

# OBSTACLES TO DEVELOPMENT IN THE SMALL AND MEDIUM-SIZED ENTERPRISES SECTOR IN HUNGARY

#### Zoltan Varga

#### **Abstract**

The objective of the study is to shed light upon the strategic points of managerial work, and to reveal the potentialities for sector growth through the analysis of small and medium- sized enterprises, taking the market participants' reaction into consideration. My essential reason for choosing the subject-matter is that the manager, his conception and inclination towards the new plays a more and more important role in the daily activity of domestic enterprises (e.g. information, marketing, etc.), and in gaining a competitive advantage on the global market. I have examined the management problems of small and medium- sized enterprises by means of questionnaire sampling. The present study is a summary based on answers received regarding the individual questions of the questionnaire, summarizing the first results of a continuous research. Part of the company directors running enterprises in Hungary are both owners and managers at the same time. It can be concluded from the study that a significant part of the managers have deficiencies in managerial knowledge, which influences the direction of companies, their profitable and efficient operation considerably.

# **Key words**

Communication. Information. Constraints on adaptation. Lack of capital. Liquidity.

#### Introduction

When deciding on the scope of the study I did not set limits to the companies' function, therefore I have managed to collect material in a very wide range. It is increasingly challenging for the members of Hungarian micro, small and medium-sized enterprises to retain their compatitiveness, and it is more and more difficult for them to survive. The relative technological backwardness, and the response to challanges differ company by company. (Badinszky, 2009.) The processing of individual answers given by the respondent enterprises during my research indicates the differences regarding the companies' various strategies and structural features very well. It is also a fact in Hungary that part of the companies in the SMEs sector are run by necessity entrepreneurs to provide livelihood for their families. (Hoványi, 1999.) The broadening export opportunities and the increasingly frequent cooperation with multinational companies prove that a certain level of internationalisation has started, the seeds of which are more and more prominent. (Süveges-Szabó, 2009.) The environment of the SMEs sector is significantly influenced by the inconstant professional and economical requirements and their continual changing. A considerable segment of the SMEs sector consists of small, technologically backward enterprises, which try to increase their efficiency by investments. They do not measure up to the effectiveness of medium-sized enterprises, even with this improvement in their performance, because the backwardness in technology is so significant. Coupled with it, the innovative activity of the Hungarian SMEs sector is on a low level. As the participants in the Hungarian SMEs sector try to satisfy the altering needs of multinational firms mainly, the ever-changing competition on the market poses increasing challange. Company strategies are supervised by the managers who influence and handle the competitors' challanges on a daily basis. Strategic leadership is not limited only to the management, regarding the sustenance of possible competitive advantage.(Chikán, 2003.) It provides direction during daily work. Forming the strategy is inseparable from managing enterprises. The managers of companies



must also monitor the new opportunities on the market, the emerging prospectives favourable for the enterprises. (Székely, 2005.) There is a constant constraint on adaptation that evolves via competition because of the continual willingness to meet the requirements and accepting work, which in many cases lead to the introduction of new technologies and their application. Not seeing clearly the tasks in front of them, managers often put all their eggs in one basket. In certain cases it entails the long-term progress of the enterprise, while in other cases it leads to the failure of companies. A great majority of prosperous enterprises obtain information from various channels, which is essential for their survival.(Badinszky, 2009.) Strategical leaders can get aquainted with the developmental courses and ideas of their partners through communication with the participants of the market. However, the proper interpretation of the information, its application for the company, the timely recognition of the external environmental factors and trends are not always coincidental. It makes recognizing the alteration of strategy and existing measures difficult. In many cases the strategy rather evolves due to the interaction of different forces than is worked up. (Salamonné, 2000.) Increasing technological development leads to growing competition. The strategies of competitors are essentially based on the achievements of the technological revolution these days (e.g. the Internet, electronic banking, network-economy, etc.). Therefore new strategies must be developed, which can ensure profitability and log-term existence. Innovation development harbours great potential for the SMEs sector. It is only true if they recognise its significance and utilize it. Small and medium-sized enterprises generate changes and development with their various economic activities on the market in their fields of production and service. (Parragh, 2011.) In this way they foster economic growth and by this means their own and their employees'subsistence. Enterprises satisfy demands, through which they create values not only for themselves, but for the other participants of the economy. Enterprises mean continual changes that necessitate more and more innovation. If there is no change on the market, in the market environment, even the enterprise is unable to develop. The alteration of the market also has an effect on enterprises. New resources facilitate the company's activity and by this means they create new opportunities for the participants of the market. In the globalised world, especially nowadays innovation and cooperation are amongst the most important factors, since they contribute to creating higher added value and along with it to the increase in competitiveness.(Csath, 2004.) Enterprises not participating in different forms of cooperation or unable to grow increasingly lag behind others in development, become backward in the field of production, and their efficiency decreases, which leads to the decline of the companies. Only those enterprises can survive, which are able to change and produce some growth and economic development. It follows from this that there is a tight correlation between innovation and economic development, which is well demonstrable. It induces processes that take place within the society, and increases competitiveness. The role of research in processes is unquestionable even if the activity requires a significant amount of work, experiment, new knowledge, and of course, remarkable cost and expenditure. The greatest problems of the SMEs sector are its earning capacity and productivity, which, according to statistical data, considerably lag behind the standards of surrounding countries. It does not only mean the backwardness in technology – although one of its reasons is the lack of information and the other one is the lack of founds – but also the high labour costs coupled with backwardness in production and the lack of marketing approach.(Porter.M. 2006.) The former is increased by the late recognition of information and its utilisation. The pursuit of the small and medium-sized enterprises is obvious: to succeed in remaining on the global market, or gaining ground there respectively. Competitive advantages must be obtained, and for that adequate competitiveness must be built up. It is possible only if the information for the SMEs sector arrives in time and the alteration of communication can be enforced.(Szerb-Márkus, 2008.) Several enterprises do not have strategies or there are pseudo strategies with the aim to



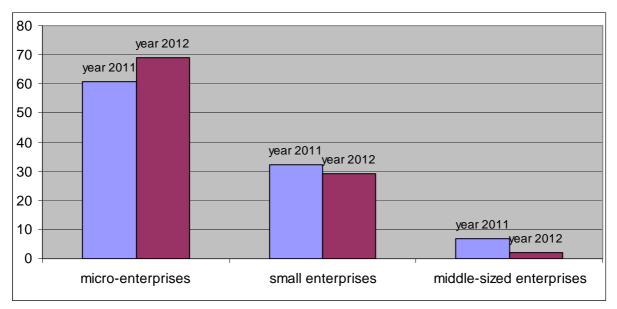
acquire easily obtainable state resources (Varga, 2006). For defining each variable I have taken into consideration Van der Veen's (2004) approach who divided his examined indices into variables that explain general and specific characteristics. General factors were: the level of generic qualifications, the level of customer and competitor-orientedness, availability of environmental resources, and competitive attitude.

#### Materials and methods

The aim of my research was to put together a list of questions to compile questionnaires suitable for the analysis of previously formulated assumptions as well as findings of researches already in progress, and to which the answers given are characteristic to the representation of the Hungarian small and medium-sized enterprises sector in the West-Hungarian region. I carried out a cross-section study that contained both quantitative and qualitative elements between 2011. and 2012. The method of data collection was based on literature research, survey and structured personal interviews. The samples come from small and medium-sized enterprises operating in the West-Hungarian region. When deciding on the scope of the study I did not set limits to the companies' function, therefore I have managed to collect material in a very wide range. The sampling was not random but snowball sampling (NARESH), therefore further managers can be involved in the scope of respondents. By means of people responding to the questionnaire, the small and medium-sized companies can be classified under certain categories of the SMEs sector. Based on the sampling I made the necessary generalizations and statistical statements regarding only groups of respondents. The questionnaire used as a method of data collection was compiled according to my information needs. The questionnaire contains both closed and open questions. Respondents answered open questions independently and anonymously. I formed separate groups of questions and studied the small and medium-sized enterprises on that basis. I have created an opportunity regarding responses to be able to form new groups in certain cases after the return of the samples. The questionnaire is well-measurable, which I intend to analyse with statistical and mathematical methods. My aim is a clear and concise wording and drawing expert conclusions from it. For the analysis I employ computerised data processing with the aid of EXCEL and SPSS 19.0 for Windows version. The methods of statistical analysis are: descriptive and mathematical statistics. Within the descriptive statistical method I calculate average and ratio distribution, whilst in the further parts of the study I count standard deviation, frequency and correlation, and in order to prove hypotheses I employ  $\chi^2$  test, t-test, analysis of variance, factor analysis, logistic and linear regression analysis as mathematical statistics methods. I consider differences significant if p < 0.05.

600 questionnaires had been sent out to the small and medium-sized enterprises sector in Western Transdanubia, from which the number of responses was 342 and the appraisable answers amounted to 274. The distribution of enterprises that provided evaluable responses are the following: trade 12%, construction industry 8%, food industry 5%, agriculture 16%, chemical industry 2%, financial sector 11%, tourism 8%, machinery 8%, information technology 9%, other services 16%.





1. Figure. Distribution of SMEs in year 2011 and 2012 based on sampling Source: Questonnaire 2011, 2012, Own edition

The distribution of the small and medium-sized enterprises sector responding in the sample in accordance with companies in 2011 was the following: 60.7% micro-enterprises, 32.4% small enterprises, 6.9% medium-sized enterprises. It is noticeable that the SMEs sector participating in the sample realigned by 2012 since the number of small enterprises decreased by 9.9% whilst the number of medium-sized enterprises by 72.5% compared to the previous year data. At the same time a realignment is also noticeable towards microenterprises. In companies belonging to the SMEs sector the shareholding of the state or local government cannot exceed 1%. During sampling I received written response mainly from companies (97%), which had been on the market for at least 5 years and the majority of the managers had been leading the enterprises for at least 2 or 3 years. Therefore, it is assumable that they are aware of the operation of the enterprises. When establishing the categories of variables I intended to put the majority of them in a single category and to avoid overlapping, since it is practical to form as clear categories as possible. During sampling I selected characteristics, which could have an essential effect on the phenomenon examined during the research. I aimed at incorporating such enterprise and manager characteristics into the survey sample, which were regarded as significant for my study. As the causes of behaviour types and characteristics of conduct are suitable for exploration, qualitative methods are also included in my research.

## Interconnection of communication, command of foreign languages, and knowledge

The participants in the economy are interconnected with each other by several means in mutual interdependence, and their decisions and behaviour are determined mainly by that. Knowledge always plays a role in the operation of the economy and the enterprises. Information generated by knowledge may become the process of production and service. The application of innovations accelerate in that way, which leads to the infiltration of knowledge. If there is more information, better decisions can be made theoretically. However, information can also pose dangers in case its source is not examined. In possession of information it is easier to change or retain partners. Information and theoretical knowledge can be transferred to practice by means of diffusion as a function of time. Knowledge enables one to adapt to challanges flexibly. Diffusion essentially means the transmission from knowledge to practice.



This gap must be bridged. It can be done by recognizing the factors, which foster or hinder its inclusion. It has a great importance, because out of a hundred innovation there are only about ten, which are utilized, and ninety are forgotten permanently according to observations (Rogers, 2005). The four components of the diffusion process are innovation, communication channels, the dimension of time, as well as the social system in which the given process takes place. The aim of communication in accordance with the sender's intenion is to make the recipient change his behaviour or his already established attitude towards a certain matter as the result of the message. Up to this point diffusion is the same as communinication. Diffusion occures if the recipient alters his behaviour towards everyone, and it is also apparent regarding his decisions. Alteration of knowledge or conviction regarding a certain thing is not necessarily entails change in behaviour. Even if someone is aware of a phenomenon, it is not sure that he will change his methods and practice. Will everything remain unchanged? No, it will not. It must be ascertained which factors affect these changes in behaviour, which ones elicit them. I have examined the distribution of the managers of enterprises included in the sample by age, education, and command of foreign languages. The results are included in the following charts.

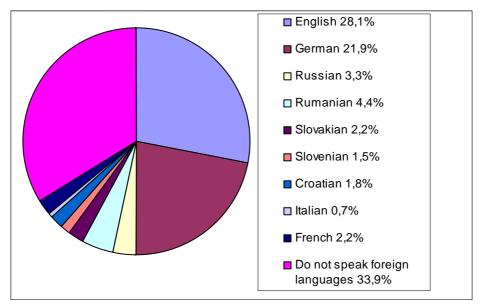
# 1. Table. The distribution of managers of the SMEs by age, gender and qualification (person)

(person)												
Designation	College, university		Higher-level courses			High School Diploma			Total:			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Below 30 years	31	21	52	2	3	5	1	0	1	34	24	58
Between 30-40 years	17	4	21	8	7	15	1	1	2	26	12	38
Between 40-50 years	66	19	85	15	5	20	2	0	2	83	24	107
Above 50 years	41	17	58	5	2	7	4	2	6	50	21	71
Total:	155	61	216	30	17	47	8	3	11	193	81	274

Source: Questionnaire 2011, 2012, Own edition

It is apparent from the chart that 78.8% of the managers in the SMEs sector have college or university degree, and 17.2% of them have some kind of higher-level qualification. According to the distribution of managers of the small and medium-sized enterprises by age, 39.1% of them is between 40-50 years old, 25.9% is above 50, and the number of those who are under 30 is relatively high (21.2%). Comparing the two years there were no changes in the composition of the number of participants.





2. Figure. Foreign language knowledge of SMEs managers based on the sample Source: own edition, based on questionnaires

The results of the questionnaire are appalling, especially if it is also taken into consideration that there are company leaders who do not speak only one, but two or three languages, which does not appear on the chart. The knowledge of foreign languages would be important primarily because of the European integration and the international tenders. As it is well-known that proportionally the foreign language knowledge of Hungarian inhabitans is the lowest in Central Europe, it would be important if company leaders could speak at least one foreign language. The low level of foreign language skills influences the economic performance of enterprises, the establishment of international connections and their development. (The survey referred only to company managers.) Speaking at least one foreign language is an essential demand regarding managers.

# 2. Table. Is it important to learn business and enterprise subjects in organised forms or participate in further education trainings according to company leaders? (%)

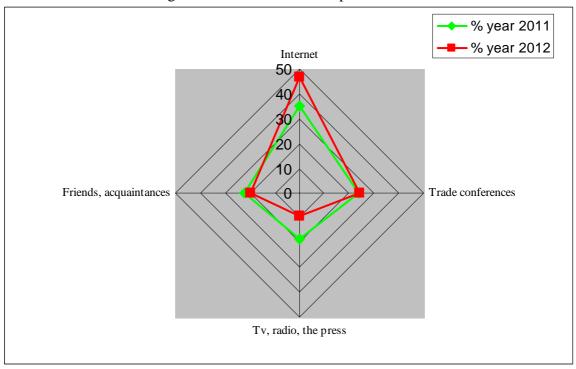
Designation	Micro-enterprises	Small enterprises	Medium-sized						
			enterprises						
Yes	20,9	23,6	41,1						
No	79,1	76,4	58,9						
Total:	100,0	100,0	100,0						

Source: Based on questionnaire, own edition

The results indicate a problem, which is typical of the managers in the sector i.e. they do not want to acquire knowledge on leadership and business by organised educational means, in the form of further education training. It has multiple reasons. Partially they do not wish to spend time on organised education as by doing so they would absent themselves from the daily direct command, and also these forms of training provide them only with general information, which is difficult to apply or utilise in everyday actions. It is apparent that they want to obtain the information necessary for the operation from other sources, which facilitate practice or practical realization.



On the basis of the questionnaire, company leaders are decisively in possession of up-to-date information. It means that managers gather information about domestic and international economic affairs and changes in the market via multiple channels.



**3. Figure. Information obtaining channels of company leaders** Source: Questionnaire, own edition

Company leaders must possess up-to-date information in order to be able to intervene in the operation and management of the enterpise in time. With the spread of the Internet managers can obtain information quickly. According to the survey, however, the selfassertion of managers carries deficiency in self-recognition. There is a contradiction between participation in trainings and the means of obtaining information. This is significant, because it follows that how much attention managers pay to gathering information personally and to the acquisition of knowledge. Here it is evident that nearly half of the managers do not participate in any training or further education, they do not regard it important. However, company leaders are aware that they need information in the competition, because they can obtain a competitive edge only on that basis. 33% of the responding managers have not been participating in any training or further education in the last three years. It was ascertainable that only managers under 40 monitor news portals daily and learn about changes in technology and the market. Few managers speak foreign languages. It is noticeable that up to the age of 40 mainly the Internet provides a considerable part of the information. The agegroup above 40 primarily aquire information by means of trade conferences or via friends, acquaintances and personal attachments. The orientation towards personal channels is better observable in this age group who give preference to trustworthy companionship. Through friends a significant part of the respondents receive information, which might help company development and further networking. It must also be remarked here that these connections can ensure the chances of participating in tenders and meeting the requirements of them. At the same time the lack of information is also apparent in the fact that company managers are unable to utilise positive changes. It can be explained by confusions in the leading and directing system; there is no consonance and as its consequence the information is lost in many cases. It also points to the problem that the managers receive the appropriate

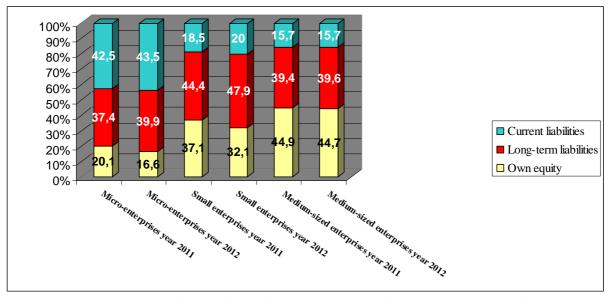


information but it is not processed, forwarded or recorded in time. Therefore, the corrections needed are not defined accurately and actions are not taken. European Union information sources are scarcely utilised by the managers. Several scientific studies and dissertations have dealt with the fact that although governmental pieces of information are useful, only a few enterprises can make use of them. It shows a considerable contradiction, which can be the subject-matter of a separate study, since government information is necessary, but entrepreneurs do not demand related services (Badinsky, 2009). A significant part of the managers responding to the questionnaire obtained business leadership skills from the practice of their own enterprises. It is coupled with the routine that the sources of information come from the families and the circle of friends. It occurs in many cases that a leader of a company learns from the 'activity' of another manager. Practice of planning is peripheral, they are not convinced of its benefits. In many instances the realization of their own ideas comes before searching for a market. Now they rush themselves into impracticable undertakings, now they do not make progress even with a lot of work. Understanding the trade is not always enough. Marketing maneuvers must also be known. They should be integrated into the daily course of business. Marketing is missing from some of the entrepreneurs' awareness to such extent that it endangers future adaptability. The staff members usually participate in trainings only in the fields of trade, taxation, accountancy, and perhaps marketing. Company leaders do not attend courses themselves, they send their staff to trainings, and as its consequence they receive only filtered information, which is then uncertain to contribute to the strategy of the enterprise in the right way. It is also coupled with the late recognition of the benefits originating from changes in technics, which may result in further backwardness of the enterprise. Relatively few enterprises have a corporate governance system that could help company development with its information and analysis. On the basis of feedback, only few managers read prognoses by economics researchers, which is indispensable for developing a broader view on entrepreneurial level, too.

### **Capital Structure**

The questionnaire based survey illustrates the capital structure problems of Hungarian small and medium-sized enterprises well. It is an essential problem that a remarkable segment of the sector possesses low level of owner's equity. It bears a part in this that most of the small and medium-sized enterprises have domestic ownership, and foreign capital has found its way to the sector only to a small degree. Another problem is that there are a lot of necessity enterpreneurs in the small and medium-sized enterprises sector. Most of the small and medium-sized enterprises have not been able to take part in the process of international division of labour so far because of the strict professional, economical, and environmental protection standards, therefore their production goes for the domestic market.





**4. Figure. Distribution of capital structure in the sample examined**Source: Questionnaire, own edition

Micro and small enterprises are unable to produce business plans, therefore exclude themselves from the opportunity of obtaining funds. With decreasing demand on the domestic market marketing difficulties emerge. It can be explained by the fact that there has been no expansion in consumption for years, on the contrary, in recent years a decrease in it can be noticed, especially in the case of micro-enterprises.

#### Liquidity

A considerable defencelessness is characteristic of the small enterprise sector. In many instances they satisfy only their partners' demands. According to the questionnaire sampling 20% of the sector is supplier for large firms, whilst 67% of the respondents exploit gaps in the market, and 3% run franchises. Based on other classification it can be said that 14% of the enterprises are suppliers for a single firm, 42% of them are suppliers for multiple companies, whilst 44% of them exploit gaps in the market. Generally it is true, regarding the members of the SMEs sector that their competitive disadvantage is growing gradually in relation to large companies; weak payment discipline and chains of debts make concentration on work difficult. Slow information flow also adds to it. Further liquidity problem is caused by the more and more frequently occuring chain of debts, which is reaching significant proportions in certain economic sectors. Financial costs are growing and several enterprises in more and more sectors reach near closing down status. It increases the short-term resource requirements of the sector. Losing liquidity, redundancy, and changing strategies have become an everyday phenomenon (Parragh, 2011).

3. Table. The distribution of average course of debits of the examined enterprises by clients (data: M HUF)

Denomination	Subcor	ntractor		Main	contrac	tor	Local government/State			
	90	180	360	90	180	360	90	180	360	
	days	days	days	days	days	days	days	days	days	
Micro-enterprises	0	10	95	0	15	80	0	10	170	
Small enterprises	4	69	71	8	52	70	5	21	57	
Medium-sized enterprises	26	12	3	98	54	23	45	17	6	



Source: Questionnaire, own edition

It can also be seen from the chart that micro and small enterprises are hit the hardest by the numerous unpaid bills. It is also relevant that accounts receivable overdue by more than 360 days add up to the most significant magnitude. It is important that apart from main contractors the number of unpaid bills of local governments and the state is considerable. The number of accounts receivable is inversely proportional to the size of the enterprise.

#### Services used

In making use of services by micro and small enterprises or by medium-size enterprises an inverse proportion can be observed.

4. Table. The prevalence of the services bought in the studied SMEs sector (in %)

Denomination	Micro-enterprises	Small	Medium-sized		
(proportion of	0-10 people	enterprises	enterprises		
mentioning%)		11-50 people	above 50 people		
Taxation and accounting	58,6	40,1	10,7		
Legal services	13,6	14,7	23,2		
Advertising, marketing	10,2	15,7	12,1		
Market research, market	1,6	3,7	10,7		
surveys					
Computing	11,4	16,0	23,0		
Business plan preparation	3,0	6,1	9,6		
Tender preparation	1,6	3,7	10,7		

Source: Questionnaire, own edition

Micro and small enterprises show a need mainly for taxation and accounting services besides using legal, computing, advertising, and marketing sevices, whilst medium-sized enterprises decisively use legal and computing services. Besides that the expenditure on advertising, marketing, market research, and market exploration is also considerable, which obviously offer a possibility for progress. It is also remarkable that medium-sized enterprises spend a significant amount of money on tender preparation services, whilst micro-enterprises either do not have or have only very limited resources for that purpose.

#### **Conclusions**

According to the data of the questionnaires, a great proportion of company directors in the SMEs sector personally formulate the regulations of their operation on a daily basis because of the challanges posed by the market, therefore their companies are shaping up in a way that reflects the personality of the manager himself. It is ascertainable that the attention of the managers is concentrated on managing and carrying out daily operational activities rather than forming strategies. It is due to the stagnation of the Hungarian economy, its downturn, the payment moral that has evolved in the country, all of which highlight the problems of economic viability. Accounts receivable from customers are generally much higher than accounts payable to suppliers.

Part of the micro-enterprises do not actually do business like real companies, they only create workplaces for themselves. The finding mentioned earlier is in connection with this, i.e. first comes the realisation of own ideas and searching for a market only follows it. Enterprises do not make or get made reliable market surveys, the cause of which is not only the economic recession and the crisis of Europe, but it also indicates that companies lack



financial resources. It is also attributable to the lack of market surveys that in many cases enterprises overestimate the expected sales results, therefore they make wrong decisions; now they rush themselves into impracticable undertakings, now they do not make progress even with a lot of work.

Leaders of the studied sector have not prepared for the elimination and prevention of negative effects, which is caused by satisfying the needs of one or two firms only, and as a result there is a great vulnerability, whilst the level of competiteveness is low.

The struggle for survival of the companies has become an everyday phenomenon. Partial loss of the market significantly influences the workforce needs of each enterprise and this change brings along the possibility of altering strategies. The research proves that a considerable proportion of micro and small enterprises do not have written strategies.

Part of the managers at the same time can see a narrow widening market and within that an extending market proportion, which they have not been able to cover with their products, yet. They are continually searching for competitive edges, which could be obtained in order to sustain development. The effects of government programmes launched by the European Union are not perceptible.

Lack of strategy, short-term approach, and the quality of contracting behaviour are the obstacles, which weaken or hinder the cooperation of the enterprises. There are legal deficiencies in the regulation of the economy. Managers, regardless of corporate categories, expressed appreciably different opinions. The differences are the following: lack of established business culture, lack of interest of companies, lack of qualification of managements, and unidentified necessities.

#### **Bibliography**

Badinszky, P. Hazai kis- és középvállalkozások elektronikus üzletvitelét segítő és akadályozó tényezők E-Business adaptáció, PhD értekezés, Gödöllő, 2009.

Chikán, A. Vállalatgazdaságtan, 3. kiadás, Aula Kiadó, 2003. ISBN 963 9478 74 1.

Csath. M. Stratégiai tervezés és vezetés a 21. században, Nemzeti Tankönyvkiadó, Budapest, 2004. ISBN: 9789631952513.

Hoványi, G. A vállalati versenyképesség makrogazdasági és globális háttere. Közgazdasági Szemle, 1999. november. p. 113-129. ISSN 0023-4346.

Parragh, B. A hazai kis- és középvállalkozások helyzete, túlélési esélyei, Nyugat-magyarországi Egyetem, PhD értekezés, Sopron, 2011.

Porter, M. Versenystratégia. Iparágak és versenytársak elemzési módszerei. Akadémiai Kiadó, Budapest, 2006. 55-63. o., 277-295. o. ISBN 963 05 8349 6.

Rogers, E.M. Diffusion of innovations, New York, [N.Y., etc.], The Free Press.(Magyar fordítás), 2005.

Salamonné H.A. Jövőkép – és stratégiaalkotás. Kossuth Kiadó, Budapest, 2000. 208 p. ISBN 963 094 194 5

Süveges-Szabó. KKV-k hálózatosodása, ITD Hungary, Üzletfejlesztési Igazgatóság. 2009.

Székely, Cs. Változásmenedzsment. NYME Sopron (2005).



Szerb L., Márkus G. Nemzetköziesedési tendenciák a kis- és közepes mérető vállalatok körében Magyarországon a 200-es évek közepén, Vállalkozás és innováció,2. évfolyam, 2. szám, 2008. II. negyedév 36-58 (23 -27 old.)

Van der Veen, M. Explaining e-business adoption, PhD dissertation, University Twente, 2004.

Varga, Gy. Több, mint innováció: modernizáció. Élet és Irodalom. 2006. (48:24)

**Authors' contact details -** Zoltán Varga dr., University of Pécs, Faculty of Health Sciences, Zalaegerszeg Campus, lecturer, H-8900. Zalaegerszeg, Landorhegyi u. 33. e-mail: minizoltan@zalaszam.hu

Phd training: West-Hungarian University, István Széchenyi Management and Organisation Sciences Doctoral School, Sopron