THE IMPACT OF NETWORKING ON THE INNOVATION PERFORMANCE OF SMEs

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**Abstract** 

Typology of networks. Opportunities and threats arising from participation in the network.

Analysis of the network's member. Unstructured nature of decision making in the network.

Entry barriers to innovation networks for SMEs. Innovation performance of SMEs as a

network member. Examples of participation of Slovak SMEs in networks. The article focuses

on examining the impact of networks on the innovation capability of small and mid-size

businesses. It is apparent that the network business brings many opportunities at innovations

implementation for the entities involved. Entrepreneurial activities of medium and small

enterprises in Slovakia is entrepreneur in united marked of the European Union. This

environment is characterized by a competitive struggle. We point to the importance of

networks and networking as a means of increasing the competitiveness of small and medium

business. The main goal of this paper is to formulate recommendations based on a systematic

analysis of knowledge for further research networks involving SMEs in the Slovak Republic.

**Key words:** entrepreneurship, small and medium enterprises, network, clusters

**JEL Code:** L14, L26, M21

Introduction

An essential presumption of market economy development is the existence of a

business sector. However, in addition to the sufficient capital, the business sector development is tied to the capability to bring and implement innovations implementing new

solutions into the corporate practice.

According to the OECD (2010) they are just the companies that play the leading role

at the creation of innovations and their launching onto the market. Their innovation capability

is currently considered as the ultimate condition of competitiveness, as in the changing

business environment innovations are the means of managing the changes (Kováč – Sabadka,

2003).

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The research confirms that the innovation activities are not exclusively the outcome of internal processes of companies (Lasagni 2012), but often the outcome of cooperation in the network (e.g.: Baum – Calabrese - Silverman 2000; Eisenhardt -Schoonhoven 1996; Flatten – Greve - Brettel 2011; Miles – Preece - Baetz 1999; Nieto - Santamaría 2010). The network – in the sense of the social exchange theory – may be defined as a system of two or more participants among whom the exchange takes place (Chetty , S . - Eriksson , K . 2002).

The individual participants of the network contribute to the mutual exchange by specific activities (Anderson , J . C . - Hakansson , H . - Johanson , J. 1994) based on the consideration of the efforts made and the reward presumed (Chetty , S . - Eriksson, K. 2002). The contributions by the participants i.e. their capability or potential for the creation of expected reward is verified by the network participants from time to time and serves as a basis for the decision to remain in the network or to leave it (Konsti-Laakso et al 2012).

Small and mid-size businesses (SME) in general are not interesting partners for other network participants (Colombo and col. 2012). This fact is most of all based on the lack of own knowledge, lack of resources for research and subsequent commercialisation of the research outcome. The reason for their absence from the networks at the side of MSP are often risks (Lasagni 2012) which may include the threat of redirecting the limited resources of the company from the subject matter of business, unexpected leakage of knowledge for the benefit of network partners, higher fluctuation of employees (Colombo et al. 2012) or dependence on the dominating partner in the network (Osarenkhoe, A. 2010).

## 1 Materials and methods

The article focuses on examining the impact of networks on the innovation capability of small and mid-size businesses. The following research questions were defined:

- What are the reasons the SME enter the networks?
- Does membership in the network offer a innovation oportunities for SME?
- In what way are the relations among individual businesses in the network perceived?

For the needs of this research we understand the network as a temporary arrangement of several participants to achieve a common goal the value of which exceeds the sum of benefits of individual participants, whereas this arrangement may but does not have to have a formalised form. The network model or organisations relations arrangement differs from the other one in three aspects. The first one: the previous models focused on exclusive, individual ownership of all or majority of production assets (resources), whereas in the case

of a network model we rather speak about their collective ownership within a network. The second one: in networks we rather rely on market management of resources flow than their administrative assignment. The third one: many currently formed network rather rely on active attitude of participants than on simple fulfilment of the agreement made or of orders.

The managed interviews took place between January and March 2013 on the sample of 50 companies in the region of Komárno. The individual businesses were selected for the sample using the snowball method. The criteria for inclusion into the sample were: a company is a SME, the company exists for at least 3 years, participation in the network, experience with innovation activities in the recent year of operation. Managers responsible for the management of the participation in the network acted on behalf of companies. Individual interviews were recorded and subsequently put into summary forms of contact.

The research methodology applied shows several limiting factors. First of all the research took place as an exploration one, i.e. its objective was to propose the formulation of the research questions which will have to be responded in the future within a more extensive and systematic research. Secondly, the knowledge obtained with regard to the selected method of the sample selection and the data obtaining method selected must be capable of generalisation on the MSB population with prudence.

## 2 Results and discussion

The small and mid-size businesses have a great meaning for the market economy development. In a tough competitive environment the business entities regardless of their size search for opportunities and methods for obtaining or keeping the competitive advantage.

The network business development is supported by the growth of information and communication technologies, information society heading for a knowledge society. They initiate its competitive dynamics, especially in the area of improving the efficiency and innovations.

Within the scope of the first research question we examined the reasons the companies enter into the networks. It seems that one of the reasons is to overcome barriers in the business development (62.3%), especially with the common sharing of information with the objective of penetration into the foreign market (32.1%). Intense support of mutual cooperation, interrelations and making of partnerships is one of the possibilities to continue in developing the sector of small and mid-size businesses. It needs to be stated that just common sharing of information helps the business entities to obtain the information quickly, to reduce expenses and penetrate to new markets.

The penetration of small and mid-size businesses to the foreign markets was examined in more detailed by Mura – Gašparíková (2010). The network business is not only locally within the Central Europe but also worldwide quite a new form of business activities which is growing dynamically. It results from the network business nature that it means the mutual linking of such business entities which are complementary in terms of their activities nature and they jointly overcome the business barriers. The network business may be prosperous on a long-term basis only if the network members contribute equally to the progress and share information with partners.

Other reasons for the creation and development of network business include mainly the costs savings (24.2%), possibility to increase the added value of products or services (13.1%) and elimination of the risk arising from the competition (8.3%).

The globalisation and internationalisation phenomenon stimulates not only the interlinking of economies but also interlinking and creation of intense relations among companies. A business of network nature contributes to the competitiveness on the global market.

The factor of innovations implementation seems to be also important. Up to 83.6% of the interviewed respondents expressed the view that participation in the network increases the SME's ability to innovate. This result agrees with the current scholar's examination of innovations in networks which provide evidence of strong correlation among innovations and SME performance (Gronum, Verreynne, Kastelle 2012).

According to the research the relations in the network are complicated for the SME. The respondents indicated that if companies within the network are quite equal from the point of their performance and resources, the partner approach works. However, if there is one or more quite stronger partners in the network, it often misuses its power. This happens mainly in the network with low degree of relations formalisation. In the network with a dominant participant one has many bilateral relations with many usually smaller participants. In the network of partner participants there is not one participant managing the network's activity, which means, however, that all the partners have the same position. The network is usually controlled by ad-hoc agreement of a part of participants and directed in a way to be able to fulfil the prevailing interest. This form is usually a transitory one and heads for the creation of a network with a dominating participant.

However, the dynamics of relations in networks still remains unclear (Gronum, Verreynne, Kastelle 2012). Majority of researches focuses on barriers the SME must face

(Grabher, 1993; McAdam – McConvery – Armstrong, 2004) at their efforts to enter into the network.

As one respondent has said, the SME enter into the networks with certain expectations, which may be summarily called the expected reward. Specifically in early stages of development the immediate evaluation of the network participant's expected reward seems the key for its further development.

## **Conclusion**

The innovation capability is currently considered as the ultimate condition of competitiveness of all types of companies. The cooperation in a network is one of the current trends in innovations creation, which creates the need for better understanding of the dynamics of relations within networks, mainly in the early stages of operation.

One of the main reasons why the SME enter into the networks is sharing the sources as the starting point for limiting the barriers from the company size and subsequent expansion of the company onto the foreign markets. From the point of dynamics of relations within networks the operation of a network with a dominating partner seems to be problematic.

It is apparent that the network business brings many opportunities at innovations implementation for the entities involved. The outcomes obtained show that from the point of future direction of the research it is needed to focus mainly on the evaluation of directly expected network participant's reward, because just it creates the starting point of a successful participation of the SME in the network.

# Acknowledgement

The article submitted is a part of the research project VEGA No. 1/0381/13 entitled Evaluation of innovation potential of business network in early stages of its formation and it was supported by the Science and Education Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic.

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