

MARKETING INNOVATIONS IN THE SMES IN BULGARIA AND ICELAND: EMPIRICAL STUDY ON CURRENT SITUATION

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Introduction

According to the World bank data, Bulgaria has one of the lowest levels of productivity in the European Union (large expenditure of resources, low cost efficiency etc.) and one of the reasons for this state is the weak innovation activity of the Bulgarian companies. In addition, recent research reveals that marketing innovations have insignificant intensity in the Bulgarian companies and especially in the SME². Another negative factor related to the innovations profile of Bulgaria is that according to the National Statistical Institute of Bulgaria the research and development (R&D) expenditure from the national budget have been cut for 2015 by 3.3% to 188.6 million leva³.

According to economists' reports and statistical data SMEs play a major role in the Bulgarian economy by serving as a link between big and small businesses as they represent 97% of the Bulagian economy. They are considered as a major player in providing linkages between various subsectors and also as a source of dynamism and agility. SMEs are also said to be an engine for economic growth by creating job opportunities for the regions and for the country as a whole. They contribute to reducing unemployment, thereby swallowing up a significant number of employed people which has a

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² The term marketing innovations in this project includes: all product innovations, innovations in the communication mix and innovations in the distribution policy of the company.

³ <http://fakti.bg/bulgaria/42549-nsi-razhodi-za-nauchni-izsledvania-namalavat-s-33>, accessed on 22.07

beneficial effect not only on the social development of society, but also on the pace of economic growth. Other than that, SMEs help to form the middle class in developing economies which consolidates the stability of social system, based on market-economy principles.

The data from the last CIS research of EU state that more than the half of the enterprises in Europe are defined as innovative⁴. In Bulgaria the innovative companies are under one third (31%). In fact in Bulgaria the most innovative sector is the IT industry⁵. The leaders in innovations are Germany (80%), Luxemburg (65%), Portugal, Belgium (58%) and Ireland (57%). After Bulgaria in this ranking are Lithuania (30%), Hungary (29%), Poland (28%) and Latvia (24%). It is known that one of the three priorities of Europe 2020 Strategy is Sustainable growth – promoting a more resource efficient, greener and more competitive economy⁶, so the main agenda of the government and the country for the next period is to have as many as possible innovative and successful SMEs due to their important role in the economic development and its consequent toward social benefits. All this shows that the research topic about innovations, decision making for investments in innovations including marketing innovations are very important issues for Bulgaria.

The role of innovations as a new and significant factor in economic growth continues to be underestimated and this is valid for Bulgaria as well despite the fact that their importance has become at least equal to the overall effect of all traditional factors of production. There is a deficit of research on the innovation activities of the SMEs in Bulgaria although exactly the lack of innovations and especially marketing innovations as well as lack of technological capability is the biggest problem of the Bulgarian economy and namely the low labour productivity which is on the bottom of the European Union.

⁴ http://epp.eurostat.ec.europa.eu/portal/apge/portal/science_technology_innovation/data/database, accessed on 12.07. 2012.

⁵ http://www.capital.bg/biznes/predpriemach/2010/03/05/868457_novost_no_samo_za_bulgariia/- accessed 23.07.2012.

⁶http://www.dfpni.gov.uk/index/finance/european-funding/content_-_european_funding-future-funding/content_-_european_funding-europe-2020.htm, accessed on 27.07.2012.

Thus, according to the assessments of Western experts, global economic growth is already based, more than 75 per cent, on the achievements of scientific and technical progress (Recommendations for strengthening the role of small and medium-sized innovation enterprises in countries of the Commonwealth of independent states, WIPO). This is the reason why the research on innovation activeness of the Bulgarian SMEs, the problems and barriers for higher level of activeness is an extremely important research problem which can serve as a bridge between the business and the higher education institutions.

The paper contains a comparative analyses of part of the empirical data for the Bulgarian companies with analogical data based on the same research questions for the activeness in innovations of SMEs in Iceland. The main goal of the survey is to find out what kind of innovations activities are conducted by the Bulgarian SMEs and what is their approach to innovations.

The research tasks are:

- To investigate what part of the SMEs in Bulgaria have made some kind of innovations in their product policy - new or improved products or services and what part of their sales are due to these products and services.
- What kind of innovations related to marketing, if there are any, are conducted - in product design, packaging and marketing communications for the products.
 - What kind of approach to the innovations is implemented by the Bulgarian and the Icelandic companies and what are the differences in the orientation of the business models in both countries related to innovations.
 - What are the expenses for R&D as percentage of the company's turnover.
 - What are the main problems which the companies are meeting when doing innovations: in new product and services development and in other marketing activities.

Background of the research

A variety of economic studies have revealed the importance of academic research for innovation, technology and economic growth (Tushman, 1977; Tushman & Katz, 1980; Adams, 1990; Narin et al 1997; Griliches, 1998; Rosenberg & Nelson 1994; Mansfield, 1995; Henderson et. al. 1998; Branscomb et al., 1999, Cohen et al 2002). During the last 30-40 years

the management literature has documented the process of transferring of scientific knowledge into successful innovations and consequent economic growth mainly on the basis of specific case studies and detailed surveys at company level (Tushman, 1977; Tushman & Katz, 1980; Bud, 1994; Hills, 1997).

On international scale there is a plenty of research about various issues closely related to innovations, innovation activities, impact of different factors on the innovations' success etc. Researchers from different countries put the focus on innovations and SMEs as small companies present a significant part of the regional and national economies. Hoffman (1998) conducts a literature survey of UK work over the past decade and tries to characterise the state of knowledge about SMEs and innovation. It concludes with a discussion of gaps and weaknesses in the literature and some requirements for future research in this field. Massa and Testa (2008) investigate the innovativeness of a sample of Italian Small and Medium Enterprises (SMEs) based on self-reported data by entrepreneurs or managers and show that the considered SMEs were important developers of radical innovations in contrast with data published by local institutions. The results show the existence of deeply different perspectives concerning innovation, starting from its definition to the effective policies for its promotions and the role of intermediary institutions.

Considering that innovation is a complex phenomenon, other studies examine how innovations are linked with organisations' performance and to understand and explain the conditions that make innovation profitable (Otero- Neira, C. Martti Tapio Lindman, M.T. and M.J. Fernández, 2009). The methodology used in the analysis is a multi- case comparative research of low- tech, small and medium- sized furniture firms from Italy, Spain and Finland. De Massis, Frattini & Lichtenthaler (2012) review and systematize prior work on technological innovation in family firms and the study shows that family involvement has direct effects on innovation inputs (e.g., R&D expenditures), activities (e.g., leadership in new product development projects), and outputs (e.g., number of new products), as well as moderating effects on the relationships between these steps of technological innovation. Some researchers explore empirically the relationships between different cooperation networks and innovation performance of SME using the technique of structural equation modeling (SEM). Based on a survey to 137 Chinese manufacturing SMEs, the study finds that there are significant

positive relationships between inter-firm cooperation (Zenga, S.X, Xieb, X.M. & C.M. Tamc, 2010), cooperation with intermediary institutions, cooperation with research organizations and innovation performance of SMEs, of which inter-firm cooperation has the most significant positive impact on the innovation performance of SMEs. Surprisingly, the result reveals that the linkage and cooperation with government agencies do not demonstrate any significant impact on the innovation performance of SMEs (opp. cit., 2010).

Other research issue since 2003 when this topic evolved is the open innovation. Researchrrs from different countries identify some trends in open innovation research by analysing how the literature on this topics has evolved since the introduction of the concept in 2003 (Van de Vrande, V., Vanhaverbeke, W. & O. Gassmann, 2010). They identify several directions for further research: open innovation research should be linked to other management areas such as marketing, HRM, change management, etc. Iceland researchers have also a significant contribution to the research on innovations in SMEs and especially the Centre for Research on Innovation and Entrepreneurship at Reykjavik University. Their research interests focus on topics like "innovation mix in young technology based firms", "service innovativeness", "design as an element of innovation", "internal and external relationships in small firms business models" etc. According to Candi (2015) for small firms in particular, R&D relationships with external innovators, large public research labs and universities, as well as industrial and other supporting partners are at the heart of how knowledge intensive innovation is organised and managed today.

Despite the vaious research interest, the knowledge base about how SMEs actually undertake innovative activities and what type of innovations they implement remains limited.

Comparing to the big scope of academic research on international level, there is insufficient research on the topic of innovativeness in Bulgaria. According to the research of Slavova (2009) the main barrier for the innovations in the small companies is the lack of financial resourses as this activity is a risky task but at the same time 26% o. f the companies have introduced improved product and services in 2009⁷. Analysis on the entrepreneurship and intentions for innovations prepared by Association

⁷ The research is not designed for the SMEs and includes all kind of companies;.

INSITE in 2012-2013⁸ in Bulgaria the SMEs in the production sector have higher innovation activeness than the companies in the services sector. The authors conclude based on the research data, that 1/3 of the companies in the processing industry have a very low innovation activeness. The importance of small and medium-sized enterprises (SMEs) in economic growth has made them a central element in much recent policymaking nowadays.

Research methodology

The data collection method is online survey and the link to the survey questionnaire was sent to a list of 150 small and medium sized companies prepared by random choice from the sampling frame: the Directory of companies- members of Burgas Trade and Industrial Chamber which includes nearly 80% of the small and medium sized companies in the South-Eastern Bulgaria.

The questionnaire contains a couple of sections relevant to the research tasks. The majority of the questions employ a 5- level Lickert scale which is a type of rating scale used to measure attitudes or opinions. For the purposes of the survey respondents are asked to rate items on a level of agreement. With regard to the statistical methods. The paper employs a quantitative statistical methods: frequencies, crosstabulation, means and correlation analysis.

Survey results and discussion

Company profile of the respondents - industry and size

According to the survey information the staff of 77.5% of the companies in the sample is under 9 people, 12.5% of the companies have from 10-50 employees (small companies) and only 7.5% are middle sized companies (with up to 250 employees). The biggest part of the firms are from the processing industry- 60%, a little more than 1/4 are from the services sector- professional services, hotel and restaurant enterprises and 12,5 % operate in the retailing sector.

Table 1. SMEs sample by number of employees

⁸ Research on entrepreneurship and perspectives for innovation development in SMEs in Bulgaria (2012-2013), conducted by a team of INSITE, ed. by Prof. Dr. Zeljo Vladimirov, Dr. Kaloyan Ganey and Dr. Ralitsa Simeonova, http://timberchamber.com/sites/default/files/imce/SMEs_2013-bg.pdf

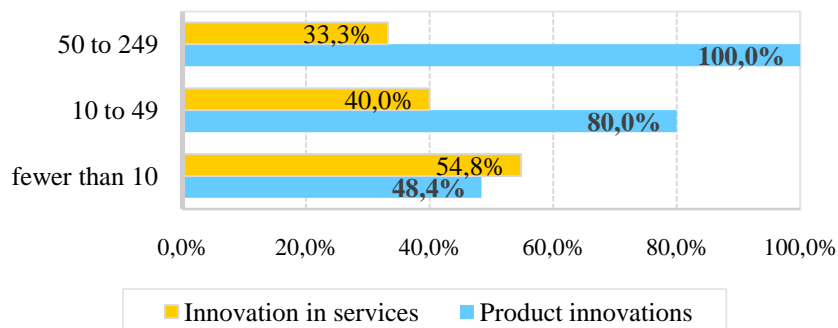
Number of employees	Percentage
Fewer than 10	77.5
10 to 49	12.5
50 to 249	7.5
More than 250	2.5

As far as the job position concerns nearly 88.0% of the respondents are general managers or CEOs, per 5% are marketing managers and managers “business development” and 2.5% are managers “New product development”. With regard to the sales dynamics the survey data show that the practice Simeonovas; percentage of the companies with sales growth from 1-5% is bigger for the companies with services innovations but there is almost no difference in the percentages of both groups (with predominantly product or with services innovations) when it concerns higher sales growth.

Development and introduction of new products and services

The summarized survey information reveals that the majority of the companies have introduced material product innovations - 57.5% and 52.5% of the respondents have conducted innovations in services. The activeness analysis with regard to the company size points out that the biggest part of the innovations active companies are in the group of medium enterprises- with 50-249 employees-100%, on second place regarding the activeness are the small firms- up to 50 employees-80% and the lowest innovation activeness is in the group of micro- firms, nearly the half of them-48.4%.

Figure 1. Innovation activeness depending on company size



The analysis of the innovation activeness of SMEs regarding services innovation reveals that the most active are the smallest companies- 54.8% of them, second according to this criterion are the small enterprises (10-49 employees)- 40% of this group and only 1/3 of the medium sized companies have introduced services innovations. As far as the innovation activity in production and services sectors concerns, the survey data point out that the higher activeness is equally represented in both SMEs groups: companies with service innovations and companies with product innovation.

A very important issue in this research and survey is the investigation of *the approach to innovations* of SMEs: The operationalization of both approaches for the purposes of the survey is conducted through the following 10 statements where the first 6 are characterising the Exploitation (Incremental innovation):

- *We improve current products/services rather than develop new ones*
- *We update the technologies embedded in current products/services*
- *We improve our production processes rather than implementing new ones*
- *We extend the functions of our current products/services*
- *We develop new products/services by extending current technologies to similar fields*
- *We introduce new products/services for our current market(s)*

The next 4 statements are characterizing the Exploration (Radical innovation)⁹:

- *We develop new products/services with totally new functionality*
- *We develop new products/services based on the latest technology*
- *We introduce radically improved products/services*
- *We create completely new business models**

As it is seen from the table below there is a difference between the approaches: the Icelandic companies are more inclined to radical innovations while for the Bulgarian companies is more typical the incremental approach to innovations.

⁹ The statements for examining the approach to innovation and the data for Iceland are provided by the *Institute for Innovations Research of Reykjavik University* in order to make possible the comparison.

Table 2. Attitude to innovation of Bulgarian and Icelandic SMEs

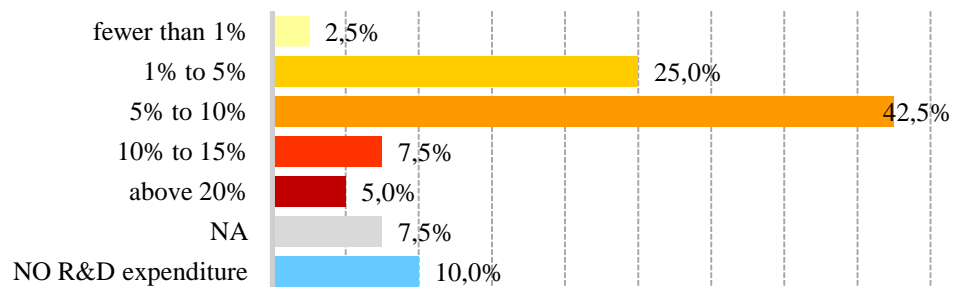
	Bulgaria	Iceland
<i>Exploitation</i>	3,70	3,62
<i>Exploration</i>	3,24*	3,47

Note: * $p < 0.05$

Investments in R&D activities and revenues from new products and services

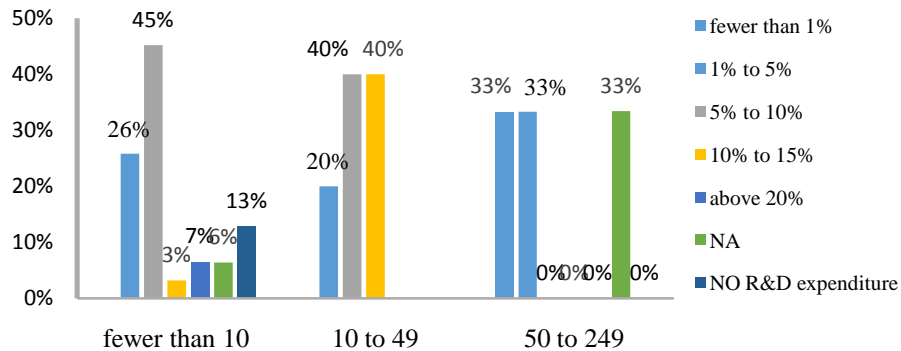
One of the basic survey issues is the question about the percentage of the sales revenue invested by the SMEs in R&D activities and the positive fact is that according to the survey results 82.5% of the enterprises included in the sample have invested in innovation activities and 42.5% of the companies have invested from 5-10% while 7,5% have invested from 10-15% from the sales revenues.

**Figure 2. Investments in R&D activities
(% from sales revenue)**



The analysis of the companies' expenditures for innovations depending on their number of employees (size) reveals that there is no relation between the company size and the percentage of sales revenue invested for innovation activeness. According to the survey results the smallest and the biggest investments for innovations (from 1-5% and over 20% are) are made by the smallest companies (with up to 9 employees).

Figure 3. Investments in R&D activities by size of SMEs



The survey results point out that in more than 1/3 of the companies with innovations the contribution to the revenues of the new product sales is more than 20%. At the same time in nearly 60% of the SMEs with various kind of innovations in services over 20% of the sales revenues are shaped by the offering and sales of new or improved services. The comparative analysis points out, that the share of companies with high contribution to revenues from new services sales is nearly 2 times bigger than the contribution to revenues from sales of new products in companies with product innovations. Therefore the recent survey gives us reason to make the conclusion that the economic effect from sales of new services is relatively bigger than the economic effect from sales of introduced new products.

Innovation in product design, promotions and distribution policy

With regard to the type of marketing innovations the survey data show that the companies undertake more and easier innovations in the promotion policy e.g. in marketing communications: 65% of the SMEs made some innovations in their promotion policy, 1/4 of the SMEs in the sample made innovations in product design and packaging and relatively high share of the company-respondents improved or totally changed their distribution channels- 37,5%. The innovative practices in marketing communications include implementing new promotional approaches, introducing new communication channels, improving by big extent the current communication means etc.

Table 3. Type of marketing innovations

	Percentage of SMEs (%)
<i>Innovations in Promotion: new promotion channels and promotion means</i>	65.0
<i>Innovations in product design and/or packaging</i>	25.0
<i>Innovations in distribution and the sales methods</i>	37,5

Generally according to the survey results the SMEs in Bulgaria focus more on innovations in the promotional policy e.g. the marketing communications in contrast with the small firms in Iceland where the stress in innovations is more on product design, on creativity and especially in the services sector where design is based on customer experience (Gemser, G.& Candi, M., 2014; Candi, M., 2014).

Regarding the barriers and difficulties related to the innovation activeness the results the respondents are on the opinion that the biggest barrier for the companies is not the lack of financial resources and access to bank credits like 5-6 years ago and this information is in fact in contrast with the situation 5-6 years ago when the main barrier was the difficult access to financial resources (Славова-Ночева, М., 2009) but the deficit of *qualified human resources* - 87% of the SMEs have chosen this answer option while at the same time 91% of the managers think that the access to bank credits is not difficult. As far as the macro- and microenvironmental impact on the innovation activeness of SMEs in Bulgaria and Iceland concerns, the recent survey highlights the fact, that in both countries according to the managers and CEOs, the environment can be characterized by the following 3 features (according more than 60% of the respondents): rapid technological changes, intensive competition, high consumer preferences which are changing very quickly.

Conclusions

The survey results and evidence give us the reason to draw the following conclusions:

The majority of the companies have introduced innovations in products - 57.5% and 52,5% of the respondents have conducted innovations in services.

The companies with innovations in products are mainly from the processing industry and those with innovations in services are from the sector of professional services, hotels and restaurants.

The majority of the SMEs - 65% made some innovations in their promotion policy, 37,5% introduced innovations in their distribution channels and 25% of the SMEs in the sample made innovations in product design and packaging. The SMEs in Bulgaria focuss more on innovations in the promotional policy- the marketing communications in contrast with the small firms in Iceland where the stress in innovations is more on product design, on creativity.

There is a difference between the approaches to innovations: the Icelandic companies are more inclined to radical innovations while for the Bulgarian companies is more typical the incremental approach to innovations.

The biggest barrier for the SMEs in Bulgaria is not the lack of financial resources and access to bank credits but the deficit of qualified human resources - 87% of the SMEs.

The environment in Bulgaria and Iceland can be characterized by the following 3 features: rapid technological changes, intensive competition and high consumer preferences which are changing very quickly.

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