Entrepreneurship in SMEs

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ABSTRACT

Small and medium enterprises (SMEs) make about 98% of total population of businesses and create about 50% of GDP. Every day in Poland about 1500 new enterprises is registered and from 1400 to 1600 of them liquidate their activities. Such dynamics in SMEs existence is caused by many factors but one of them is the changeable business environment including both the macroenvironment and the industry environment. The SMEs significance to the country's economy brings to mind a question how their cycle of life can be extended. The problem can be categorized as a problem of the SMEs ability to perceive and use of the market opportunities. A systematic approach to the problem consists of three stages: segmentation of the environment, analysis of events and changes in the segments and associating of the events into favourite situations that is into opportunities. Each of the stage can be supported by different methods. Example giving in the first stage the PEST analysis as well as structural analysis of sector can be used. In the second stage the following methods of strategic analysis can be used: trends extrapolation, strategic groups mapping, sectors attractiveness analysis, structural analysis of the sector, etc. In the last stage mostly the cross-impact method can be used. The use of the above methods of strategic analysis can be easily evidenced mostly in big and some medium enterprises. That is because these enterprises posses in their organizational structures functional units that are focused on particular segments of the environment. Example giving the R&D department analysis the changes in the technological segment, the financial department analysis what happens in the economic segment and the procurement department analysis the processes in the segment of suppliers. However small enterprises and a number of the medium once have very simple structure and there do not exist the organizational unit that are specialized in dealing with particular macroenvironment and the industry environment segments. Does it mean that SMEs do not observe and not analyse the changes in the business environment and do not search it to identify the opportunities? The practice and the pilot research that has been done by the author leads to negative answer for the question. The conjecture is that SMEs search for the opportunities using the entrepreneurship abilities of the management as well as the whole organization. To verify the conjecture an investigation has been undertaken in Polish SMEs. The investigation concerns the entrepreneurship features of the owners/managers of the businesses and the entrepreneurship marketing as well as the methods of strategic analysis. In this paper the results of the research are presented.

Keywords: Entrepreneurship, Identification of Opportunity, SMEs

INTRODUCTION

According to Eurostat (2011, p. 11-12) in 2008 there were 20 million of enterprises in EU (27)including 20,5 million SMEs. The firms employ 135,8 million people including 90,6 million employed by SMEs and deliver 6,176 billion EUR value added including 3,617 billion EUR generated by SMEs (table 1). At the same time there were 1556 thousand enterprises in Poland including 95,5 % Micro, 3,3% small, 1,0% Medium-size and 0,2% large firms.

Table.1. Enterprise size class analysis of key indicators, nonfinancial business economy, EU-27, 2008

	Number of enterprises	Persons employed	Value added	Apparent labour productivity
	million		EUR 1000 million	EUR 1000/person
All entreprises	21	135,8	6176	45,5
All SMEs	20,9	90,6	3 617	39,9
Micro	19,3	39,3	1348	34,3
Small	1,4	27,9	1147	41,2
Medium-sized	0,2	23,4	1122	47,9
Large	0	45,2	2559	56,6

	Number of enterprises	Persons employed	Value added	Apparent labour productivity
	Share in total (%)		Relative to total (%)	
All entreprises	100	100	100	100
All SMEs	99,8	66,7	58,6	87,8
Micro	92	29	21,8	75,3
Small	6,7	20,5	18,6	90,5
Medium-sized	1,1	17,2	18,2	105,3
Large	0,2	33,3	41,4	124,5

Source: Eurostat 2011, p.11

The SMEs, when being entrepreneurial, have strong influence on an economy's strength and stability. They affect the economy by innovations and job creation (Barringer, Ireland, 2012, p.47; Bjerke, 2007, p16). To these two effects Safin (2008, p.50-61) adds influence on: ecology, macro economy, stability, regional deconcentration, mobilization of capital and economy transformation. The importance of SMEs to the economy makes interest about their survival rate. The survival rate in chosen economics is presented in figure 1.

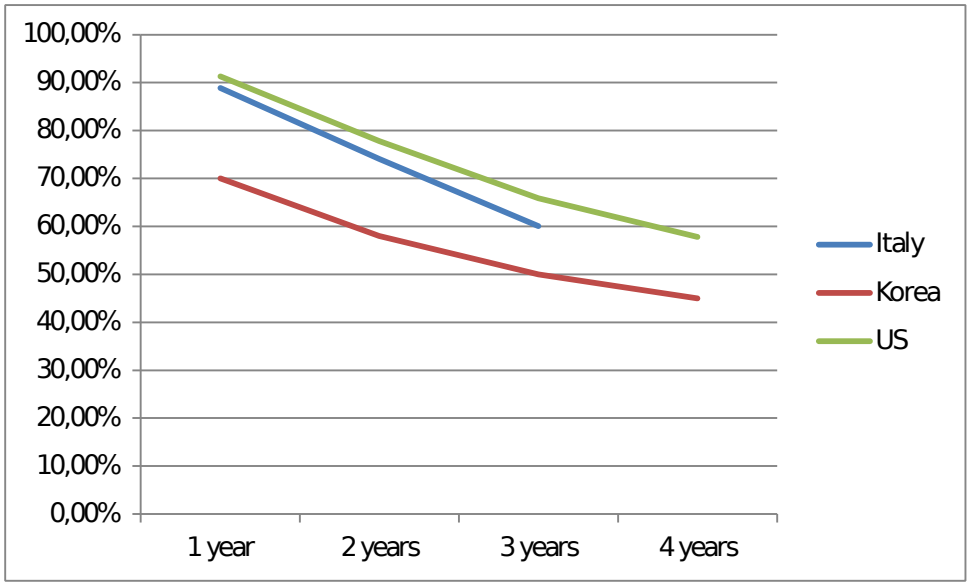

Figure.1. Enterprise survival rate (2006 cohort)

Source: OECD, 2013, p.52-53

According to PARP (2013, p.22) survival rate in 2011 in Polish SMEs was: 76,6% (1 year), 54% (2 years), 32% (5 years). It seems that such rapid decrease of the rate can be slowed down when the ability of SMEs to identify the opportunities is improved.

OPPORTUNITY AND ENTREPRENUARSHIP

As reported by Davidson, there are, in principle three different ways to define entrepreneurs and entrepreneurship:

1. Using those skills characterizing entrepreneurs.
2. Using those processes and events which are part of entrepreneurship.
3. Using those results that entrepreneurship leads to (Bjerke, 2007, p.16).

The first way defining entrepreneurship is presented by authors who stress on features of entrepreneurship and traits. Example giving Bridge, O'Neill and Cromie identified the following features (Bjerke, 2007, p.82-83): achievement motivation, risk-taking propensity, locus of control, need for autonomy, determination, initiative, creativity, self-confidence and trust. Timmons, Delmer, Zimmer and Scarorugh and Allen list traits (Bjerke, 2007, p.83-84): responsibility, opportunity obsession, desire for immediate feedback, future orientation, tolerance and ambiguity, over-optimism, high commitment and leadership.

Barringer and Ireland (Barringer, Ireland, 2012, p.35-42) mentioned the following characteristics of successful entrepreneurs: passion for the business, product/customer focus and execution intelligence. The authors list also such traits as: a moderate risk taker, a networker, achievement motivated, alert to opportunities, creative, decisive, energetic, a strong work ethic, lengthy attention span, optimistic disposition, persuasive, promoter, resource assembler/leverage, self-confident, self-starter, tenacious, tolerant and ambiguity and visionary.

Dominiak et al (2005, p.22-25) has divided the operational competencies of the owner/manager of small or medium enterprise into entrepreneurial, managerial and technical competencies. To the first category the authors count: perseverance, tendency to risk taking, creativity and flexibility.

Some kind of summarization of the above traits are the following statements: "Entrepreneurs see opportunity where other people only see problems if anything at all" (Bjerke, 2007, p.83), "…the identification and exploitation of (technological) opportunities are what distinguish entrepreneurs, i.e. innovation"(Braunerhjelm, 2011, p.165), "The entrepreneur is innovative, i.e. perceives and creates new opportunities..".

The second way of defining the entrepreneurship can be illustrated by sentences like:

- Entrepreneurship is "the cognitive process by which… entrepreneurial behavior" (: Audretsch, Heblich, 2011, p.245);
- Entrepreneurship is "some kind of creative process, as grabbing an opportunity or exploiting a possibility" (Bjerke, 2007, s.98).

Third way of defining entrepreneurship is focused on the effects it leads to. For example Kirzner says that entrepreneurship leads to finding new market niches for existing or adopted products (Stam, Nooteboom, 2011, p.429) and Barringer and Ireland (2012,p.33-35) among the reasons of becoming entrepreneurs list "pursue financial rewards" although they add that typically it is secondary to reasons like to be their own boss" and "to pursue their own ideas".

Most definitions are a mix of these three way. An example can be definition by Coulter. An entrepreneurship is the process whereby an individual or a group of individuals use organized efforts and means to pursue opportunities to create value and grow by fulfilling wants and needs through innovation and uniqueness, no matter what resources are currently controlled (Bjerke, 2007, p.16).

No matter in what way an entrepreneurship is defined, usually the entrepreneurship is connected with opportunities. In fact the opportunity is defining factor of entrepreneurship. There are a lot of examples of this. Some of them are:

- Entrepreneurship is about opportunity – recognizing it, seizing it and exploiting it – but it is also about failing sometimes (Bjerke, 2007, p.184),
- Entrepreneurship is a response to opportunities created by investment in new knowledge (Acs, 2011, p.238).
- Opportunity entrepreneurship is a kind of entrepreneurship in which a perceived opportunity is exploited (Lowe, Marriott, 2007, p.243).

Although opportunity is a defining factor of entrepreneurs it is rater rarely defined itself by the authors writing on entrepreneurship. Some exception is the definition by Barringer and Izreland (2012, p.69). According to them an opportunity is a favorable set of circumstances that creates a need for a new product, service, or business. In this paper an opportunity is as a situation appearing in the environment of the enterprise that favors the achievement of the enterprise's intented goal or desirable effects (Trzcielinski, Trzcielinska, 2011, p.12). Comparing with the definition by Barringer and Ireland it extends the domain of opportunities from the needs of the external stakeholders to include the needs of the enterprise, e.g. access to cheaper suppliers, more competent labor forces or more attractive loans. Because the opportunities favor to achieve the business goals it is important to enhance the enterprise's ability to perceive the opportunities. As Barringer (2012, p.81) states an opportunity cannot be pursued until it's recognized.

The literature provides some recommendation how to increase the enterprise's opportunities recognition. Baron and Shane recommend following (Bjerk, 2007, p.92-95): build a broad and rich knowledge base, organize your knowledge, increase your access to information, create connections between the knowledge you have, build your practical intelligence, mix your eagerness for hits with wariness of false alarm. Barringer and Ireland (2012, p.81-83) give the personal characteristic of the entrepreneur. It includes: prior experience, cognitive factors, social networks and creativity. They also distinguish three approaches that can be used to identify an opportunity (Barringer, Ireland, 2012, p.70-80):

- Observing trends in cross section of PEST analysis,
- Solving a problem after it is recognized by observation the challenges that people encounter in their daily lives and through more simple means, such as intuition, or chance,
- Finding gaps in the marketplace.

In this paper some preliminary results of investigation how Polish SMEs search for opportunity is presented.

THE RESEARCH

The subject of the research

The research has been focus on finding if Polish SMEs identify opportunity using:

1. Methods of strategic analysis. These methods can be divided into two groups: used to analyze the macroenvironment and the industry environment. In the first group the following methods were investigated: SWOT, trends extrapolation, Delphi method, scenarios methods. In the second group the interest was about: strategic group analysis, Porter's Five Forces, sector attractiveness and white intelligence of economy.
2. Marketing methods like: satisfaction of customer, product preferences, market share, brand trust, effectiveness of price policy and effectiveness of promotion.
3. Try and fail approach to find the gaps in the market place.

The subject of the research is presented at Figure 2.

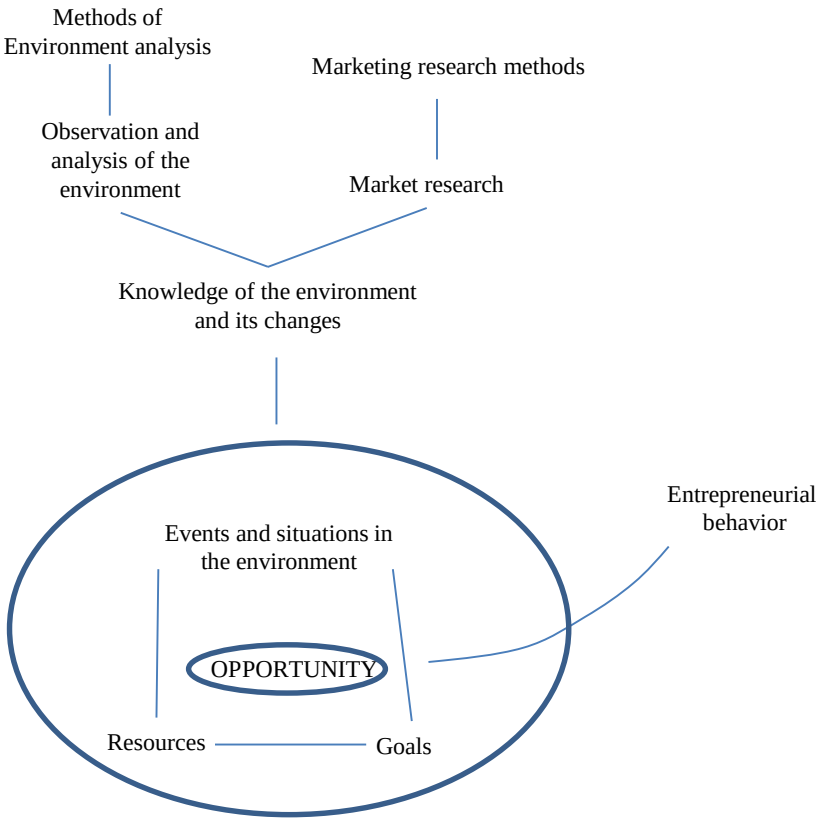

Figure.2. The method of collecting date

Source: Trzcielińska J. 2013, p. 189 – 201

The method of collecting data

The data were collected by direct interview of owners or managing directors of enterprises located in different regions of Poland. The firms belong to manufacturing and service industries. The data concerning the first subject of investigation where collected from 218 firms including 51 small, 89 medium and 78 big enterprises. The data concerning the second and third research subject were obtained from 68 firms including 6 small, 29 medium and 33 big enterprises. The data were collected in the period from 2011 to 2013.

The results

Recognition of opportunities should be supported by use of methods that are used to analyze the business environment. Usually the authors point out on methods like PEST analysis and trends identifications (Barringer, 2012, p.70,80; Lambing, 2003,p.112). In this paper more systematic approach to analysis of the enterprise's environment has been implemented. The author's interest was about the object of the recognition for opportunities as well as the methods which are dedicated to analyze both the macroenveronment and the industry environment. Also the interest included if the enterprises use the methods systematically themselves or use external consultants to analyze the environment.

45,1% small, 65% of medium and 82,1% of big enterprises analyze the business environment either systematically or occasionally. Table 2 presents the percentage of firms that observe the changes at the markets of customers and suppliers as well as financial and labor markets.

Table.2. Observation of business environment – percentage of firms

Market	Occasional observation			Systematic observation		
	S	M	B	S	M	B
Customers	35,3	39,3	50	13,7	28,1	37,2
Suppliers	21,6	34,8	42,3	5,9	24,7	28,2
Financial	21,6	24,7	33,3	9,8	25,8	33,3
Labor	21,6	24,5	33,3	7,8	16,9	23,1
Sample	51	89	78			

Source: own research

The most popular method used to analyze the environment is SWOT (56,0%), following by scenarios methods (52,3%) and Porter's % forces (50,9%). The frequency of use of these and other methods is presented in Table 3.

Table.3. The use of the methods of analysis business environment - percentage of firms

Method	Occasional and systematic use			Systematic use by organizational units of the enterprises		
	S	M	B	S	M	B
SWOT	29,4	55,1	74,4	21,6	40,4	53,8
Extrapolation of trends	23,5	42,7	67,9	2	10,1	12,8
Delphi	15,7	38,2	48,7	3,9	7,9	15,4
Scenarios	31,4	49,4	69,2	9,8	22,5	42,3
Porter's 5 forces	31,4	51,7	62,8	9,8	22,5	33,3
Attractiveness of sector	35,3	40,4	56,4	7,8	14,6	37,2
White intelligence of economy	29,4	41,6	51,3	11,8	29,2	23,1
Sample	51	89	78			

Source: own research

To recognize who is the customer and what are his needs and next to adjust the product to the customer's expectations the marketing methods are used. According to the author findings 76,3% of firms are involved in marketing research including 37,3% of small and medium enterprises. The percentage of firms which lead the marketing research is presented in Table 4.

Table.4. Percentage of firms which systematically leads the marketing research

Marketing methods used to research:	S + M	B
Customer's statisfaction	64,5	71,4
Customer's statisfaction	48,4	39,3
Market share	38,7	60,7
Trust to the branch	22,6	42,9
Effectiveness of the price policy	45,2	25
Effectiveness of the promotion	29	25
Sample	31	28

Source: own research

The biggest portion of enterprises often promote the products by recommendation of their customers (40,7%) and very often by their websites (35,6%). 40,7% firms never promotes their product with use of electronic mail, 66,1% never use the internal blogs and 62,7% never use the social media like Twitter or Facebook. Table 5 presents what kind of promotion is often and very often used by the enterprises.

Table.5. Ways of product promotion used frequently by firms

Way of promotion	Used often		Used very often	
	S+M	B	S+M	B
Recomendation by customers	38,7	42,9	35,5	25
Distribution of information about product in public places	29	32,1	3,2	21,4
Product distribution in public places	6,5	3,6	3,2	0
Telemarketing	12,9	0	0	3,6
Videoclip	3,2	0	0	0
Video game	0	7,1	0	0
E-mail	22,6	10,7	12,9	7,1
We site	29	35,7	41,5	28,6
Internet blog	16,1	3,6	3,2	3,6
Twitter/Facebook	9,7	17,9	9,7	3,6
Sample	31	28		

Source: own research

According to the firm's promotion 84,7% of them are strongly customer oriented. This concerns 90,3% of small and medium and 78,6% of big enterprises. From the other side in 50,8% of firms only the inquisitive customer can learn the advantages of the product (Table 6.).

Table.6. Possibility of becoming convinced about the product advantage

Way of becoming convinced about the product advantage	All firms	S+M	B
Inquisitiveness of the customer	50,8	51,6	50
Persuaded by firm's personal	59,3	74,2	42,9
Personal experience	62,7	61,3	64,3
Firm's involvement	69,5	74,2	64,3
Sample	59	31	28

Source: own research

In case of 20,3% firms the customer can learn himself the functionality and the product operating although it rather difficult. However 54,2% of firms help their customers (Table 7.).

Table.7. Possibility of learning about functionality and the product operating

Learning the functionality and the product operating	All firms	S+M	B
Is easy and does not require customer engagement	32,2	32,3	32,1
Is easy but require some engagement of the customer	39	48,4	28,6
Is difficult but the customer can do it himself	20,3	19,4	21,4
Is difficult and require an special training	10,2	12,9	7,1
Always is supported by the firm	5,2	58,1	50

Source: own research

Entrepreneurship is understood as an art of turning an idea into a business. Entrepreneur firms are proactive, innovative and risk taking. Typically it tries something new and therefore the failure rate associated with their efforts is naturally high (Barringer, Ireland, 2010, p.32,37). These symptoms of entrepreneurship consist on "try and fail" approach that the firms apply. The author has found that 20,3% enterprises often launch new product to the market and 8,5% of them do this very often. From the other side 20,3% of enterprises introduce the new product seldom and 10,2% very seldom (Table 8.).

Table.8. Percentage of firms that introduce of new product to the market

How often the firm launches the new product	All firms	S+M	B
Very seldom	10,2	16,1	3,6
Seldom	20,3	22,6	17,9
Pretty often	25,4	19,4	32,1
Often	20,3	16,1	25
Very often	8	9,7	7,1
Sample	59	31	28

Source: own research

32,2% of firms implement seldom and 13,6% very seldom new technology that is much more than these that do this often or very often (Table 9).

Table.9. Percentage of firms that implement of new technology

How often the firm implements the new technology	All firms	S+M	B
Very seldom	13,6	16,1	10,7
Seldom	32,2	41,9	21,4
Pretty often	30,5	19,4	42,9
Often	10,2	9,7	10,7
Very often	6,8	0	14,3
Sample	59	31	28

Source: own research

32,2% of firms enter the new market seldom and 13.6% very seldom compering with those that do this often (18,6%) or very often (6,8%) (Table 10.).

Table.10. Percentage of firms that enter new markets

How often the firm enters a new market	All firms	S+M	B
Very seldom	13,6	22,6	3,6
Seldom	32,2	25,8	39,3
Pretty often	22	25,8	17,9
Often	18,6	9,7	28,6
Very often	6,8	9,7	3,6
Sample	59	31	28

Source: own research

Discussion of the results

The above data (Table 2 to 10) let us to conclude that small and medium enterprises are moderated in systematic observation of the business environment and communication with the market as well as they are rather careful about talking the risk to introduce both new products and technologies and enter new markets. Does it mean that SMEs behave in irrational way? To contribute in answering to this question the author checked the reliability (international consistency) of the criteria that were implement to measure that firms involvement in above activities and then has analyzed if the involvement is correlated with effectiveness of the firms. The reliability was checked with use of the coefficient of Cronbach's alpha.

Table. 11. Internal consistency of criteria used in the research

Criteria	Cronbach's alpha	Standarized Cronabach's alpha	α	Internal consisancy
Observation of business environment; observation of markets:				
- customers				
- suppliers	0,92	0,92	≥ 0,9	excellent
- financial				
- labor				
The analysis of business environment; analysis is led with use of methods:				
- SWOT				
- Extrapolation of trends				
- Delphi				
- Scenarious	0,88	0,89	<0,7 ; 0,9)	good
- Porter's 5 forces				
- Atractiveness of sector				
- Economy white intellignce				
Marketing methods are used systematically; the subject of research is:				
- customer's satisfaction				
- customer's preferiences				
- market share	0,99	0,99	≥0,9	excellent
- trust to the brand				
- efectiveness of the price policy				
- efectiveness of the promotion				
Communication with the market				
1) Ways of producct information:				
- recomendation by the customers				
- distribution of information about product in public places				
- product distribution in public places				
- telemarketing				
- video clip				
- video game				
- e-mail				
- web site				
- internet blog				
- Twitter / Facebook				
2) Making the customer convinced about product advantages	0,9	0,8	<0,7;0,9)	good
- inquisitiveness of customer				
- persuaded by firm's personal				
- personal expirence of customer				
- firm involvment				
3) Customer gots knowledge about funtionality and the product operating				
- is easy and does not require customer engagement				
- is easy but requires some engagement of the customer				
- is difficult but the customer can do it himself				
- is difficult and requires an especial training				
- always is supported by the firm				
Try and fail approach to use opportunities				
1) New product launching				
- very seldom				
- seldom				
- pretty often				
- often				
- very often				
2) Implementing new technology				
- very seldom				
- seldom				
- pretty often				
- often				
- very often				
3) Entering a new market				
- very seldom				
- seldom				
-pretty often				
- often				
- very often				

Source: own research

The Cronbach's alpha indicato confirms high internal consistency of the criteria and therefore high reliability of the data can be used to investigate if there is a remarkable difference in effectiveness of SMEs that in terms of the criteria are more or less entrepreneurial. In the current stage of the research the effectiveness is measured by:

- Time of existence of the enterprise. Longer time suggests bigger ability to run the business effectively.
- Extent of geographic coverage. The wider scope of the market suggests more entrepreneurial energy of the enterprise that can leads to higher effectiveness of acting.
- Level of income. The higher income creates more opportunities that can be used.

CONCLUSIONS

The presumption of the research was that more entrepreneurial are SMEs, better their results and longer time of their existence. The entrepreneurship of the firms has been estimated by their involvement in observing the environment, use of methods to analyze the environment market research and communication with the market as well as the "try and fail" approach to search and try market opportunities. The research has shown that Polish SMEs are moderately involved in such activities. The percentage of firms that undertake such actions systematically, often or very often very from 5,9% (small firms observe systematically the market of suppliers) to 64,5% (SMEs are systematically involved in investigating the customer's satisfaction. One of characteristic of SMEs is innovativeness and risk taking. The research has shown that Polish SMEs are rather conservative. The percentage of these that often or very often innovate the product or process vary from 0% (SMEs very often implement new technology) up to 16,1% (SMEs often launch new product to the market). Only 9,7% of them often or very often enter new market while 22,6% and 25,8% do this very seldom or seldom.

The result can be a little bit unreliable as the author still continues the research. This particular concerns the small enterprises. However it seems sure that SMEs absorb knowledge too slowly. The art of state is much better in engineering knowledge than in managerial and organizational knowledge. Of course SMEs have very simple organizational structures and limited human resources. Therefore it can be not expected that SMEs will have deeply and narrowly specialized staff responsible for observing the environment and looking for opportunities. All the more the engineers in SMEs should combine the professional knowledge with the managerial and organizational one.

Table. 12. Pearson correlation coefficient

	Age bracket	Market scope	Income bracket	Customer market	Supplier market	Financial market	Labour market	SWOT	Trends Extrapola-tion	Delphi	Scenarious	Porter's 5 forces	Sector attractive-ness	Economy white intelligence
Age bracket	1,000	-0,155	0,187	0,164	0,156	0,127	0,168	0,121	0,112	-0,011	0,048	-0,014	-0,105	-0,048
Market scope	-0,155	1,000	0,072	0,141	-0,006	0,116	0,070	0,035	0,139	0,057	-0,038	0,008	0,188	0,104
Income bracket	0,187	0,072	1,000	-0,098	0,005	0,015	-0,041	-0,004	-0,034	-0,096	0,067	0,006	-0,175	-0,144
Customer market	0,164	0,141	-0,098	1,000	0,768	0,781	0,626	0,635	0,534	0,320	0,560	0,534	0,473	0,438
Supplier market	0,156	-0,006	0,005	0,768	1,000	0,721	0,665	0,577	0,442	0,372	0,464	0,552	0,435	0,413
Financial market	0,127	0,116	0,015	0,781	0,721	1,000	0,710	0,700	0,559	0,346	0,546	0,568	0,315	0,304
Labour market	0,168	0,070	-0,041	0,626	0,665	0,710	1,000	0,533	0,524	0,468	0,466	0,471	0,384	0,405
SWOT	0,121	0,035	-0,004	0,635	0,577	0,700	0,533	1,000	0,545	0,337	0,436	0,510	0,301	0,447
Trends Extrapolation	0,112	0,139	-0,034	0,534	0,442	0,559	0,524	0,545	1,000	0,447	0,366	0,337	0,328	0,323
Delphi	-0,011	0,057	-0,096	0,320	0,372	0,346	0,468	0,337	0,447	1,000	0,394	0,375	0,393	0,423
Scenarious	0,048	-0,038	0,067	0,560	0,464	0,546	0,466	0,436	0,366	0,394	1,000	0,612	0,382	0,336
Porter's 5 forces	-0,014	0,008	0,006	0,534	0,552	0,568	0,471	0,510	0,337	0,375	0,612	1,000	0,480	0,427
Sector attractiveness	-0,105	0,188	-0,175	0,473	0,435	0,315	0,384	0,301	0,328	0,393	0,382	0,480	1,000	0,532
Economy white intelligence	-0,048	0,104	-0,144	0,438	0,413	0,304	0,405	0,447	0,323	0,423	0,336	0,427	0,532	1,000

Source: own research

The analysis of correlation has sown not significant dependence between the measures of effectiveness and observation of the business environment (Table 12).

The only significant relationship exists between involvement of the enterprises in observation of particular markets and implementation of different methods to analyze the environment. However because only a small percentage of SMEs is involved in such activities (particular in systematic way) therefore there is not statistically significant influence of these activities on the enterprises effectiveness.

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