:
Lithuania	77.82	6.72	11.57	3.89	:
Luxembourg	54.32	6.48	4.50	0.42	33.95
Hungary	75.13	15.00	9.43	0.43	:
Malta	82.42	6.44	9.55	1.60	:
Netherlands	56.55	17.72	13.02	4.63	8.07
Austria	60.53	7.76	3.07	3.82	24.81
Poland	73.17	8.83	14.86	3.13	:
Portugal	75.05	12.33	7.09	3.78	1.75
Romania	77.87	6.35	13.34	1.86	0.56
Slovenia	70.62	17.70	8.27	1.67	1.68
Slovakia	81.55	7.90	9.57	0.97	:
Finland	:	:	:	:	100
Sweden	70.82	12.51	15.54	0.78	0.35
United Kingdom	:	:	:	:	:
Norway	33.47	3.82	6.35	1.22	55.14
Switzerland	80.80	8.31	7.97	2.91	:

: not available; Unit: Percentage

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Table 6: Accidents at work regarding the position in the company – Serbia (2012)

GEO \ Position in company	Production workers	Workers indirectly involved in production	Administrative workers	Managers
Serbia	74.80	21.40	1.90	1.90

Unit: Percentage

Source: Authors research

Comparing the percentage of injuries occurrence at work in SMEs in Serbia and SMEs in other European countries, certain similarities and differences could be noticed. Regarding the degree of injuries among production workers in Serbian companies, the state of affairs is almost identical to the situation in the majority of European states. The same goes with the work places exhibiting the smallest risk of injuries (manager positions). However, it is very interesting that the administration staff in Serbian SMEs endure the smallest percentage of injuries at work in the whole Europe. On the other hand, workers indirectly connected to production in Serbian SMEs (workers engaged on production system maintenance etc.) endure far more injuries at work than their colleagues in other European countries. The closest unfavourable situation in this group of employees is detected in Slovenia, Holland and Hungary.

3.4. ACCIDENTS AT WORK REGARDING THE SIZE OF THE ENTERPRISE

The size of the company influences the state of occupational safety considerably. The percentage of injuries of employees at work is significantly higher in smaller and medium sized enterprises than in large companies [24,25,26,27]. The reasons for this are limited resources of SMEs (human, financial, technical and other). Besides, the systems of occupational safety management are frequently developed for larger economic systems and cannot be implemented in smaller companies in a way that would ensure the best quality.

Observing the degree of injuries in micro, small and medium sized enterprises, one also notices differences. Micheli and Cagno recommend separate investigation of the state of occupational safety within these three categories of companies [27]. The reasons of significant differences in occupational safety in micro, small and medium sized enterprises lie in different financial capability of the enterprises and their technical equipment, as well as in organizational divergences.

According to the Eurostat data (Table 7), the state of occupational safety in micro enterprises (From 1 to 9 employees) is far more favourable compared to the safety of employees in small and medium sized enterprises. The situation is identical in micro enterprises in Serbia, except that the percentage of injuries corresponds to European average (Table 8). This state of affairs opposes the previously stated fact that the safety level of employees increases with the size of the company [27]. The explanation for this kind of situation in Serbia, based on the results of our research, can be found in the fact that managers (owners of the companies) and workers constantly directly communicate, thus the culture and climate of safety are exceptionally developed, and the way of controlling safety behaviour of the employees is direct. Almost identical situation of

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occupational safety in micro enterprises in the rest of Europe can most probably be explained in the same or similar fashion.

Table 7: Accidents at work regarding the size of the enterprise – Europe (2011) [15]

Size of enterprise \ GEO	From 1 to 9 employees	From 10 to 49 employees	From 50 to 249 employees
Belgium	16.98	26.91	20.02
Bulgaria	6.55	18.18	27.62
Czech Republic	4.17	17.19	32.64
Denmark	0	0	0
Germany	14.62	22.83	22.26
Estonia	10.21	25.33	38.26
Ireland	13.60	23.60	30.22
Greece	38.71	27.40	19.12
Spain	23.04	31.62	23.65
France	21.96	34.20	29.84
Croatia	5.22	13.12	31.37
Italy	24.63	20.14	15.01
Cyprus	23.69	23.46	20.49
Latvia	7.78	19.65	32.62
Lithuania	3.95	22.01	36.07
Luxembourg	9.86	30.02	32.48
Hungary	4.72	14.71	28.85
Malta	9.38	21.82	28.37
Netherlands	15.89	32.65	34.72
Austria	8.81	24.43	26.94
Poland	6.23	18.58	35.89
Portugal	28.10	27.93	19.36
Romania	7.69	19.92	28.22
Slovenia	14.01	21.56	30.37
Slovakia	7.21	17.86	35.79
Finland	0	0	0
Sweden	14.19	32.33	30.37
United Kingdom	0	0	0
Norway	13.18	33.78	35.47
Switzerland	:	:	:

: not available; Unit: Percentage

Table 8: Accidents at work regarding the size of the enterprise – Serbia (2012)

Size of enterprise \ GEO	From 1 to 9 employees	From 10 to 49 employees	From 50 to 249 employees
Serbia	8.40	31.80	59.80

Unit: Percentage

Source: Authors research

Considering injuries at work in small companies (From 10 to 49 employees) in Serbia and the rest of European countries, one can say that the state of safety in Serbian companies in this category corresponds to European average. Nevertheless, the degree of injuries of employees in middle sized companies in Serbia (From 50 to 249 employees) is at a disconcerting level and it is twice as high as European average. This piece of information is even more disconcerting having in mind that middle sized enterprises are carriers of

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economic activities and the development of the country they are doing business in, thus as such they should be the leaders in the field of occupational safety.

4. CONCLUSION

SMEs have a key role in the economy of any state and engage a considerable contingent of labour force. Thus the safety of the employees in this group of enterprises has major significance. However, compared to large economic systems, SMEs do not have so well developed systems of occupational safety management. Regarding it at the level of Europe, in certain states one notices a deviation from this state of affairs, i.e. the state of safety at work in SMEs is at satisfactory level, similar to the situation in the leading companies in this field. On the other hand, the state of affairs in this field in Serbia is at a pretty low level compared to other European countries. Therefore, starting international cooperation with companies having successful systems of safety management at work is imposed as a way of safety increase of the employees in SMEs in Serbia. Along with the detailed analyses of injuries at work, as well as all the elements of safety and along with the adjustment of domestic context to the best systems of European practice of occupational safety management, the occupational safety of the employees in SMEs in Serbia may attain a considerably better and satisfactory level. Finally, besides the cooperation among the companies from Serbia and other European countries, it would be favourable to initiate cooperation at the level of the Ministry of Economy and the institutions dealing with safety at work.

RERERENCES

1. The Ministry of Economy, the Ministry of Regional Development and Public Administration, National Agency of Regional Development, (2013) The report on small and medium sized enterprises and enterprising for 2012, Biograf, Belgrade. (in Serbian)
2. Eurobarometer Team of the European Commission, (2007) Observatory of European SMEs. Flash Eurobarometer, No. 196, Budapest, European Commission.
3. European Commission, (2011) Communication from the Commission to the European Parliament, The Council, Economic and Social Committee and The Committee of The Regions - Review of the "Small Business Act" for Europe. European Commission, Brussels, 23.2.2011, COM(2011) 78 final.
4. <http://www.pks.rs/PrivredaSrbije.aspx?id=20&p=0&>
5. Getting to Green – A Sourcebook of Pollution Management Policy Tools for Growth and Competitiveness, (2012) The International Bank for Reconstruction and Development / The World Bank, Washington, DC.
6. H.S. Shannon, V. Walters, W. Lewchuk, J. Richardson, L.A. Moran, T. Haines, D. Verma, *Am. J. Ind. Med*, 29 (1996) 258–268.
7. H.S. Shannon, J. Mayr, T. Haines, *Safety Sci*, 26 (1997) 201–217.
8. A.I. Glendon, D.K. Litherland, *Safety Sci*, 39 (2001) 157–188.
9. A. O’Dea, R. Flin, *Safety Sci*, 37 (2001) 39–57.
10. D. Zohar, *J. Organ. Behav*, 23 (2002) 75–92.
11. K. Mearns, S.M. Whitaker, R. Flin, *Safety Sci*, 41 (2003) 641–680.
12. M.N. Vinodkumar, M. Bhasi, *Safety Sci*, 47 (2009) 659–667.

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13. Z. Ismail, S. Doostdar, Z. Harun, *Safety Sci*, 50 (2012) 418–423.
14. R.M. Morillas, J.C. Rubio-Romero, A. Fuertes, J. *Safety Res*, 47 (2013) 57–65.
15. http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database
16. N. Milijić, I. Mihajlović, Dj. Nikolić, Ž. Živković, *Int. J. Ind. Ergonom*, 44(4) (2014) 510-519.
17. S.S. Islam, A.M. Velilla, E.J. Doyle, A.M. Ducatman, *Am. J. Ind. Med*, 39(1) (2001) 84–91.
18. F.C. Breslin, J. Polzer, E. MacEachen, B. Morrongiello, H. Shannon, *Soc. Sci. Med*, 64 (2007) 782–793.
19. S. Tucker, D. Diekrager, N. Turner, E.K. Kelloway, *J. Safety Res*, 50 (2014) 67–73.
20. L. Laflamme, E. Menckel, *Safety Sci*, 21(2) (1995) 145–161.
21. S. Salminen, *J. Safety Res*, 35(5) (2004) 513–521.
22. J.F. Kraus, *Am. J. Public Health*, 6 (1985) 403–418.
23. J.H. Oh, E.H. Shin, *Soc. Sci. Med*, 57 (2003) 2173–2182.
24. J. Leigh, *J. Commun. Health*, 14 (1989) 44–52.
25. P. Kines, K. Mikkelsen, *J. Occup. Env. Med*, 45 (2003) 1074–1078.
26. B. Fabiano, F. Curro, R. Pastorino, *Safety Sci*, 42 (2004) 587–600.
27. G.J.L. Micheli, E. Cagno, *Safety Sci*, 48 (2010) 729–733.

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JOB CREATION FOR YOUTH IN THE V4 COUNTRIES BY MICROCREDITING

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Abstract

The Paper highlights the problems of the European economic crises relating youth unemployment. It draws attention to the EU Greek Presidency relation these issues. It presents the financial means calls microfinancing which partially could contribute to alleviation and poverty by creation of self-employment and development of microenterprises by providing microloans and microcredits. There is a lack of comprehensive study and exchange of practice in microfinancing in the V-4 countries. The paper summarizes the definition of the microcrediting and presents the currents state-of-the art in the EU. Following this the Author summarizes the main microfinance institutions in the V-4 countries. In the final session the Author gives professional recommendations and a directive on good conduct of microfinancing based on the outcome of the Workshop held in 2013 in Budapest, as well as summarizes recommendations for V-4 countries to further steps.

Keywords: *youth unemployment, poverty alleviation, job creation, microfinance, microfinance institutions, good conduct of microfinance*

1. INTRODUCTION

2013 reached the end. The hope of stabilising the European economy, overcome the economic crises, decrease the level of unemployment - especially among the young - has yet to be realised. According to Council of the European Union as of April 2014, the youth unemployment rates remain historically high, at 23.2% in the EU-28 and 23,8% in the Euro area (December 2013). Despite the renewed political focus and slogans to create jobs for young people the youth unemployment rates are much higher than the unemployment rate for all ages. This reflects the general difficulties faced by young people in finding jobs. As rule of thumb, one out of every four persons available for the labour force is unemployed. Getting a job is the safest route out of poverty for those people who can and ready to work. The recent European Parliamentary election resulted in a political landslide. The majority of the EU countries no more thanks the idea of the United State of Europe and the beaucratic Brussels's mechanism. While the officials and civil servants in Brussels are dealing with the shape of banana and colour of the tomato, while the eurocrats suggest to cut all locust tree in Hungary, Romania and Serbia, which contribute to production of the best acacia-honey, in fact nothing is happening in the field of job creation and poverty alleviation.

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While a lot of initiatives are being carried out by the V4 countries, there is still a need for more support for employment of young people." It is very important to emphasise that encouraging entrepreneurial spirit and supporting start-up initiatives should be considered. However, the question is how, by whom and by which means? And this is the aim of the current paper to draw attention of the policy-makers and entrepreneurial support institution to the significance of the microcrediting and microcredit schemes in the V4-countries.

2. YOUTH UNEMPLOYMENT

The youth unemployment rate reached new historic high of 23.5 % in February 2013, more than twice as high as the adult rate, with some 5.7 million young people affected. Young people that have only completed lower secondary education (early leavers from education and training) bear the highest risk of unemployment. In 2012, the EU average youth unemployment rate was 22.8 %, but reached 30.3 % for low-skilled youth [1]. The rate of the youth unemployment in the V-4 countries is summarised in Table 1.

Table 1. Youth Unemployment Rate for population aged 15-24, in V4 countries - 2013

	CZECH REPUBLIC	HUNGARY	POLAND	SLOVAKIA
Population in million	10.5	9.97	38.5	5.4
Unemployment rate in %	6.7	10.9	9.7	13.6
Youth unemployment rate in %	18.0 (19.5)	26.1 (28.1)	25.8 (26.5)	33.2 (34.0)

Source: UNECE Countries in Figures, 2013

Remark: figures relates to year 2011, while youth unemployment rate in brackets - to 2012.

Youth unemployment not only has a personal effect on each individual and their families, it has an influence on public attitudes towards the structure of the EU itself. Since time immemorial migration has been the means to a better life. The principle of the free movement of peoples across the region is well established in the EU but there are serious economic inequalities among the constituent parts. Those countries, such as the UK, who have been able to develop welfare systems are wary of migrants coming from less generous countries in Central and Eastern Europe (CEE).

The current social and labour dimension in the European Union requires the enhancement of the social dimension in order to strengthening employment, social inclusion and protection. Within the framework of the Youth Guarantee scheme, EU Member States have committed to ensure that all young people up to the age of 25 receive a high-quality offer of a job, an apprenticeship or a traineeship within four months of becoming unemployed or leaving formal education. EU countries endorsed the principle of the Youth Guarantee in April 2013 [2]. However, the proposal suffers from several limitations, such as national strategies and lack of financial resources for implementation of your employment creation. So far only Austria, Denmark, Germany, Ireland, Italy, Latvia and Spain developed National Youth Guarantee Implementation Plans.

The European Economic and Social Committee, the European Parliament and the Council in 2008 acknowledged, that more than 80 million people across the Union lived below the poverty line, that is, more than the population of our largest Member State, or 16.5% of our

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population. With the economic crisis, the situation has of course worsened. The situation of those earning the lowest amount has continued to deteriorate and they now face a greater risk of indebtedness and insolvency. This is totally unacceptable in the 21st century Europe. It would only be proper to ask this is the "gift and benefit" to join the EU?

During the Poland's Presidency of V4 among other programs a cooperation took place in the sector of Education, Volunteering, and Youth. The work within this priority included a working meeting "V4 Youth Roundtable" representatives in April 2013. Poland prepared a report aimed at providing a comparative analytical review of the situation of young people in these countries for the prospective development of youth policy in the region of the Central Europe [3]. In spite of the fact, that this is a valuable report concerning the situation of the youth, not to much is suggested in the final chapter of conclusion and recommendation. The report rightly points out, that "the employment of young people, remains the first sphere of needed actions from the countries concerned.

3. PRIORITY OF THE GREEK EU PRESIDENCY

"The top priority of the Greek Presidency is also the promotion of employment and the creation of jobs, notably amongst the young population. The Greek Presidency will speed up the implementation of actions such as the "Initiative for the Youth" and the "Youth Guarantee". The Greek Presidency also seeks to finalise the negotiations on the proposed directive of the posting of workers, as well as the establishment of a quality framework for internships across the EU, the renewal of EURES [4].

The Presidency will also put emphasis on the promotion of the programme for employment and social innovation and the PROGRESS microfinance facility, aiming at the retention and creation of jobs through the development of SMEs and social entrepreneurship."

These are fine aims and in the second half of 2014 we shall see the results of these sounding targets. The primary task of the policy makers and Governments should be job creation. The main findings of the 2013 Employment and Social Developments in Europe Review shows how taking up a job can help people to get out of poverty, but only in half of the cases: much depends on the type of job found, but also on the household composition and labour market situation of the partner.

On 20 May 2014, in Brussels, European Youth Forum was held by EU Member States' Ministers for Youth. The participants discussed a first-time ever EU Work Plan for Youth for 2014-2015 to adopt important decisions concerning young people. During this Forum *Jan Truszczyński*, Commission Director General for Education and Culture, emphasised, that "*entrepreneurship is not a panacea but part of the solution. In order for it to work, it has to be joined up with other initiatives in other policy sectors*". During this meeting the participants discussed the ways and means how the youth entrepreneurship should be supported and promoted among the young people. Tasks for promoting youth entrepreneurship is summarized in a Draft Council Resolution [5]. This Council Resolution is rather weak and is similar to a "socialist brigade movement invitation a la Brussels". It has not obligatory status for the implementation. The main deficiency is lack of focus on financial resources for the implementation of the Youth Guarantee programs.

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One of the useful tools for addressing the young people hindering to start a business is lack of financial resources. Youth employment can be created through entrepreneurship education approach and support of start-ups of the identified youth through microfinance services. Such programs need selected microfinancial institutions (MFIs) and other development stakeholders.

4. MICROCREDIT AND MICROFINANCE

Availability of financial instruments is of paramount importance for SMEs. Financial instruments are defined as any tools that are used by either firms or financial intermediaries to acquire or intermediate funds. There is a one important thumb-finger rule: different SME target group need various financial schemes and lines. These varied from microcredit through public credit guarantee fund and from mutual credit guarantee association to venture capital and others. There is not a unique tool of financing SMEs. The need depends basically on the stage of maturity and size of an enterprises.

DEFINICION OF MICROFINANCE [6]

"Microfinance" is often defined as financial services for poor and low-income clients offered by different types of service providers. In practice, the term is often used more narrowly to refer to loans and other services from providers that identify themselves as "microfinance institutions" (MFIs). These institutions commonly tend to use new methods developed over the last 30 years to deliver very small loans to unsalaried borrowers, taking little or no collateral. These methods include group lending and liability, pre-loan savings requirements, gradually increasing loan sizes, and an implicit guarantee of ready access to future loans if present loans are repaid fully and promptly.

More broadly, microfinance refers to a movement that envisions a world in which low-income households have permanent access to a range of high quality and affordable financial services offered by a range of retail providers to finance income-producing activities, build assets, stabilize consumption, and protect against risks. These services include savings, credit, insurance, remittances, and payments, and others.

CPAG Microfinance Gateway

Microcredit addresses the need for access to credit to self-employed, business start-ups and small enterprises. It has a particular focus on, but is not restricted to, groups with limited access to the conventional credit market. Examples include female entrepreneurs, young entrepreneurs, entrepreneurs belonging to a minority group, entrepreneurs with a disability, sole traders, etc. Business starters and self-employed, especially from vulnerable groups request for modest modest amounts. The most popular microloans are less than EUR 5,000 only. The European Commission adopted a new definition of microenterprises that came into use as of 1 January 2005. Enterprises will be considered as microenterprises if their headcount amounts to less than ten and their turnover (or balance sheet total) does not exceed €2 million.

The EU Institutions defined microcredit as a loan below €25,000. In 2010, the European Commission by its Decision No. 283/2010EU launched the European Progress Microfinance Facility (EPMF) for setting up and/or developing microenterprises and small businesses by the availability of microcredit – loans below € 25,000 [7] Progress

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Microfinance does not directly finance entrepreneurs, but enables **selected microcredit providers** in the EU to increase lending, by:

- issuing guarantees, thereby sharing the providers' potential risk of loss and ú
- providing funding to increase microcredit lending.

The European Commission communication of 13 November 2007 entitled "A European initiative for the development of microcredit in support of growth and employment" identified four priority areas for action:

- i. improving the legal and institutional environment in the Member States,
- ii. changing the climate in favour of employment and entrepreneurship,
- iii. promoting best practices and
- iv. providing additional financial capital for microfinance

In 2010, the European Commission by its Decision No. 283/2010EU, as a first step in implementing this agenda, the Commission and the European Investment Bank (EIB) created Jasmine (Joint action to support microfinance institutions in Europe) in 2008 which provides mentoring for non-bank microcredit finance institutions and a financing window for a global amount of EUR 20 million offered by the EIB. The EU allocated EUR 25 million from the overall budget while the European Investment Bank additionally provided EUR 75 million, so totally EUR 100 million was allocated for this purpose [8] This Facility shall be implemented by using the following types of actions, as appropriate:

- (a) guarantees and risk-sharing instruments;
- (b) equity instruments;
- (c) debt instruments;
- (d) support measures, such as communication activities, monitoring, control, audit and evaluation which are directly necessary for the effective and efficient implementation

Generally, the V4 countries considered this financial means as out of their interest since their policy makers felt assumed to recognize the poverty and extreme unemployment in their countries. Unfortunately majority of the V4 countries did not realize the significance of this issue. Only Poland used this instrument in proper manner by nominating Inicytywa Micro (with support of EUR 3.771 million) as a non-bank institution and the FM Bank (with support of EUR 1.88 million) as financial intermediaries out of the 26 participating institutions from 15 Member States.

The Decision No. 283/2010/EU emphasised that the actions financed by the EPMF should be coherent and compatible with other Union policies, in particular the Competitiveness and Innovation Framework Programme (CIP) financial instruments, Jasmine, European Agricultural Fund for Rural Development (EAFRD), European Regional Development Fund (ERDF), Jeremie (Joint European resources for micro to medium enterprises initiative) and the European Social Fund (ESF).

The JASMINE - Joint Action to Support Microfinance Institutions in Europe -, a joint initiative of the European Commission, the European Investment Bank (EIB) and European Investment Fund (EIF). JASMINE aims to enhance the capacity of non-bank micro-credit providers and micro-finance institutions (MFIs) in a number of fields, in order

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help them become sustainable and viable operators in the micro-credit market. The European Progress Microfinance Facility also aims to increase the availability of micro-credit loans of below €25,000 by issuing guarantees to share in any potential risk of loss. The facility does not therefore directly finance entrepreneurs, but enables selected micro-credit providers in the EU to increase lending.

Originally the JASMINE TA Facility provided various financial and non-financial services to MFIs, but the concept has evolved over the years. As it stands now, the JASMINE TA Facility concentrates on delivering TA to microcredit providers, while financing is made available to microcredit-providers through the European Progress Microfinance Facility (EPMF) managed by the EIF.

The JASMINE HELPDESK allows you to lodge detailed information requests about JASMINE Technical Assistance, the Code of Good Conduct for Microfinance institutions / Microcredit providers, the CGAP's Client Protection Principles, Market Updates, European Microfinance characteristics and funding possibilities through the European Progress microfinance Facility (EPMF) [9]

5. Creation and role of the Microfinance centre – mfc

In order to support the emerging microfinance industry the Microfinance Centre (MFC) was established in 1998 in Poland. The Microfinance Centre is a regional microfinance resource centre and network. It brings together 103 organizations - including 78 microfinance institutions - in 27 countries of central Europe, Eastern Asia and the Caucasus Region. MFC serves over 800,000 low-income clients. The MFC headquarters is located in Warsaw. It has also a regional office in Bishkek (Kyrgyzstan).

The Mission of the MFC is to contribute to poverty reduction and the development of human potential by promoting a socially-oriented and sustainable microfinance sector that provides adequate financial and non-financial services to a large numbers of poor families and micro-entrepreneurs [10]

6. MICROFINANCE PROGRAM IN THE V-4 COUNTRIES

The European microcredit finance is very young. This growing sector has significant potential. The microcredit practice is varying from one country to another and depends on the microfinance intermediaries providing micro loans. The legal framework is also varying and the practice and operation procedures differs from each other.

Microcrediting has 20 year history in the V-4 countries. After the political changes in 1989, thousands of micro- and small-scale enterprises have been created in Central-Europe mainly due to the fact, that many people became redundant or simply lost their jobs due to closing up factories and privatizing state-owned enterprises. These unemployed people became forced entrepreneurs and unintentionally became a cradle and backbone of the private national economy. This situation was the same in all V-4 Countries.

In spite of the passed two decades, neither unified microcredit sector, nor general legal framework exists regarding the microcredit sector.

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In spite of the long-year experiences so far no joint project was carried out in comparison and exchange of experiences in microcrediting between the V-4 countries. The main microfinance institutions in the V-4 countries see in Table 3.

6.1. CZECH REPUBLIC

The concept of microcrediting is relatively new in the Czech Republic. Czech Republic currently does not implement direct microfinance funds but supports raising awareness about microfinance as a means of development cooperation and economic development of the Czech non-profit organizations and the public. The microcrediting was not in the mainstream of the Government restructuring program during the 1990s.

Microcrediting can be provided according to main legislative act as Banking Act No. 21/1992 Coll. and Law 47/2002 Coll.

In May 2010, the Czech Government established the Concept of the Czech Foreign Development Cooperation for the period 2010-2017, which defines microfinance as one of the possible modalities of international development co-operation. Based on this conception in 2011 the Czech Ministry for Foreign Affairs and Czech Development agency have been supported Microfinance Foundation and the initiation of the web-based development portal to promote microfinance among Czech NGOs with two grants. International Development Cooperation is a full-fledged part of the foreign policy of the Czech Republic and contributes to the achievement of its objectives [11] *Svitakova and Vyborna* present the two existing concept in microcredit development and following [12] The first concept presents microfinance as an alternative investment for foreign capital. It is represented by the join-stock company Microfinance. In its philosophy „microfinance“ is a type of investment suitable for stabilization and supplement of investment portfolios as it is an alternative asset with safe and attractive interest and at the same time with demonstrable advantage for healthy development of world economy. The Czech portal www.myELEN.com (my Electronic Loan Exchange Network) focuses on financing microfinance, cooperative and development projects in developing countries. Via myELEN.com everyone can financially support chosen entrepreneur, a whole group of them or a microfinancial institution and get back the principal together with firmly determined interest. This initiative follows the *seven principles of Social Business*, developed by the Grameen Bank and Nobel Prize winner Muhammad Yunus. The [myELEN](http://myELEN.com) objective is not only profit, i.e. achieve financial and economic sustainability, but also to overcome specific problem that threatens the entire society, part, or nature [13] The company manages web-based portal www.myelen.com.

The second microcredit concept presents a tool for development corporation. The Endowment Fund Microfinance (Nadacni Fond Microfinance - NFMF) was founded in 2007 with the aim to raise awareness of microfinance in the Czech Republic and to help the poorest people in developing regions in their quest for independence through microfinance. NFMF main activities are training in microfinance expert assistance in the integration of microfinance into project portfolios NGOs, advisory and consulting services and support

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initiatives and activities contributing to the creation, protection and development of small businesses in developing countries.

An important mission NFMF is active spreading awareness and raising awareness of microfinance as a form of development cooperation among the general public. NFMF is the executor of training seminars for professionals and the general public, such as *microfinance and development assistance in times of financial crisis*, carried out on the premises of the Czech University of Agriculture and *Microfinance: a new trend in the fight against poverty*, held at the University of Economics. In 2011, educational activities NFMF spread of projects aimed at educating secondary school students in the issues of development aid and long-term vocational education teachers.

6.2. HUNGARY

In 1991, the National Microcredit Scheme (MCS) was launched by the European Union Commission and the Hungarian Government in the framework of the small and medium-sized enterprise promotion program of PHARE - Poland-Hungary Assistance for the Reconstruction of the Economy Program. The main aim of the PHARE SME program was to promote employment and economic restructuring through the promotion of the SME sector. On the verge of the political change in 1990 both the Hungarian Government and the European Union found it outstandingly important to increase the number and the influence of small and medium-sized enterprises as well as to establish the institution of enterprise promotion [14,15]

In order to achieve the above mentioned goals, beginning from 1991, the European Union - using PHARE resources - provided significant financial and professional help for the establishment of enterprise development foundations in the counties and the capital city and their operational organizations called Local Enterprise Agencies (later to be referred to as LEAs) as well as for the training of their staff and for the launch and operation of enterprise support programs run by the foundations.

The national network of enterprise promotion foundations in the counties and the capital city had covered the whole country by 1996. (In the initial experimental program LEAs were formed in 6 counties, then as a result of successful operation, LEAs were established in all the 19 counties and the capital city.) In accordance with the EU norms, the members of the Network are: sector-neutral, operating by the principles of decentralization and regionality, built on extensive local support and co-operation.

The basic activities of the LEAs, financed by PHARE, are counselling, training, properties (business incubators, industrial parks), providing microcredit as well as generating development programs.

When the programme was launched in 1992, no general legal framework regarding the microcredit activity existed concerning the microcredit activity of the individual microfinance organizations.

In 1998 the Hungarian Parliament amended Act No. CXII of 1996 on Credit Institutions and Financial Enterprises in such a manner that it removed the crediting activity performed

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from the National Microcredit Scheme of the Hungarian Foundation for Enterprise Promotion from under the effect of the Act.

Later, the Hungarian Parliament amended Act No. CXII of 1996 on Credit Institutions and Financial Enterprises with Section 2 of Act No. XXXIX of 2003. on the basis of Section 2 (1) (h) of Act No. CXII of 1996. Following the enactment of the amendment of the Act, the crediting activity of the Hungarian Foundation for Enterprise Promotion and the microcredit activities of the foundations operating in the counties and the capital do not fall under the effect of the Act [16].

Summarising the microcredit practice exists in Hungary we can state that since 1992, meanwhile the financing mechanism suffered several changes. These changes reflect the confused and sometimes unadvised attitude of 5 outgoing Governments plus the current one. During 15 years 25,400 microentrepreneurs received microcredit in amount of HUF 42.6 billion (around to EUR 185 million). This amount is very modest as compared to the 850,000 SMEs. This amount is even worth if we consider that 80% of the Hungarian SMEs are operating without any credit, while 20% the SMEs in advanced economies [17]

In this field micro and small enterprises could play a significant role, because they produce products and provide services on spot, by doing so, they create jobs, pay taxes; those generate growth where in full or part-time. The microcrediting in accordance with the EU policy line might be a good tool to solve particularly the poverty and to bring back the entrepreneurial unemployment to the labour market. However, at time being the majority of the micro and small enterprises could not be applicable by financial institutions in spite of using every effort. Government policy-makers and the financial elite does not understand the importance of fighting against poverty and social inclusion by creating jobs and self-employment by properly use of microcredit facilities.

While microcrediting through non-commercial financial intermediaries was introduced in over 100 countries – recently also in Austria -, the Hungarian financial elite believes that microcrediting according to the pattern by Muhammad Yunus has no *raison d'être* in Hungary. It is a great mistake. If we integrate 100,000 unemployed people back to the labour market and these starting to pay social insurance, than they also contribute to the economic growth taking the social weight off the shoulder of the Government. And the main important thing is that these people could leave again in human circumstances.

6.3. POLAND

In Poland a unique micro finance schemes called Fundusz Mikro was established in 1994 with a USD 20 million loan capital investment by the Polish-American Enterprise Fund. Fundusz Mikro was registered as a limited liability company, the only non-bank institutional form in Poland that can make interest-bearing loans. A USAID grant covered initial operating costs. FM began its lending operations in February 1995 with a one-year pilot program in which it systematically tested different lending methodologies, locations, types of clients, types of employees and co-operation arrangements with partner organisations. Based on the results of the pilots, it has, since February 1996, built a nationwide network of 11 branches and 1 main office (Headquarters).

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Micro Fund has developed a unique form of financial cooperation with our customers, based on the principle of partnership and mutual trust by offering permanent access to capital in simple terms, without unnecessarily complex formalities. In his more than 18 years of activity, Micro Fund has become the leading microfinance institution in Poland and one of the largest in Central and Eastern Europe. Since its inception, the Fund has granted more than 130,000 micro loans to over PLN 1 billion, to 57,000 owners of micro and small businesses. 60% of Micro Fund clients are repeated customers [18]

In May 2012, the Fund acquired Micro technical assistance financed by the European Union under the project JASMINE and passed with a very good result, rigorous assessment carried out by a reputable company - Planet Rating. Since January 2012, the owner of Micro Fund is *Mrs. Magdalena Dulczewska*, President of Micro Fund in 2004-2009 and the first CEO of FM Bank SA in 2009-2011. The new President, together with a dynamic team, introduce innovative methods of supplying loans to entrepreneurs across the country so that the process of borrowing even more simplified and reduced to a minimum of formality. A new method has not applied to other financial institutions in Poland is to co-FM interested entrepreneurs who have limited access to finance its activities due to the stringent requirements of the banking law. Those customers can apply for funding in Micro Fund, if they meet the conditions of the institution.

Fundusz Mikro has been developed an innovative, computerized loan portfolio risk assessment system, or tool, which is used to control default risk at a time when Fundusz Mikro is undergoing rapid expansion of its lending operations. The loan portfolio risk assessment tool that Fundusz Mikro is an innovation in the micro finance field because it is more sensitive and sophisticated than traditional credit-scoring processes.

A fresh approach is also being taken in Poland [19] A new bank, FM Bank SA was founded in 2010 and is based in Warsaw. It offers banking services for micro and small Polish entrepreneurs. FM Bank's target customer group consists of microenterprises employing up to 10 people and reporting the annual turnover of under PLN 1 million, as well as small enterprises employing over 10 people and reporting the annual turnover of PLN 1-3 million. In June 2013, the Financial Supervision Commission cleared the merger FM Bank SA Polish Enterprise Bank SA. The operation has been launched in July 2013. Name the merged entity is FM PBP Bank SA.

FM Bank was established on the basis of experiences of the Fundusz Mikro. The objective of the Fund was to support the development of small enterprises.

FM Bank was established on the basis of Fundusz Mikro (Micro Fund), the leading Polish institution financing operations of microentrepreneurs. The Bank's shareholders are as follows: - FM Holdings S.à.r.l. – holding company with its registered office in Luxemburg, a part of the private equity investment fund, Abris Capital Partners, with an 89% stake in the share capital of FM Bank - International Finance Corporation (IFC) – a membership organization of the World Bank Group, aiming to support development of the private sector in Central and Eastern Europe, with a 10% stake in the share capital of FM Bank; - *Piotr Stepniak* – a private investor with a 1% stake in the share capital of FM Bank [20]

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Inicjatywa Mikro (IM) is a microfinance organization that provides small business loans to growing enterprises in Poland. Established in 1996 with the help of Opportunity International, IM now operates seven lending branches throughout central and southern Poland serving both rural and urban clients. It is one of the beneficiaries of the EU Progress Microfinance facility.

6.4. SLOVAKIA

There are neither a special law on micro-credits nor current initiative to take such kind of law in Slovakia. When comparing activities of different players in the micro finance segment, it has to be taken into account that all apply different definitions with regards to micro financing.

A loan guarantee programme is operated in Slovakia by the National Agency for Development of SMEs (NADSME) through the Slovak Guarantee and Development Bank (SGDB). The guarantee scheme for SME of the SGDB was founded in 1992 with a contribution of ECU 2 million from PHARE programme funds and co-ordinated by NADSME. An equal amount was contributed by the Slovak government.

In 1993, the guarantee programme for SME from PHARE funds was reorganised. Subsequently in November 1994 both the above mentioned programmes were merged into one guarantee scheme for SME. Under this programme, as of the end of 1996, 108 credit guarantees had been given for a total financial volume of SKK 210,933 million (US 6 m).

The Micro-loan Program was launched in 1997 by the National Agency for Development of Small and Medium Enterprises - NADSME. Following the pilote project the final decision on the provision of a micro-loan is preceded by the following:

- the entrepreneur visits a selected centre (RAIC, BIC, FF in Dunajská Sreda, Prešov, Kosice, Spišská Nová Ves, Komarno, Losonc, Martin, Prievidza, Nitra, Poprad, Povazska Bisztrica, Trebišov, Trenčín, Zvolen, and the Seed Capital Company Ltd. in Bratislava),
- the entrepreneur submits the application and the business plan,
- the business plan is analysed and assessed, location and/or premises of the planned investment are visited and inspected,
- the decision is taken by the Micro-loan Council,
- the applicant is immediately informed about the decision. Once the application is approved, a loan agreement along with other documents is signed.

Micro-credits may be used to acquire movable and immovable fixed assets, reconstruct operating space, purchase stocks, raw materials or merchandise. At present a micro-loan is min. EUR 1,400 - max EUR 42,000, period of maturity from 6 months up to 4 years, interest rate around 6.25%. The borrower should provided 100% of guarantee or register a mortgage. This practice was not user friendly and the number of entrepreneurs were not to much. Provisions through the network of regional co-operating centres (RAICs/BICs) called also as MFIs.

Since the programme does not comply with the Law No.231/1999 Z.z. State aid, as amended (Act No. 203/2004 Coll, which amends Act no. 231/1999 on state aid as

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amended and amending certain laws). In February 2010, the Slovak Government suspended the operation of the microcredit operation. Since 17 February 2010, no applications are accepted and approved. The NADSME prepared the implementation of procedure changes in compliance with an updated version of the Micro-loan Programme that was approved by the Government of the Slovak Republic on 27 January 2010 and published in the bulletin Obchodný vestník No. 32A in 17 February 2010, however, nothing happened during the last three years.

The Micro-fund of the INTEGRA Foundation – the support of new or already running business activities operated by women. Interga Foundation is a non-profit organization established in 1995, whose mission is to bring well-being to communities by creating opportunities for the vulnerable, supporting personal, economic, spiritual and social development, thus contributing to the alleviation of poverty and justice for the poor [21] The Integra Foundation is registered in the Register of Foundations at the Ministry of Interior of the Slovak Republic, registration number 203/Na-96/346. Credits up to EUR 2,800 can be provided with maturity up to 2 years, the annual interest rate is 9.5%, 3 possible means of security: group pledge, third party pledge or pledging with assets.

In summer of 2003, the Slovak Ministry of Labour and Social Policy launched a microcredit management program for local government SME consultants to alleviate the high unemployment rate in Eastern-Slovakia. This program was implemented by the Bulgarian HIRON Management Consulting Company.

The VOKA - Vidiecka organizacia pre komunitne Activity - was established in 1998 as a civic association. It started as community activities for Muranska Planina region with six villages. Following the pilot stage in 2005, a strategy for development was elaborated for the period of 2007-2015 [22]

To sum up, the Slovak economic policy is not at the favour of the microcredit business. Unfortunately, the Government suspends social support for those entities who are starting business activities.

7. CODE OF GOOD CONDUCT OF MICROCREDIT FACILITIES AND PRACTICES

On 26 September 2013 the Hungarian Microcredit Network organized a Workshop on „The experience of the Hungarian legal framework for MF provision and its lessons in an international context, and the possible effects of the implementation of the European Code of Good Conduct for the sector”. This Workshop was held in Budapest with include the representatives of Microfinance Institutions (MFIs) involved in the regulation, Hungarian members of the Parliament, representatives of the Ministry of Economic Affairs and the Central Bank, as well as EU experts involved in the elaboration and the implementation of the European Code of Good Conduct.

In 2011, the European Commission decided to elaborate a uniform code of conduct for microcredit provision in the EU [23] No organizations from the Visegrad-4 countries participate in the elaboration of this document. Reading at first glance, the procedure is very bureaucratic, similar to the majority of the EU procedure. Elaboration of an individual

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code of conduct request lot of time and it is a question mark whether the microcredit practice will be better in a given country.

The participants of the Budapest Workshop have studied the current practice of the Hungarian microcrediting and unanimously suggested to define the international professional recommendations and directives.

Signed in Budapest on 25 September 2013 by representatives of the European Microfinance network from Belgium, Germany, Hungary, Italy, Norway, Spain, United Kingdom as well as the Head of European Microfinance Network (EMN) and European Federation of Ethical and Alternative Banks (FEBEA).

8. CONCLUSION AND RECOMMENDATIONS

In the V-4 countries there is no single policy model for the promotion of entrepreneurship among youth. The existing microcredit facilities are not focused specifically on entrepreneurship and start-up development excepted some initiatives in Hungary and Poland.

The programs developed in different cultural and national settings show a wide variety of approaches. In order to foster youth entrepreneurship every country has to find an appropriate policy mix of initiatives that combat the most important barriers and constraints that exist in their cultures.

However, for more than 20 years microfinance in many countries has been portrayed as a policy tool for job creation and poverty reduction. It is a “bottom-up” local economic development process assisted by special microfinance intermediaries. There is a paradigm change in crediting activities: unemployed people and poor become creditable. Credit can create economic power that would generate into social power, lifting the poor out of poverty.

Microcredit is not a panacea for job creation and poverty alleviation. Every country has to elaborate an appropriate policy mix which fits to their culture. Promoting an entrepreneurial culture among young people as well as unemployed people is one of the strategic objectives for job creation and poverty alleviation. While doing this, entrepreneurship education has to build into national teaching curricula. Unfortunately, not all member states recognized so far the importance of this issue. There is a lack of modern teaching materials and lack of appropriate teachers as well. The lack of adequate start-up finance is one of the most significant barriers to young people seeking to create their own businesses. In this field microcredit is a very good tool. However, in addition to provision of loan, there is a need for clever advocacy and consulting support how to create a business plan and how to start-up.

So far the V-4 countries did not organize any workshop where the country practices and their main characteristics were presented and discussed. This is why the Author of this paper suggests to launch such kind of project based on the existing Visegrad Fund, organize

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workshops, share experiences in job creation programmes and elaborate a joint standpoints and recommendations for good conduct.

REFERENCES

1. European Commission, EU Youth Unemployment. Available from <http://ec.europa.eu/europe2020/pdf/themes/21_youth_unemployment.pdf>, [20 January 2014]
2. European Commission, 2014, *Employment, Social Affairs & Inclusion*, Available from <<http://ec.europa.eu/social/main.jsp?catId=751>> [20 January 2014]
3. E. Krzaklewsa: *Visegrad Youth - Comparative Review of the Situation of Youth People in the V4 Countries*, Warsaw 2013. Available from <https://www.google.hu/webhp?tab=mw&ei=4MrjUqq2IsSa8AGRqICIDg&ved=0CAUQqS4oAg&gws_rd=cr#q=poverty+in+v4+countries> [25 January 2014]
4. EURES, 2014, *The EURES Job Mobility Portal*, Available from <<https://ec.europa.eu/eures/>> [28 February 2014]
5. Council of the European Union, 2014, *Draft Council conclusions on promoting youth entrepreneurship to foster social inclusion of young people*, Brussels, 30.04.2014. No. 8378/14
6. CGAP, Microfinance Gateway, 2014, *What is microfinance?* Available from <http://www.microfinancegateway.org/p/site/m/template.rc/1.26.12263/>. [28 January 2014]
7. European Commission Employment, Social Affairs & Inclusion, Available from <http://ec.europa.eu/social/main.jsp?langId=en&catId=836>
8. Decision No283/2010/EU of the European Parliament and of the Council as of 25 March 2010 on "*Establishing a European progress Microfinance Facility for Employment and Social Inclusion*".
9. European Commission: *The JASMINE Helpdesk form* Available from <<http://ec.europa.eu/yourvoice/ipm/forms/dispatch?form=jasminhelp&lang=en>> [28 February 2014]
10. Microfinance Centre, Available from <<http://www.mfc.org.pl/en/about>> [28 February 2014]
11. Nadacni fond Microfinance, *Microfinance jako zpusob ZRP*, Available from <<http://www.nfmf.cz/microfinance-jako-zpusob-zrs>> [28 February 2014]
12. J. Svitakova - Magdalena Vyborna: Current Microfinance options in the Czech Republic and their further development by the Czech Microfinance Foundation. 2nd European Research Conference on Microfinance, Groningen, The Netherlands [28 February 2014]
13. Microfinance a.s., *Small amounts. Big difference*, Available from <<http://www.myelen.com/index.php/en/aboutus>> [28 February 2014]
14. I. Kovács, 2007, *The Microlending Sector in Hungary*, PRIMOM
15. T. Szekfü, 2007, *The Microcredit Sector in Hungary*, Székesfehérvár
16. European Microfinance Network, 2012, *A Collection of Case Studies, No.1*. Brussels
17. A. Szabó, 2008, *Experience in Microcrediting in Hungary*. ERENET PROFILE, Vol VIII, No.1., January 2008

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18. Micro Fundus, 2014, *O nas, O Funduszu*, Available from <<http://www.funduszmikro.pl/o-nas>>, [28 February 2014]
 19. European Banking Federation, 2010, *Microfinance within the EU banking Industry: Policy and Practice*, Brussels.
 20. Microfinance Information Exchange, 2012, *Strengthening the Microfinance Sector with Objective Data and Analysis*, Available from <http://www.mixmarket.org/mfi/fm-bank> [28 February 2014]
 21. INTEGRA Foundation, Bratislava, Available from <http://www.trialog.or.at/images/doku/sk_integra_foundation_2013.pdf> [28 February 2014]
 22. VOKA Rural Organization, Available from <<http://ceecn.net/citizen-participation-week-2013/cpw-archive/30-reports-2005/54-voka-rural-organization-for-community-activities-slovakia>> [2 June 2014]
 23. European Union Regional Policy Enterprise and Industry, 2013, *European Code of Good Conduct for Microcredit Provision*, Version 1.0, ISBN 978-92-79-21023-5 doi:10.2776/41012, Brussels

1. Annex 1. Major Microfinance Institutions in the V-4 Countries - 2014

Name of the MFIs	Main feature of the microfinance
CZECH REPUBLIC	
NFMF - Nadacni Fond Microfinance	This support is based on the knowledge transfer and preparation of a web-based Portal for development co-operation, which all NGOs can access to present their development projects on the web-page www.nfmf.eu
Electronic Loan Exchange Network - myelen.com	In its philosophy „microfinance“ is a type of investment suitable for stabilization and supplement of investment portfolios as it is an alternative asset with safe and attractive interest and at the same time with demonstrable advantage for healthy development of world economy.
HUNGARY	
Hungarian Foundation for Enterprise Development - MVA	The oldest microcredit Foundation that since 1990. It is a public NGO that is governed by the <u>board of trustees</u> while day-to-day operations are managed by the Foundation's staff of <u>labour structure</u> . It does no deal with microcrediting with borrower requesting microcredit directly. As a co-financier we have a history of actively participating in various joint initiatives of the EU and the Hungarian government.
Hungarian Microcredit Network ®	The Hungarian Microfinance Network is comprised of 20 Local Enterprise Agencies (LEAs) throughout Hungary. The LEAs operate in form of non-profit foundations or public foundations initiated by local Governments, banks, finance associations for the promotion directly the SMEs in the 1990s. While the MVA does not deal with the entities applying for the credit directly, this is done by the members of the <i>Hungarian Microfinance Network</i> made

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<p>MiFiN Microfinance Financial Service ZRT</p> <p>START Garancia ZRT</p>	<p>up of the enterprise agencies operating in the counties and the capital being in a contractual relationship with it. The whole credit assessment procedure takes place at these organizations.</p> <p>Established in 2007 it coordinate the outplacement of the micro loan from the JEREMI program.</p> <p>Established in May 2006 by the Hungarian Foundation for Enterprise Development (51% of shares) and MNB Invest Zrt (49% of shares) with the aim of assisting the Hungarian SMEs in acquiring equity financing for development purposes and non-refundable EU subsidies.</p>
POLAND	
<p>Polish Agency for Enterprise Development</p> <p>Fundusz Mikro</p> <p>FM PBP Bank SA</p> <p><u>Inicjatywa Mikro</u> ("IM")</p>	<p>In 2005 there were 75 loan funds with a total capital of PLN 558m (about EUR 140m) operating, which granted 16,000 loans (12,000 alone by Fundusz Mikro). The average loan given was PLN 14,400 (EUR 3,680). These loans helped to create 5,400 jobs.</p> <p>Money on hand can be used to finance the needs of business, loan amount to PLN 70,000, determined individually, based on the current and projected financial and economic condition Client be triggered once, the current account indicated by the Customer, after the signing of the loan agreement, repayment of the loan in equal monthly instalments of principal and interest. Security: a blank promissory note, guarantee spouse/third person plus at least one of the following: transfer of ownership of collateral, mortgage, assignment of life insurance package borrower, others proposed by the Client.</p> <p>The mission of the FM is to become a major specialist in the field of micro-enterprises operating in the Polish banking sector. It is envisaged to be the main partner of micro-entrepreneurs, focused on solving their financial problems in a professional manner.</p> <p>It is an NGO offering micro and working capital loans, credit lines, start-up loans,. Loans are made directly to entrepreneurs following their evaluation.</p>
SLOVAKIA	
<p>National Agency for Development of Small and Medium Enterprises - NADSME</p>	<p>The Micro-loan Programme launched in 1997, runs by a network of co-operating regional advisory and information centres (RAIC) and business innovation centres (BIC). Micro-loans provided to enterprises with up to 20 employees may be used to acquire movable and immovable fixed assets, reconstruct operating space, purchase stocks, raw materials or merchandise. At present, the minimum amount of a loan is SK 50,000 (approximately EUR 1,400 EUR), maximal up to 1.5 MSKK (approximately 42,000 EUR) with the maturity</p>

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INTEGRA Foundation	<p>period from 6 months to 4 years. At the request of the entrepreneur, a grace period of up to 6 months can be given.</p>
VOKA NGO	<p>The Micro-fund of the INTEGRA Foundation – the support of new or already running business activities operated by women. Credits up to EUR 2,800 EUR, maturity up to 2 years, the annual interest rate is 9.5%, 3 possible means of security: group pledge, third party pledge or pledging with assets.</p> <p>VOKA provides small group microloan to microentrepreneurs, unemployed, businesswomen, socially handicapped, rural entrepreneurs; EUR 550 – 14,000 EUR, maturity up to 15 months, liability required.</p>

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THE CONSTRUCTION ENTERPRISES IMAGE MANAGEMENT WITH INTERNET TECHNOLOGY APPLYING IN VISEGRAD COUNTRIES

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Abstract

Development of Internet technology and the rapidly growing number of Internet users caused the internet has been recognized as one of the most effective tools for creating the company image and thus the success of the business . In the current economy, the image has a strategic role and the brand being a part of its is the most important part of the company's intangible assets. Earlier, the brand creating process was identified mainly with elements such as a name, logo, or used symbolism. Nowadays, e - brand should be understood more broadly as creating value for customers in the form of the confidence in the deals and transactions, the proximity between the client and the company, positive emotions and experiences. Consciously image creating an image is one of the most important sources of competitive advantage that can be obtained on the market. The article confirms that enterprise image management in Internet is therefore a necessity, and a lack of concern for the web image can result in the image destruction, even the built in years and outside the network.

Keywords: *Internet, efficiency, web content, image, Visegrad, construction company*

1. INTRODUCTION

Internet is a global network that connects computers of different users, that is decentralized and resistant against outage of one or more parts. It allows data sharing, e-mail use, reading hypertext documents and other services. Internet is not controlled by some authority, it is system build in the way it operates itself [1].

Efficiency is about doing things right. Effectiveness is about doing the right things. Internet, as marketing tool, is very effective. It is very powerful tool of integrated marketing communication. It meets every 4E and 4C of integrated marketing communication [2]:

- *Enhancing* – improving and intensifying contacts, enhancing quality of services,
- *Economical* – not wasteful,
- *Efficient* – competent,

- *Effective* – producing the outcome required, measuring the effects using models AIDA, DAGMAR or ATR,
- *Coherence* – logically connected,
- *Consistency* – in harmony,
- *Continuity* – consistent over time,
- *Complementary communications* - supportive communications

These categories and its measurement and evaluation is the content of the presented in the article research findings. Biggest difference between using traditional media and internet is 6I [3]:

- Interactivity – “pull” instead of “push”,
- Intelligence – from monologue to dialogue,
- Individualisation – personalisation instead of mass communication,
- Integration – from one media / small amount of content to lot of content and integration of that content,
- Industry restructuring – strategic thinking and ability to react fast to the changes,
- Independence of location – from local to global.

Web content is the textual, visual or aural content that is encountered as part of the user experience on websites. It may include, among other things: text, images, sounds, videos and animations. It should be underlined, that web content is as important as a form (graphic's and procreator's work). A picture is worth a thousand words. Graphics on the internet can be divided into these categories: GIF, JPG and PNG. Besides these bitmap forms we have vector: SVG and SWF (flash). This audiovisual can be distributed offline (hypertext) or online (streaming, podcasting, video casting, publishing). Video files are often flv, windows media video, quick time, mpeg. Aural (hearing) content is usually these types of files: mp3, mp4, mpeg, real audio, wav. All content used at websites helps to gain clients' attention. Usually ways to gain attention of audience are: humour, real life dramatisations, slices of life, testimonials, guarantees, comparisons, problem solving, characters, talking heads, recommendations, reasons why, facts, news, emotion, cartoons, animation, charts, computer graphics, acclamation, music, symbols, animals, contests and sweepstakes, offers, exaggeration, glamour, personalities, spokespersons, free phone numbers, the product alone, the product in use, different uses of the product, effects of not using the product, before and after, the package as the star. Some of those elements are used by different kinds of enterprises including the construction enterprises which have been started using the website as the channel for the creating of the enterprise image expressed as the strategic development tool.

The enterprises image dominates in a text – heavy web. The increase of the web content meaning in visual image creating by enterprises was presented in Figure 1. As more and more information is published every day, it's only natural that consumers turn to visuals as a faster way to process and create content, find inspiration, and express taste. Consumers are also increasingly more mobile, and the form factor of touch devices lends itself to a very visual architecture. Mobile makes it easy for consumers to produce and process photos. The hardest thing to do on a tablet is type. The easiest thing to do on a tablet is to tap an image and scroll infinitely through a visual stream. Most of this visual activity is happening using mobile devices on visual networks such as Pinterest, Instagram, Tumblr and other niche networks such as Polyvore, WeHeartIt and Houzz [4].

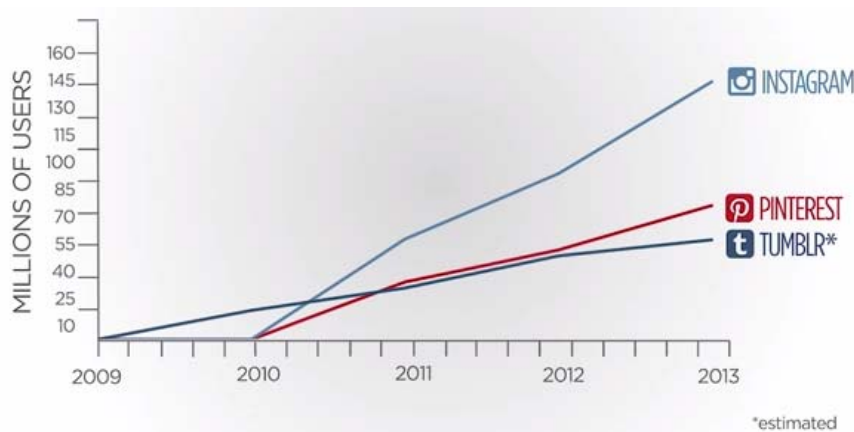


Figure 1. The rise of the enterprise visualise with Internet applying in period 2009 – 2013 [4].

Image of the enterprises is created by lots of functions of the web content. Web image meets several cases of social networks (blogs, forum) created by the companies for the product placement and clients opinions exchange channel what support the image (way of clients thinking of the enterprise activity and its products).

Photo networks also offer the opportunity to crowd-source images that reflect brand's products and turn SEO oriented web pages into a visual display of authentic, social-imagery that leads consumers to purchase and share. Crowd-sourced images are emerging as a great way for brands to tell their stories in visual and inspiring ways [4].

Construction is an essential component of every country's economy. It is responsible for building the facilities and supporting infrastructure necessary for a nation to produce wealth, to provide shelter for and deliver services to its citizens. Construction accounts for a large portion of the economic activity and the bulk of new investment in almost every country of the world. The efficiency with which construction is carried out is a major factor in the competitiveness of a country's industries and the quality of life of its people; yet it is too often dismissed as unimportant and taken for granted. Just as the information and communications revolution is dramatically affecting most industries and society as a whole, the construction industry is actively taking advantage of new technologies and incorporating them into practices and procedures. Consider the impact, satellite and Internet technologies alone have had on the industry [5].

The aim of the article is to present the Internet effects applying in the construction industry in Visegrad enterprises as the one of the most popular and important way for the construction company image management.

4. THE WEB CONTENT IN VISEGRAD CONSTRUCTION INDUSTRY – RESEARCH FINDINGS REVIEW

The group of 250 construction companies in Visegrad countries (Slovak Republic, Poland, Czech Republic and Hungary) was the research group analysed in the scientific elaboration. Web content and effectiveness of the websites functionality of analysed construction companies were tested in period of 6 months in 2011-2012.

Research objects have been selected with the hierarchical method applying that used the Web positioning. The scientific elaboration presents chosen examples of the construction companies from Visegrad countries (Slovak Republic and Czech Republic).

2.4. WEB CONTENT OF SLOVAK CONSTRUCTION COMPANIES

The one of the chosen Slovak construction companies was A.I.R. (<http://www.air-air.sk/montovane-domy/>). Company A.I.R. Ltd. was established in 2007 in a response to an increasing number of investors, who needed complex architectural and engineering services. Company decided to offer our experiences obtained from a bigger investment projects also to smaller investors requiring an added value, it means an advance project preparation and complex engineering packages. Company services are aimed mainly at small and middle investors who require an individual approach and value a complex package of services. Characteristic of the analysed company website includes: Website in Slovak and English mutation, no slogan, contacts: e-mail, telephone, contact form. Those elements are commonly used by the majority of the construction company. Table 1 presents advantages and disadvantages of the presented Web content.

Table 1: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://www.air-air.sk/montovane-domy/>]

Advantages	Disadvantages
Sophisticated, simple interface	No connection to social networks
English mutation of website	No offer of newsletter
Contact form on website	No Youtube
	No Skype connectivity
	No fax contact
	No references
	Lack of interactivity

The other interesting example of the Slovak construction company Web content is website of Apex A (<http://www.apex-arch.sk/>), where the Web characteristic presents modern design of website (modern interface of the website, search toolbar, references, competition, connection to social network, cross-promotion). The main disadvantage is no language mutations and no channels for clients communication.

Great advantage for the client is the communication channel such as Skype, where the client can ask directly the company assistant for the construction investment details. The example of the Slovak company that use Skype as the communication channel is Brilliant dom (<http://www.brilantdom.sk/>). The Web of the analysed company has: Slovak, English, German and French language version of website, Web slogan: *High quality of living* and contact channels such as: e-mail, telephone, contact form, Skype).

The similar Web practice is used by Slovak construction company Certiko (www.certiko.sk), that has modern interface with lots of useful information for the investors in the form of virtual tour through the house or Q & A forum section. Unfortunately it has no multilingual version of website.

The famous network channels using in the communication of the enterprises with their clients has rising popularity among the Web enterprise users. Facebook and Twitter are one of the most popular and useful tools for the enterprise promotion. The Slovak construction company that use Facebook and Twitter is company Createrra (<http://www.createrra.sk>). Its Web content has the following elements: slovak mutation of website, slogan: Responsible architecture, contacts: e-mail, telephone, map, Facebook and Twitter connection, references, media section, map of houses build in Slovak Republic and moder interface of website. The other communication channel is included in the website of construction company Data (<http://www.datad.sk/>), that uses ICQ and Skype connection with clients.

The innovative elements in the company image creating are presented on the website of the other Slovak construction company Ekoline (<http://www.eko-line.sk>), that has modern interface with e-shop.

The high level of Internet applications using in Internet image presentation can be meet in the case of Slovak company Euroline Slovakia (<http://www.eurolineslovakia.sk/>) that uses: Facebook, Youtube account, iPhone free application and free telephonenumber.

The model of modern Web content used by Slovak construction companies for the image management has the following elements that were identified in 45% of analyzed websites of Slovak construction companies: modern interface, newsletter, search toolbar, Facebook connection, Twitter connection, Youtube account, mentioned in media section, FAQ section and the most important element in the opinion of 95% of clients – virtual tour on the proposed houses.

2.5. WEB CONTENT OF CZECH CONSTRUCTION COMPANIES

The research group of Czech construction companies includes 50 companies. Research findings review presented in the scientific elaboration presents selected examples that are significant for the research issue related to the image management with Internet tools applying.

Review of the 50 Czech construction companies websites confirms that more than 50% websites have no multilingual version of the Web. More than 30% websites have search toolbars, references, Facebook connection and cross-promotion.

The selected websites content of Czech construction companies is following:

1. Barx constructions (<http://www.barxconstructions.cz/>):
 - Czech language version of website,
 - Slogan: no slogan,
 - Contact: e-mail, telephone, contact form, Facebook.

Table 2: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://www.barxconstructions.cz/>]

Advantages	Disadvantages
Modern interface	No other language mutations
Blog	No Youtube
References	No Skype
Cross-promotion	Not active on Facebook
Section for registrated users	
Facebook connectivity	

2. Berkucio (<http://www.berkucio.cz/>):
- Czech language version of website,
 - Slogan: no slogan,
 - Contacts: e-mail, telephone, map, Facebook.

Table 3: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://www.berkucio.cz/>]

Advantages	Disadvantages
Facebook connectivity	No other language mutations
Map of houses build in Czech republic	No Youtube
References	No Skype

3. Certiko (www.certiko.cz):
- Czech language version of website,
 - Slogan: no slogan,
 - Contacts: e-mail, telephone, contact form.

Table 4: Advantages and disadvantages of the construction company Web content [own elaboration based on www.certiko.cz]

Advantages	Disadvantages
Youtube account	No other language mutations
Modern interface with a lot of information	No Skype
References	No social networks connectivity
Cross-promotion	
Mentioned in media section	
Virtual tour through house	
Q & A forum section	

4. Deva architecture (<http://ekodomy.eu/>):
- Czech language version of website,
 - Slogan: Houses that heal,
 - Contacts: e-mail, telephon.

Table 5: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://ekodomy.eu/>]

Advantages	Disadvantages
References	No other language mutations
	No connectivity to social networks
	No Youtube
	No Skype
	Not many information on website

5. Delta Panel (www.delta-panel.cz):
- Czech language version of website,
 - Slogan: no slogan
 - Contacts: e-mail, telephone, map.

Table 6: Advantages and disadvantages of the construction company Web content [own elaboration based on www.delta-panel.cz]

Advantages	Disadvantages
FAQ section	No other language mutations
	No connectivity to social networks
	No Youtube
	No Skype
	No References

6. DOMY D.N.E.S. s.r.o. (<http://www.drevene-domy.info/>):
- Czech language version of website
 - Slogan: no slogan
 - Contacts: e-mail, telephone, fax.

Table 7: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://www.drevene-domy.info/>]

Advantages	Disadvantages
References	No other language mutations
Map of houses build in Czech republic	No connectivity to social networks
Cross-promotion	No Youtube
	No Skype

7. Dřevokomplet B+H (<http://www.drevokompletbh.cz>):
- Czech language version of website,
 - Slogan: With us you build cheaper,
 - Contacts: e-mail, telephone, map, contact form.

Table 8: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://www.drevokomplethb.cz>]

Advantages	Disadvantages
Cross-promotion	No other language mutations
References	No connectivity to social networks
	No Youtube
	No Skype

8. Dřevostavby ČB (<http://www.drevostavbycb.cz/>):
- Czech language version of website,
 - Slogan: Low energetic houses for your comfortable living,
 - Contacts: e-mail, telephone, contact form, map.

Table 9: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://www.drevostavbycb.cz/>]

Advantages	Disadvantages
References	No other language mutations
	No connectivity to social networks
	No Youtube
	No Skype
	Not many information on website

9. Eko domy Czech (www.eko-domy.com):
- Czech language version of website,
 - Slogan: Low energetic houses for price of flat,
 - Contacts: e-mail, telephone, contact form.

Table 10: Advantages and disadvantages of the construction company Web content [own elaboration based on www.eko-domy.com]

Advantages	Disadvantages
E-shop	No other language mutations
	No connectivity to social networks
	No Youtube
	No Skype
	Too much animations on website
	No references

10. Eko-dům (<http://web.eko-dum.eu/cz/index.html>):
- Czech language version of website,
 - Slogan: no slogan,
 - Contacts: e-mail, telephone.

Table 11: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://web.eko-dum.eu/cz/index.html>]

Advantages	Disadvantages
	No other language mutations
	No connectivity to social networks
	No Youtube
	No Skype
	No references

11. Elk (<http://www.elk.cz/index.php?id=home>):

- Czech language version of website,
- Slogan: Houses for living,
- Contacts: e-mail, telephone, Facebook.

Table 12: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://www.elk.cz/index.php?id=home>]

Advantages	Disadvantages
Facebook connectivity	No other language mutations
Youtube account	No Skype
Map of houses build in Slovak republic, Germany, Switzerland and Austria	
References	
Search toolbar	

12. Freedomky (<http://www.freedomky.cz/cs>):

- Czech, English and German version of website,
- Slogan: Free art of living everywhere,
- Contacts: e-mail, telephone, map, contact form, Facebook.

Table 13: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://www.freedomky.cz/cs>]

Advantages	Disadvantages
3 language mutations	No Skype
Facebook connectivity	
Vimeo account	
Youtube account	
Possibility of try to live in one of the houses	
Modern interface of website	
FAQ section	
References	

13. Hoffman (<http://www.hoffmann.cz/nizkoenergeticke-domy>):

- Czech language version of website,
- Slogan: no slogan,
- Contacts: e-mail, telephone, contact form, map.

Table 14: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://www.hoffmann.cz/nizkoenergeticke-domy>]

Advantages	Disadvantages
Search toolbar	No other language mutations
References	No connectivity to social networks
Mentioned in media section	No Youtube
FAQ section	No Skype

14. Natura Space CZ (www.naturaspace.com):

- Czech language version of website,
- Slogan: no slogan,
- Contacts: e-mail, telephone, map.

Table 15: Advantages and disadvantages of the construction company Web content [own elaboration based on www.naturaspace.com]

Advantages	Disadvantages
Modern interface of website	No other language mutations
Search toolbar	No connectivity to social networks
References	No Youtube
FAQ section	No Skype

15. RD Rýmařov (www.rdrymarov.cz):

- Czech and English language version of website,
- Slogan: ...trees gave them soul,
- Contacts: e-mail, telephone, contact form.

Table 16: Advantages and disadvantages of the construction company Web content [own elaboration based on www.rdrymarov.cz]

Advantages	Disadvantages
2 language versions of website	No connectivity to social networks
Modern interface	No Skype
Facebook “like” plugin	No references
Search toolbar	
Mailing list	
Seen in media section	
Youtube account	

16. REALSUKA Dřevostavby (<http://www.realsuka-drevostavby.cz/>):

- Czech language version of website,
- Slogan: no slogan,
- Contacts: e-mail, telephone, map, contact form.

Table 17: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://www.realsuka-drevostavby.cz/>]

Advantages	Disadvantages
References	No other language mutations
Cross-promotion	No connectivity to social networks
	No Youtube
	No Skype

17. Woodprogress (<http://www.woodprogress.cz/>):
- Czech language version of website,
 - Slogan: no slogan,
 - Contacts: e-mail, telephone, map, contact form.

Table 18: Advantages and disadvantages of the construction company Web content [own elaboration based on <http://www.woodprogress.cz/>]

Advantages	Disadvantages
References	No other language mutations
Cross-promotion	No connectivity to social networks
	No Youtube
Search toolbar	No Skype

3. CONCLUSION

As it was mentioned in the chapters above, web content used at websites helps to gain clients attention. Evaluation of the most interesting websites, that gain the client attention, was presented with using Slovak and Czech construction companies websites.

Slovak construction companies and their Web content elements identified as the most interesting image creating websites are following:

1. Createra:
 - Social network – Facebook and Twitter,
 - Testimonials – from owners of the houses,
 - Guarantees – certificated projectants,
 - Problem solving – because of 2010/31/EU law we are going to build these houses in the future,
 - Reasons why and Facts – representation data,
 - News – participating in trades and markets,
 - Personalities – introduction of the team,
 - Product in use – references.
2. Euroline Slovakia:
 - Social network – Facebook, Twitter and Youtube,
 - Testimonials – houses awarded with prices,
 - Guarantees – certificates,
 - Reasons why and Facts – calculations and representation data,
 - News – news in the building industry,
 - Computer graphics – animations,

- The package as the star – many variations of projects, adjustable.
3. ForDom:
 - Social network – Facebook, Twitter and Youtube,
 - Guarantees – certificates,
 - Reasons why and facts – calculations,
 - Contests and sweepstakes,
 - News – participating in trades and markets.
 4. Honka:
 - Social network – Facebook,
 - Guarantees – 54 years of HONKARAKKENNE OYJ tradition,
 - Problem solving – protecting the environment as a creed and symbol,
 - Symbols – worldwide known Finnish company,
 - Glamour – interior design Honka Fusion.
 5. Mini Domy:
 - Social network – Facebook and Twitter,
 - Reasons why and facts – calculations,
 - Problem solving – declaring ecological concept,
 - The package as the star – many variations of projects, adjustable.
 6. Nestbox:
 - Social network – Facebook, Twitter and Youtube,
 - Guarantees – service life,
 - Testimonials – references,
 - Symbols – comparing company's story to story of Little Prince.
 7. W&D
 - Social network – Facebook, Twitter,
 - Personalities – introduction of the team,
 - Reasons why and facts – calculations,
 - Problem solving – declaring ecological concept,
 - The package as the star – every house is unique.
 8. Zelená stavba:
 - Social networks – Facebook,
 - Problem solving – declaring ecological concept,
 - Spokespersons – managing director's intercession,
 - Reasons why and facts – calculations.

Czech construction companies and their Web content elements identified as the most interesting image creating websites are following:

1. Agentura Bydlení:
 - Social network: Facebook,
 - Reasons why and facts – references and calculations,
 - Testimonials – exact indicators and number indexes,
 - Offers – special seasonal offers.
2. ELK:
 - Social network: Facebook,
 - Offers – special discount offers,
 - Testimonials – from owners of the houses,
 - Guarantees – certificates,
 - Contests and sweepstakes.
3. Euroline:

- Social network: Facebook, Twitter and Youtube,
 - Testimonials – houses awarded with prices,
 - Guarantees – certificates,
 - Reasons why and Facts – calculations and representation data,
 - News – news in the building industry,
 - Computer graphics – animations,
 - The package as the star – many variations of projects, adjustable.
4. Freedomky:
- Social network – Facebook, Vimeo and Youtube,
 - Testimonials – houses awarded with prices,
 - Reasons why and Facts – calculations and representation data,
 - News – participating in trades and markets,
 - Before and after – process of installation (only in 5 hours),
 - Personalities – who is the “father” of the idea,
 - The package as the star – every house is unique.
5. Penatus:
- Social network – Facebook,
 - Guarantees – certificates,
 - Reasons why and Facts – calculations and representation data.
6. Strade:
- Social network: Facebook,
 - Reasons why and facts – calculations,
 - Offers – special discount offers.

REFERENCES

1. M. Blažková, *Jak využít internet v marketingu*. Praha: Grada Publishing, 2005, pp. 156.
2. D. Pickton, A. Broderick. *Integrated marketing communications*. Essex: Pearson Education Limited, 2005, pp. 28-29.
3. D. Chaffey, *E-Business and E-Commerce Management : Strategy, Implementation and Practice*. 4th edition. 2010. pp. 800.
4. S. Sharad, *Images are Eating the Web: The Rise of the Visual Enterprise*, January 27th, 2014. In Industry Insights. www.piqora.com.
5. C. Schella, *Improving the Construction Industry Image*.

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