Summary:

Nowadays, the notion of innovation is treated flexibly depending on the field in which it is used. The bases of being economically competitive enterprise in the SME sector (small and medium sizes enterprises) are directly initiative and innovation. The author treats enterprise innovation as the ability and motivation to search and commercially use the results of scientific researches.

To be competitive, the enterprises of SME sector should find the support in the universities in order to gain knowledge and innovation as a “driving force of the growth” (in accordance with the document, “Common Actions for Economic Growth and Employment – the New Beginning of Lisbon Strategy”). It is necessary to be a more attractive business partner than other enterprises by means of patents, technology, location, products quality and the ability to buy cheap.

In this article the present stand of innovation management in polish SME based on the research results in the project „Innovation development in the Lubuskie region” (paper’s author was member of group, which realized this project) is presented. The date which was used is from 2007-2008 from Lubuskie region, Poland. Consequently, based on the research results, the model of innovation transfer in SMEs is formulated.

1. Introduction

Small and medium enterprises (SME) in order to be competitive have to implement or transfer innovations. Often, in innovation implementation process, research and development institution are discounted. In this context, innovation transfer process in company is consider as one of the main aim of SME’s.

Innovativeness had already been becoming a priority for the science society, governments and entrepreneurs. The paper mentions why innovation’s transfer in SME is necessary in a changed and enlarged EU which faces global competition. The analysis of innovation
transfer tools based on experience of Lubuskie region (Poland) is presented. This activity would enable SME in Poland to decrease the distance to more advanced economies, allowing it a more effective competition on the European and international scene.

We can notice a market niche in the area of theoretical and practical approach to the innovation management process in the enterprises of SME sector. These enterprises have a decisive role in creating jobs and in more general meaning, they are the social stability and economical development factors. However, they often face difficulties in obtaining the capital or credit at a limited guarantees, which they can provide, as well as with limitations in the information access, especially concerning New Technologies and possible markets. Also, the integration of knowledge and innovation in an enterprise is accepted as a definition of the innovation management process [Dyer J.H., Singh H., 1998].

The researching problem has been formulated: there is a level of innovation in the small and medium-sized enterprise based on the research results. Are there examples of relations between process of introducing innovations and knowledge management in enterprise? Is there any model of innovation transfer in SME?

The second chapter of the article presents the present stand of innovation management in polish SME based on the research results in the project „Innovation development in the Lubuskie region” (paper’s author was member of group, which realized this project). The date which was used is from 2007-2008 from Lubuskie region, Poland.

The third chapter contains characteristics of the model of innovation transfer in SMEs. The summary presents directions of further works.

2. Polish SME level innovation – research result

Additional value for SME can be defined by an effective innovation implementation. Polish middle level management is a basis for accelerating structural changes in the regional economy, as well as it is a crucial factor determining competitiveness. In knowledge based economy, while trying to maintain their markets and access new ones, managers and employees should improve their skills to utilise innovative technological solutions available globally [Drucker P.F., 2000]. Rapid changes require employees to resort to life-long learning. One of the most important civilisation challenges in the information society is to counteract knowledge outdate [Leszczyński Z., Mielczarek-Skowronek, 2001].
So, let us to present the research result of analyze in the project „Innovation development in the Lubuskie region”. The date which was used is from 2007-2008 from Lubuskie region, Poland. The questionnaires have been sent mostly by e-mail to chosen SME as well direct and telephone interviews were conducted. In whole 100 interviews were carried out. In a questionnaire there were presented problems as follow:

- The needs in field of innovation transfer and development in enterprises.
- Cooperations with R&D institutions.

Fig.1, Fig.2, Fig.3, Fig.4 presents the research results.

![Innovation implementation in polish SME, Lubuskie region, 2007-2008](image)

**Fig. 1 Present stand of innovation implementation in polish SME,**

*Source: own elaboration*

There are two possibilities to create an innovation in enterprises. First – realization of EU project and second – to profit by knowledge’s database. The overall objective is the analysis of the financing abilities of innovative projects, especially knowledge’s transfer. The specific objectives are:
• Analysis of the cooperation between SME and research and development institutions (R&D),
• Analysis of the main sources of the innovative projects financing in small and medium enterprises,

There are also institutions that make SME to implement the new knowledge in their structures [Patalas-Maliszewska J., Krebs I., 2008]:
• Centre for Innovation Promotion,
• Regional Contact Points,
• Technology Transfer Centre,
• Technological and Science Park,
• Incubator of Entrepreneurship and Technologies.

![Fig. 2 Cooperation between SME and R&D institution](image_url)

**Polish SME, Lubuskie region, which cooperation with R&D Institution**

*Source: own elaboration*

The cooperation with R&D institutions in innovation’s area declares 46% of respondents. At the same time 84% thinks that there is no reason to formal cooperation. (Fig. 3).
Development of innovation and competitiveness in companies depends on adjusting the education offered by universities to business needs. Factors determining the value of innovation in a company include employees’ knowledge, their skills, abilities, innovativeness, and experience. However, competitive advantage depends actually on adjusting innovation solution to company structures. The analyze attempts to eliminate weaknesses as regards education and develops innovation through preparing infrastructure for economic changes.
and adjusting it to needs that companies have. Entrepreneurs as well as science and research people believe that there is a shortage of transfer mechanisms for innovation, innovation awareness, culture and education. Research under the subject will contribute to increased possibilities for development and improvement of competitiveness of companies and universities by extending the base supporting development of research, innovation, and technologies.

Based on the results presented paper’s author can conclude that the majority of SME has not cooperated and will not cooperate with R&D institution. The chapter 3 shows exemplary shape of the innovation transfer model in SME.

3. Innovation transfer model in SME

It can be observed, based on the research result and literature study, that the main sources of innovation transfer in SME are innovation’s project database – websites, new technologies databases, patents bases [Patalas-Maliszewska J., Krebs I, 2008].

So, the innovation transfer model is formulated. (see Fig. 5):

**The reference model of SMEs:**
- Functionality areas: \( F_n \), where \( n \in N \)
- Business process: \( P_n \), where \( n \in N \)
- Knowledge: \( W_n \), where \( n \in N \)
- The defined criteria of SMEs efficiency for each \( F_n: S_n \), where \( n \in N \)

**Step 1:** Monitoring and analysis of business processes in SMEs:
- Defining of SMEs competence
- Demands of innovations transfer to SMEs: \( I_n \), where \( n \in N \)

**Step 2:** Innovation transfer process in SMEs:
using model bases on collected data to asses and the forecast of innovation transfer

**Determinants of innovations implementation in SMEs:**
- SMEs Knowledge: \( W_n \), where \( n \in N \)
- Clients, Business partners
- Universities
- Innovations Support institution
- Finance institution
- …

**Sources of innovation transfer:**
- R&D institution
- Innovation’s project database – websites
- New technologies databases
- Patents bases

**Data base of values of the characteristics of innovation:** \( i_{i,k} \) in SME for \( k \)-companies \( i,k \in N \)
Innovation is always connected with the knowledge and technology transfer to an enterprise. The notion of innovation is treated flexibly depending on the field in which it is used. The bases of being economically competitive enterprise in the SME sector are directly initiative and innovation. The author treats enterprise innovation as the ability and motivation to search and commercially use the results of scientific researches. Now author's research are focused of literature studies concerning the determinants of innovation transfer process in SME and data collection from SME about value of defined characteristics of innovation.

4. Concluding remarks

Answering the questions asked in the introduction of article can be assume a statement that one of the most important element which can decide about enterprise's competitive advantage is ability to cooperation with R&D institution and transform innovation into new products, services and technologies. The value of the company is being considered in financial aspect. Speaking about profit, turnover and making investments. However more and more often the attention is focused on different aspects of enterprise’s value. Competitive advantage is connected, for example, with ability to quick reaction on market’s demands, more efficient services, designing and putting in to practice new product in a short time. Innovation management is effective process of keeping and sharing important information in a company.
This paper is aimed at new innovation transfer model in SMEs based on the research results in the polish SME, Lubuskie region. In the research to follow it is planned to building of data base of values of the characteristics of innovation: \( i \) in SME for \( k \)-companies \( i,k \in \mathbb{N} \).

References: