COMPETITIVENESS AND INNOVATION IN KOŠICE REGION

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Abstract: The main objective of the enterprise in a market economy is to ensure its economic and commercial success, a crucial prerequisite for its competitiveness and innovation level, which constitutes the decisive factor. Competitiveness of Slovak small and medium-sized enterprises after the accession to the EU is a very important indicator of their maturity. Analyzed study gives an overview of the results of assessing the level of innovation taking place in the subjects of small and medium enterprises in Košice region, whose competitiveness is relatively low. The paper analysis the situation of the issue in the enterprise and solution proposals, which should be complied with State and the other institutions helpful in overcoming the initial barriers to full integration of our businesses in the EU single market environment.

Keywords: Competitiveness. Innovation. Innovative behavior of enterprises. Small and medium-sized enterprises. Region Košice.

1 Competitiveness and innovation

Competitiveness of the region can be defined as the ability to produce products and services that will stand in international relations and is also secured the maintenance of high and persistent income of its residents. Generally, we define the competitiveness as the ability of firms, industries, regions, nations and supranational regions to generate high levels of income and employment. (Hudec O., 2007).

With rising number of foreign direct investment, there is a continuous trend of gradually declining unemployment rate in the region (for example can be given almost all the municipalities in Slovakia). We must however note that besides of the competitiveness of the regions there are also many other factors, but foreign direct investments guarantee a steady increasing competitiveness of the region.

According to Moses [2] competitiveness is not just a corporate fight. This is a fight for any position or resources. By this regard, all the cities or regions can compete. Camagni [3] argues that globalization affects not only companies but also the territory between them more and more by competing in the production and acquisition of producing factors.

Similarly, according to the European Union [4] the competitiveness is defined as region's ability to produce products and services that are sold at international markets and create high and sustainable incomes for higher employment. According to the definition of the European Commission [5], the region's competitiveness is seen as an equivalent to the economy's ability to offer its citizens an improving standard of living, high employment and a sustainable level, so the European Commission is inclined to think that the basis of competitiveness of the region is accompanied by productivity growth and by maintaining high employment.

The term "innovation" in technical terminology began appearing several years ago in connection with the issue of growth theory. First, more complete explanation of the concept of innovation introduced into economic theory appeared in the work of JA Schumpeter "Theory of Economic Development" from 1911. Author of this term understands the activity of the entrepreneur who introduces the the national economy by “new combinations” (as he called innovations) from a position of simple reproduction (circular motion) to the development of economic growth - thus an extended reproduction.

Such complexes activities constitute the new production methods, new markets, new materials, new products and new production organization, which was later in the book Business Cycles (1936) called by the term "innovation".

1.1 Results

Industry - current
Košice region is economically one of the less developed areas of the Slovak Republic and it is also between the 10 least developed regions of the European Union. In terms of potential of economic power, it is the second largest province in the country. In these regions, there are several major companies from the fief of the steel and engineering industry and automobile industry, wood-furniture, food, electronic industry.

By economic activity (NACE), we contacted 53 respondents, who helped to map the situation in the Kosice Region. The largest proportion of respondents active in manufacturing was (33.96%), followed by construction sector (16.98%), 13.23% are businesses in hotels and restaurants. At the same level there are the enterprises in the wholesale and retail businesses and in education (9.43%).No less important, but a smaller group of businesses are businesses in the arts, entertainment and recreation (7.55%). Agricultural, professional, scientific and technical activities represent 3.77% of total holdings. The smallest representation (1.88%) has transport and storage (Table 1).

The groups of respondents were mostly from the district of Kosice (28 companies), representing 52.83% of the total numbers of businesses, Michalovce district were involved in 9 enterprises, it is 16.98% of the total number of entrepreneurs. The fifth additional business was from the district Spišská Nová Ves, which is 9.43%, Trebišov and Rožňava districts are represented by four companies - 7.55% of the total. Smaller districts such as Sobrance (2 companies) and Gelnica (1 company) form 3.77% and 1.89% of the total.

Table 1: Distribution of enterprises by NACE

	Number	%
Agriculture	2	3,77
Industrial production	18	33,96
Construction	9	16,98
Wholesale and retail trade	5	9,43
Hotels and restaurants	7	13,23
Transport, storage	1	1,88
Professional, scientific and technical activities	2	3,77
Education	5	9,43
Arts, entertainment and recreation	4	7,55
Total	53	100

Source: Own processing

In analyzed companies, we evaluated also the length of these businesses. In this mapping surveys may be concluded that in the range of 10 to 15 years there are around 74% which are considered to have stabilized economy. Businesses that have existed for more than 15 years, represent the second largest group (14%), and entrepreneurs who undertake less than 10 years constitute the third group with 12%.

The questionnaire survey consists of small enterprises with 10 to 49 employees 62%, which represents the largest group. The second largest group consists of businesses with 50 to 249 workers, and to 21% and the third group consists of businesses with 0-9 employees, only 17%.

SMEs and innovative capacity
In the past, people carried a large proportion of manual labor, but machines do it today - thanks to knowledge. The new information society and its size is less important than flexibility and dynamics of corporations. The importance of research and development and the need for specific innovative services lead to creation of scientific and technological potential enable for the development of information capabilities. Companies are forced to search for a specific human resources, therefore, often entering external markets work or cooperate with universities and secondary schools, to draw attention to their potential skilled employees.

According to Peter F. Drucker (Drucker, 1985), innovation can be broadly defined as the process of securing new and better skills or more useful. Innovation is not the science or technology, but a value that can be measured by impact on the environment. Drucker wrote that in terms of management there are only two basic functions: marketing and innovation. While the marketing function is to satisfy current customer needs, innovation is trying to meet future customer needs. Without the ability to constantly innovate business can vanish when the needs of the costumer or the competition change.

The question we asked our respondents regard to innovation in the company over the past 5 years was responded as follows (Table 2).

Undertakings engaged in agriculture in the questionnaire survey replied that over the last five years has introduced a new technology, and also upgraded the existing technology in business. Survey attended by 18 enterprises (100%) of the manufacturing sector, of which 16 enterprises (88.88%) introduced totally new technology, a large proportion of these enterprises, 2 enterprises (11.12%) innovated the technology used so far. Of the 9 enterprises in building four businesses put in place over the past five years a completely new technology in the enterprise (44.4%), 3 enterprises during this period, decided to upgrade to date technology (33.33%) in 2 companies (22, 22%) they have not seen any technological innovation. In the 2 companies (40%) in the wholesale and retail are the last 5 years recorded upgrading existing technology and in the remaining three companies (60%) have not made any technological innovation. Four companies - 57.14% hotels and restaurants upgraded over the past 5 years to date technology and 3 companies (42.86%) upgraded. One company engaged in the transport and storage (100%) has not made any technological innovation. Enterprises of industry expertise, scientific and technical activities said that over the last five years had implemented the innovation of the existing technology. (100%). In the educative sector, two companies (40%) have introduced a new technology, and 3 companies (60%) said that the nature of the business precluded any innovation. Of the four companies in the arts, entertainment and recreation one company has introduced over the past five years a completely new innovation in the enterprise (25%) and 3 undertakings during this period did not reveal any technological innovation (75%).

Table 2: Technology Innovations in SMEs (NACE)

	Innovation Technology	No innovation	Introducing a new technology	Nature and Technol. excludes innovation	Number of enterprises
Agriculture	2	0	2	0	2
Industrial production	2	0	16	0	18
Construction	3	2	4	0	9
Wholesale and retail trade	2	3	0	0	5
Hotels and restaurants	4	3	0	0	7
Transport, storage	0	1	0	0	1
Professional, scientific and technical activities	2	0	0	0	2
Education	0	0	2	3	5
Arts, entertainment and recreation	0	3	1	0	4
Total	**15**	**12**	**25**	**3**	**53**

Source: Own processing

During the reporting period, most companies have introduced an entirely new technology (47.17%) 28.30% of companies in the period of 5 years created an innovative technology, 22.64% of companies are not upgraded and 5.66% of enterprises had a negative nature and technological innovation. Innovative technologies were realized mainly in agriculture, manufacturing, professional, scientific and technical activities and also education, new technologies were introduced in the manufacturing, construction and agriculture, but also in education. We assume that the use of new, respectively innovative technologies inevitably contribute to faster development of these companies. Businesses whose nature of the technology used precludes any innovation exist mainly in the field of education. Almost half of the enterprises, i.e. 25 introduced a completely new innovation for the past 5 years, 15 enterprises innovated over the past five years the technology used so far in the enterprise and 3 enterprises nature precludes any technology innovation.

The next question related to product innovation as the results of production activities in SMEs (Table 3).

Table 3: Product Innovation in SMEs (NACE)

	Innovation Technology	No innovation	Introducing a new technology	Nature and Technol. excludes innovation	Number of enterprises
Agriculture	2	0	0	0	2
Industrial production	3	2	14	1	18
Construction	1	2	4	2	9
Wholesale and retail trade	2	2	1	0	5
Hotels and restaurants	3	1	3	0	7
Transport, storage	0	1	0	0	1
Professional, scientific and technical activities	1	0	1	0	2
Education	2	0	2	1	5
Arts, entertainment and recreation	1	2	1	0	4
Spolu	**15**	**10**	**26**	**4**	**53**

Source: Own processing

The agricultural sector provides enterprise product innovation over the past 5 years. Of the total number of 18 enterprises from the manufacturing sector, 14 businesses put in place a completely new product (77.77%), while 3 of them have upgraded the product so far (16.66%), 2 not upgraded (11.11%) and 1 enterprise nature secreted product innovation was (5.55%). In construction, 4 enterprises introduced a completely new product (44.44%), 2 enterprises upgraded at all (3.77%) and also the nature of their product innovation excluded (3.77%) over the past five years, and one company has innovated (1,89%). The wholesale and retail businesses did not upgraded 2 (3.77%) and also upgraded an existing product (3.77%), and one company has introduced a completely new product (1.89%). In the field of hotels and restaurants 3 enterprises upgraded product so far (5.66%), and 3 enterprises introduced a completely new product (5.66%), while one company was innovating at all (5.55%). In the transport and storage firm innovating, it was at all (5.55%). In the field of professional, scientific and technical activities, one firm has innovated a present product so far (5.55%) and one company has also introduced a completely new product. In education, we contacted the five businesses - 2 enterprises have introduced a completely new product (3.77%) and 2 enterprises also innovated the product so far (3.77%), while one company with the nature of the product eliminated the innovation.(5.55%). The last topic was art, entertainment and recreation, in which our respondents answered as follows: 2 enterprises did not innovate at all (3.77%), one company has introduced a completely new product (5.55%) and also one company has innovated an existing product (5, 55%).

For a summary of the responses of our respondents, the small and medium-sized enterprises in this survey for the last five years decided to innovate as following:

26 enterprises have introduced a full product innovation,

- 15 enterprises have innovated product so far,
- 10 enterprises ever upgraded,
- 4 enterprises preclude product innovation.

2 Conclusions

Proposed measures for innovation activities KR:

- Set the direction of SME International - an open EU market, as well as foreign firms can contribute greatly to solving innovations.
- Provide more space for customers who are gro new ideas and insights to effectively innovate.
- Focus on end-consumer.
- Targeting of language differences and language barriers and deepening of knowledge for the purpose of creating an effective communication and relationships in the external environment.
- Build qualitative information systems that would help to respond to trends in the shortest possible time.
- Control under the new EU standards, which determine the degree of innovative devices.
- Promoting research activities linked to the budget through the creation of these purposes and subsequent cooperation with universities.
- Support the development of educational, scientific - technical innovation activities and building of industrial parks.

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