INNOVATION - AS A GROWTH FACTOR FOR THE COMPETITIVENESS OF ENTERPRISES IN A UNIFIED EUROPEAN MARKET

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Knowledge-based economy, innovation and technology transfer are concepts developed for trends that are visible in the most developed industrial superpowers of the world. The most appreciation is given to knowledge, information and high skills. In these circumstances, innovation plays the primary role as a source of economic change and development. Enterprises in Poland, being aware of such changes, are also beginning to pay more and more attention to innovative activity in order to compete effectively in the market, either by implementing new processes that will provide a cheaper, or through introduction of new technology products and, thus, becoming market leaders. The countries of the European Union in order to effectively compete in the global market must strive to create the conditions for the development businesses in the area of innovative activity. The Lisbon Strategy is a tool to make the economy of the European Union the most dynamic and the most competitive in the world. The realization of the objectives of the Lisbon Strategy means developing and stimulating entrepreneurship by setting up companies and supporting their activities with particular emphasis on small and medium-sized enterprises. The support is possible due to the European Union structural funds. The above shows the importance of a lot of small and medium-sized enterprises in the economic development of the EU. The basis for the development of the economy is innovation. The acquisition of EU funds by enterprises is carried out to introduce new products, services and technologies. The report "Barriers of cooperation and scientific entrepreneurs", published in November 2006 by the Ministry of Science and Higher Education shows that every year Poland patenting is only 2.7 per million inhabitants, while the average in the European Union is 133.6. Consequently, the scale of innovation in the Polish economy is low. Overcoming barriers to raising funds and drawing the structural EU funds will contribute to reducing the imbalance.

Key words: innovation, entrepreneurship, competitiveness, SMEs, EU funds

The concept of innovation
Building a knowledge-based economy in business enterprises may be achieved through realizing the importance of knowledge, information, new techniques and technology.

The concept of innovation in the knowledge economy changes and is defined in many ways, which results in many definitions of innovation. However, after extended analysis of issues one can come to one conclusion. Innovation is something new.

The concept of innovation was certainly defined by J. Schumpeter, who, as one of the first, argued that innovation is a new combination of existing production factors.

Schumpeter understood the innovation as introducing fundamental or radical changes, including the transformation of new ideas and technological invention into the market, but also as:

- The introduction of a new product or of a new quality of a product,
- The introduction of a new or improved method of production,
- The opening of a new market,
- The application of a new method of sale or purchase,
- The use of new raw materials or half-manufactured goods
- The carrying out of the new organization of any industry.

Finally, according to J. Schumpeter, innovation can vary activities that will be successful. He mentions several ways in which innovation may appear:

- these can be new products,
- new quality of products,
- new production processes,
- new markets,
- new technologies and materials,
- new organizational structures.

More often, however, innovation is defined as an economically successful exploitation of new ideas.

The role of organizational innovation is noted by a significant number by economists; according to them: "organizational change is a response to technical change, while, in fact, organizational innovation can be a necessary precondition for technical innovation."

Organizational Innovation - "refers to the implementation of new methods of organization. These may be changes in the rules adopted by
the action and of the workplace or in the company's relationship with the environment."

Innovation is the implementation of new or significantly improved product (good or service) or process, a new method of marketing or a new organizational method in business practice, organization or place of employment relations with the environment.

According to Peter F. Drucker, who described the innovation "... as a specific tool of entrepreneurs, through which, which is an opportunity to make changes to adopt a new business or to provide new services." According to him, it is economical rather than technical or social. Ch. Freeman argued, however, that innovation can only be seen as innovation, when it is traded. However, the question remains on which the value of innovation can be marked as being traded.

Another definition of innovation is quoted in the document. "Guidelines for Applicants applying for funding under the Sectoral Operational Programme Improvement of the Competitiveness of Enterprises, according to which the innovation must be understood as the work involving preparation and launching of production, as well as preparation for the sale of new or improved products and services (offers) for the placing on the market, or other practical use or the introduction of modernization process of distribution.

A different definition of innovation was presented by G.S. Altshuller, who emphasized the need for creative processes as far as innovation was concerned, and associated innovation with creativity. Innovation, according to him, "is a complex phenomenon and a set of skills, a different way of organizing, synthesis and expression of knowledge, perception of the world and creates new ideas, perspectives, reactions and products".

Another issue that is important to the concept is seeing innovation as a process. Previously unknown product of a company is the result of its innovation. If it is implemented in practice, it is innovation. Innovation is the ability of applying the act of creativity, new ideas, and inventions. Innovation typically involves creativity, but is not identical to it: innovation involves acting on the creative ideas to make some specific and tangible difference in the domain in which the innovation occurs.

Innovation is here treated as a continuum of technical and organizational changes, including, on one hand, simple modifications to existing products, processes and practices (which may be new to the firm, but not necessarily for the industry), to fundamentally new products and processes, on the other hand (which are so new for the industry and for the company). The implementation of innovation requires a series of research as well as technological, organizational, financial and commercial matters. In contrast, according to a manual developed by the Organization for Economic Cooperation and Development, innovation occurs when new or improved product is introduced to the market, either new or improved processes are used in production, with a new product and process - at least from the point of view of the introducer. In accordance with the manual, technical innovation is an objective improvement of the properties of the product or system of supply in relation to the products and processes already existing.

How innovation occurs and, above all, what is innovation? Innovation is the result of three actions interacting with one another.

Firstly, one should gain knowledge, hence show interest, creativity and care.

Secondly, one needs to put theoretical knowledge into practice, and therefore have the ambition and the will to fight for the new.

Thirdly, we must be able to transform the knowledge into a definite action, and that means one must have courage, determination and the necessary financial resources.

As far as innovation is concerned, one usually comes to conclusion: "We do not know what we do not know." If you want to innovate, you cannot rely simply on what you already know. The Light bulb was not invented by the constant optimization of candle wax. New thinking and new ideas were essential, quite distant from accepted until then. Therefore, we are wrong if we believe that we can innovate on the basis of existing knowledge only. What we can achieve while acting that way is knowing what we know, and not knowing what lies beyond our way of thinking. In other words "we do not know what we do not know."

On the other hand, one would define innovation activities differently if considering it from the practical point of view. Innovation activity is the whole of scientific, technological, organizational, financial and commercial matters, which lead to the implementation of new or improved products, processes or services. In a few words, it can be said that it is a change that brings profit. To make it simpler, you can say that sci-
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Innovation and research is transforming money into knowledge, while innovation is transforming knowledge into money. This apparent truth, however, does not seem to be understood both by the government officials, and local government representatives, which results as in declining investment in science and education in our country.

The level of innovation in particular regions is different, and to identify characteristics and factors that increase innovation activities in the regions and the development of certain sectors at the regional level can contribute to a better understanding of the innovation process to build and develop a knowledge-based economy. In fact, in such regions one can identify six vital factors that stimulate innovation.

Firstly: a region should have institutions and organizations from which it would be possible to transfer knowledge and the outcome of scientific research. Transfer of knowledge is necessary in this case, but not sufficient.

Secondly: in the region, there should be pro-innovative environment. This approach will allow the identification of problems and needs, and consequently the use of knowledge transfer will resolve the existing problems.

Thirdly: in the pro-innovative surrounding what really matters is human capital. It is quite obvious that the primary source of innovation in the company is its employees. The whole of the knowledge of the worker is the basis for the existence of a pro-innovative environment. The degree of innovation of the manufacturing process in an enterprise largely depends on human capital.

Fourthly: encouraging pro-innovative actions of employees is an extremely complex task; sometimes the whole system of employment is subordinated to it in this career path and internal encouragement within the organization. The appropriate way of motivating employees allows using their creativity to build innovative capacity of enterprises.

Fifthly: building a pro-innovative region requires support, including financial support from public funds. Reaching innovative solutions is a long term process with a high degree of risk.

Sixthly: a significant role in stimulating innovation depends upon middle-management staff in public administration, local government and enterprises. Cooperation of middle-management staff will help to speed the construction of pro-innovative environment, and thus to achieve the high level of the knowledge-based economy.
In order to be successful in constructing innovative culture we must not forget about a system of incentives. The sources of incentives in companies, but also in the institutions of business environment are: customers, contractors, suppliers, educational institutions, and a range of internal incentives.

Co-operation with the customer can be a good illustration: the principal task of a company from the SME sector is to provide a continuous outlet for their products. It is necessary in order to obtain profit and the profit is necessary to obtain and maintain the company’s earnings to allow further development. The positive impact on the customer guarantees his satisfaction, but, at the same time, it is necessary to offer him such a product, which cannot be offered to him by the competition. Certainly, this must be an innovative product.

While characterizing internal incentives, what should be pointed out is that their existence requires a suitable environment in the enterprise or institution. Innovation in your organization will not be made at the commands of the supervisor; in order to create innovation we must create a set of conditions and, furthermore, be well prepared for the failure at the same time. The risk of management of change is a new concept, but requires a deeper analysis of the organization that is engaged in the implementation of innovation.

Many companies’ experience shows that to change the employee’s attitude to innovation we often need to change the management system in the enterprise.

Whilst the enterprise is joining the innovative activity, it may specify a number of reasons due to which it has taken such a decision.

When building pro-innovative environment in the enterprise one should apply as many instructions of others who have built such systems as possible, and therefore:

- give your employees the freedom of thought,
- make sure to remove all the uncertainties in the organization,
- allow for making mistakes,
- appreciate the innovative ideas,
- suggest the exchange of thoughts and ideas,
- be a leader in innovative ventures,
- engage key customers in the process of innovation management,
- bear in mind that innovation can start from different sources,
- treat technology of the company as property of the whole,
- be prepared for obstacles in the implementation of innovation.

This last warning is extremely important as it presumes a change in the allocation of power in the company, as undermining the position of people with traditional skills, and strengthening the position of those who possess the new ones.

Innovation is the driving force of economic development. Schumpeter defined innovation as "creative destruction". In this spirit, the history of civilization can be seen as a chain of more and more rapidly occurring innovations, one after another.

In the global economy - the knowledge-based, the innovative power of the companies plays an essential and decisive role. During increasingly shorter periods companies must provide new products and services to the market to change and renew the full spectrum of its products within a few years. The pressure put on the market is becoming more and more rapid. On the global market, the one that came as the second is often already lost. The skillful use of knowledge management, in such way that it becomes a significant factor for competitiveness, innovation and planning, implementation, and control over them, is a precondition for future economic success.

**Rudiments of innovation**

By far the most important argument for the crucial role of innovation in increasing the competitiveness of enterprises is the ability to gain priority in the creation of new products and services fulfilling the needs that emerge or to improve the efficiency of meeting the customers’ needs.

Table 1. Sources of knowledge and technology transfer

<table>
<thead>
<tr>
<th>Sources of information, knowledge of purchase and technology</th>
<th>co-operating partners</th>
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</thead>
<tbody>
<tr>
<td><strong>Open source</strong></td>
<td></td>
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<tr>
<td>Internal sources within the enterprise:</td>
<td></td>
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<tr>
<td>Research and development</td>
<td>+</td>
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<tr>
<td>Production</td>
<td>+</td>
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<tr>
<td>Marketing</td>
<td>+</td>
</tr>
<tr>
<td>Distribution</td>
<td>+</td>
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<tr>
<td>Other companies in the cluster</td>
<td>+</td>
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<tr>
<td>Market and external commercial sources:</td>
<td></td>
</tr>
<tr>
<td>Competitors</td>
<td>+</td>
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<tr>
<td>Other companies of the same type of activity</td>
<td>+</td>
</tr>
<tr>
<td>Clients</td>
<td>+</td>
</tr>
<tr>
<td>Consultants / consulting firms</td>
<td>+</td>
</tr>
<tr>
<td>Suppliers of equipment, materials, components, software or services</td>
<td>+</td>
</tr>
<tr>
<td>Commercial Laboratories</td>
<td>+</td>
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<tr>
<td>Sources from the public sector:</td>
<td></td>
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<tr>
<td>Universities and other institutions of higher education</td>
<td>+</td>
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<tr>
<td>National / Public research institutions</td>
<td>+</td>
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<tr>
<td>Private non – commercial research institutions</td>
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</table>
The key issue, therefore, is the answer to the question of from what sources companies should take innovation, innovative ideas, and ideas for new products or services. The answer is simple; in practice there is at least dozen ways to obtain knowledge on this subject. Apart from those specified in Table 1 we can also mention:

**Human capital** - it is almost obvious that the primary source of innovation can be employees of the company. It is their knowledge, both hidden and accessible, that is the source of ideas, of solutions resulting from the daily observation of work of the company. Their ideas included in the most efficient and effective business operations can be transformed into product innovation, technology and organization. Stimulation of pro-innovative activities of employees is an extremely complex task, sometimes the whole system of employment in this career path as well as internal incentives within the organization are subordinated to it. If workers are appropriately motivated then it makes it possible to make the most of their innovation potential. The use of motivation theories in practice, which has been successfully used by a number of entrepreneurs (e.g., Maslow’s hierarchy of needs), brings incredible results. Motivating individual workers, as well as whole employee groups who are expected to build pro-innovative environment is very difficult. In Poland it is even more difficult, since the vast majority of business managers come from the times when hardly any institution of higher education provided lectures as far as human resource management is concerned. It is visible especially in SMEs where managers are people of great professional experience, technical experience, but with the lack of knowledge of the enormous scope of work organization, motivation of employees, economics and labor law.

**R & D** - is a very effective means of obtaining innovation, but in practice used only by large enterprises. This results from the lack of financial resources to such projects in the SME sector. In small and medium-sized organizations, there are often department involved in the organizational activities of research and development, but the effectiveness of these activities is low. This results mainly from the necessity to bear costs while the effects can be uncertain and long-term. SMEs cannot afford such expenses, although they realize that it could be the way to achieve significant success in the field of building pro-innovative environment. Big businesses can afford research and development practices which means that are achieving success in the form of new products, services, technologies or processes, which in turn provide a further success - financial success. Large pharmaceutical organizations Academic model are a good example. The policy of funding research and development is based on important public assets as well, but not everybody is aware of the importance of small, specialized and highly creative research and development, or specialized units within the SME sector. Positive examples are the rules of supporting and funding for research in the field of biotechnology in the U.S., where many ideas come from small companies.

**The market - customers** - the knowledge of customers’ needs, their ideas for new solutions in this area may be a way to raise awareness of the innovation; this will be a simple pattern of knowledge transfer. This will concern mainly organizational innovation and marketing, especially in the direction of getting to know the needs of the client, and, as a consequence, of better positioning the product on the market. Gathering information on your product from the market is especially visible in recent times,
mainly due to facilities that bring together information technology (internet).

**Actions of competition** - in a free market economy, competition, widely speaking, means rivalry; competition is regarded as a process through which various groups struggle for gaining its place in the market; thus, it leads to the elimination of the weaker, while it allows stronger leadership to build up to the best position and acquiring the most absolute market. Today, competition is considered the most important mechanism which leads to promotion of the most favorable ideas in terms of economic criteria. Knowledge of the workings of competition triggers defense which is basically the use of solutions other than the competition, with the result that they are, in general, pro-innovative solutions. Competition is an important source of information about innovation. Observations of activities and competition in virtually every industry and enterprise is practiced, and often results in coming up with pro-innovative actions. The motivation is clear, eavesdropping competition means that we will not fall behind our competition, sometimes even winning the race for customers.

**Pro-innovative business environment** - innovation business environment is made up of four systems, which include:
- Access to information for entrepreneurs,
- A network of institutions active in promoting innovation,
- Pro-innovative educational system,
- Pro-innovative actions of the regional authority.

For the realization of the activities from this issue of great importance are local business organizations, NGOs and the mass-media. In many cases, it involves a change in social attitudes, to creating a pro-innovative. The system of universal access to information for business consists of the following elements:
- Developing a network with access to scientific information, technical, technological as well as the inclusion of public libraries to the system of innovative information,
- Creation of regional networks to ensure high quality information content and the use of information resources on-line,
- Implementing integrated information system, allowing efficient communication between the units of local authorities, enterprises, universities, public bodies,
- Organization of pro-innovative events - trade fairs, seminars, conferences as the exchange of thoughts, views on the innovation behavior. This is the place to see new products, ideas, trends, often in international release.

**Research – development units** - a number of separate institutions conducting research funded mainly from public resources. Potentially, they may be a good place for obtaining innovative solutions, especially for larger companies, owing to the issues which they deal with. These include the entire network of PAN units, although working with small and medium-sized enterprises in their case is rather poor.
Technology Platforms - databases - created as part of a network of institutions active in promoting innovation and supporting the search for new solutions. They are created by many organizations from the international level (e.g. Europe - the IRC), through government, or regional centers, such as the Transfer of Technology Centre.

Conclusions
1. On a macro-scale, as far as development of innovative entrepreneurship is concerned, are difficulties in obtaining funds from the European Union for this type of projects. Bureaucracy procedures for obtaining assistance from the European Union, to a large extent, hamper the development of entrepreneurship based on knowledge transfer, innovation and technology.
2. Strong barriers to the raising of the Structural Funds by SMEs on the development of innovative entrepreneurship
are - financial barriers, specifically lack of financial resources for investment co-financed by the European Union.
2.1. As far as the conduct of the application process is a major problem - too many attachments in the competition as well as unclear guidelines.
2.2. Under the contracts for funding is a strong barrier - too long to wait for the funds.
2.3. According to respondents, in order to facilitate the process of applying for funds from the European Union for entrepreneurs from the SME sector should be - to simplify the application forms for structural funds.
3. Definitely, we should - raise the level of knowledge of the beneficiaries - businesses on the EU funds, mainly in terms of opportunities, and benefit from the funds for SMEs in the proper use of financial assistance received from the European Union, including the development of innovation.

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