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# ENTERPRISE: PERFORMANCE AND BUSINESS PROCESSES

**INNOVATION MANAGEMENT IN  
ORGANIZATION**

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**Abstract:**The authors of the article present issues relating to innovation management in organisation. They discuss factors that determine making innovative decisions as well as new strategy, i.e. Europe 2020 that may be an opportunity to redefine Polish innovation policy and a chance for Polish enterprises to develop. The authors emphasize a fundamental role of capital in financing innovative activity conducted by enterprises, and present one of models for the implementation of public and private capital in financing this sphere.

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## Introduction

Basic organisation (enterprise) does not have sufficient knowledge, qualifications and resources that are essential for creating value together with consumers. Ways (methods) of approaching the creation of innovation and value require organisational skills that allow enterprises to provide the continuity of innovative activity. In order to manage innovation successfully and effectively, managers should constantly think about innovations, seek capital to finance them and behave in a certain way to mobilise their organisations (Prahalad and Krishnan 2010).

The EU strategy - Europe 2020 - emphasizes a need for the so-called smart growth, i.e. actions aimed at enhancing the role of knowledge and innovation as the main driving forces behind development in the future. In other words, actions taken to improve the quality of education, intensify research activity, absorb and support the (diffusion) of innovation and knowledge as well as use information and communication technologies efficiently (Janasz, 2011). Europe 2020 strategy provides for smart and sustainable growth, more jobs and higher standard of living, which should foster social inclusion and define trends in the development of organisations and societies.

The implementation of national strategy entails the necessity to define method for financing the actions to be taken as part of this strategy. Certain

undertakings require enterprises, central and self-government institutions, employees and employers to be particularly active. The expected rate of economic growth requires considerable capital expenditure that may be financed from enterprises' own resources, credits, as well as public resources, including foreign funds (Janasz, 2010).

Both taken individuals and social groups into account, innovativeness is determined by social norms and organisational culture. It is connected with social capital and particularly with the so-called creative social capital. Activity conducted by enterprises on global market requires them to use the notion of innovative capital. It is characterised by a certain set of institutional and behavioural factors typical of individual, organisation, markets and societies.

The article is aimed at presenting the process of innovation management in organisation (enterprise) that operates on European market (currently undergoing integration), with special reference to issues relating to financing innovative activity conducted by business entities. It is worth mentioning that the aforementioned issues have become particularly important to researchers who focus on innovative processes occurring all over the world. Although there are a number of publications concerning the matter, it should be emphasized that the problem of innovation funding and all the related aspects have not been examined adequately so far. No universal theoretical and methodical approach has been defined in this scope. After all, the identification of specific qualities of mechanisms that govern the financing of innovative activity, their requirements and proper capital structure provide basis for improving the competitiveness of the entire economy.

It is relevant to address the aforementioned issues since willingness to introduce innovations in organisations as well as ability to create, absorb, diffuse and transfer these innovations are still unsatisfactory, particularly in the Member States situated in Central Europe. Furthermore, the range, scale and level of innovation are lower compared to the developed countries.

### **Innovative decisions in organisation**

Strategic character of innovations stems from their changeability, increasing rate of these changes, dynamism, the fact that enterprise is concerned about its future, synergic interrelationship between particular innovations, and finally – their economic efficiency. On the other hand, multi-faceted character of innovations results from their interpenetration and cooperative relations (Janasz, 2010).

Every business entity takes a number of complex actions aimed at attaining strategic objectives. These goals certainly include pro-innovative activity that involves the creation and introduction of innovations allowing to gain competitive advantage. This activity together with the accomplishment of the aforementioned strategic objectives will contribute to market success. Both various manifestations of pro-innovative activity as well as its results depend on a number of factors (e.g. Janasz and Koziol-Nadolna, 2011). Increasing number of innovative decisions stems from certain incentives and determinants that are changeable and affected by turbulent environment. As it has already been stated, strategic decisions are one of the main sources of

competitive advantage gained by business entities. In order to develop, a given entity needs innovations, i.e. new products (services), new technologies, organisational systems and new markets. Due to Poland's accession to the European Union and increasing globalisation, innovativeness of organisation should be subject to development aimed at improving the competitiveness of the entire economy, achieving economic growth and increasing the level of prosperity in society. Factors determining innovative decisions may have both positive and negative effect on innovative activity conducted by enterprises.

Innovative decisions are about the future. It is necessary to forecast changes that are going to occur on the market. Innovative resources are allocated in market economies mainly under the influence of market impulses. This is achieved thanks to the formation of prices of different goods and the creation of conditions for competition. The latter has to some extent effect on the level of profit as well as produces the flow of financial and real capital between various spheres. The influence of the market on innovative activity is observed when market impulses are reflected in strategic decisions made by innovative business entities (market equilibrium, prices and interrelation between them have the character of external parameters). At the same time, it should be noticed that a number of theoretical analyses and experience gained by particular market economy countries confirm that market mechanism does not always provide innovator with correct information about future trends and certain innovative projects. This stems from the fact that market mechanism characterizes current conditions of management whereas innovative decisions refer to future needs (sometimes distant ones) that may alter the deadlines for economic agreements (innovations of strategic and structural importance, in the scope of environmental protection, public health, technical infrastructure, community facilities, national defence, etc.).

Accurate innovative decisions are taken when situation becomes evident. It is a function of the number and quality of information items that one has gathered about economic and socio-political processes as well as level of changeability and lack of coherence between internal and external conditions for action. As a result, innovator (decision-maker) takes decisions aimed at:

- generating a long-term and satisfactory profit, taken account of risk assessment and portfolio of innovative options developed on this basis,
- maximizing the market value of innovative undertaking,
- In Poland, sustainable and competitive market is the main stimulus of innovative decisions during the period of systemic transformation. This market is the final verifier of the aforementioned decisions. Such a situation occurs when the market determines:
- necessity to adopt new scientific and technological solution,
- direction of structural and technological solutions for particular sector of economy,
- the period during which it emerges on the market,
- method for placing it on the market,
- scope and scale of the distribution of a product (service) newly placed on the market,

- deadline after which a given product is withdrawn from the market and replaced with a new one.

Taken the reasons behind innovative decisions into account, users play more and more important role. The users are particular members of "value chain" and consumers (Hippel von, 2007) as well as human factor (know-how, information) in relation to the so-called hard factors. As it has already been noticed, all these changes are sometimes referred to as the creation of a new economic paradigm, i.e. "open innovation" (Mirowski and Sent, 2007). Each of the aforementioned factors determines innovative decisions, although entrepreneurs may also exert an effect on consumer buying behaviour. Eventually, producer has to comply with client's will and produce goods (services) that satisfy his/her needs at a given moment (see Noga, 2009). Therefore, consumer (customer) preferences are major factors determining innovative decisions, which is also the case with the life cycle of products (services) on a given market. Innovator has to consider the fact that most products go through four stages in their life cycle on the market (introduction, growth, maturity and decline). Subsequent stages in the life cycle of products entail different intensity of innovative decisions.

### **Innovations in economic strategy adopted by the European Union**

It was in 2010 when European Commission ceased to analyse the 2008 financial crisis and began to define new challenges. Europe 2020 has become a flagship document concerning the new strategy and policy pursued by the European Union in the light of new challenges (see Meeting the Challenge of Europe 2020, 2011). One of demands defined in the Lisbon Strategy is also included in the document under discussion, namely the goal of investing 3% of GDP into research and development by 2020 (EC, 2010).

New pro-development instruments, mentioned in Europe 2020 strategy, provide among other things greater support for activity conducted by private research and development centres, and take account of the Innovation Union project treated as the concept aimed at improving the conditions and availability of R&D funding (Ołędrowicz, Krupowicz, 2010). According to this concept, new ideas and innovations should effectively translate into new products, technologies and services. This will lead to innovative dynamism, facilitate economic growth, sustainable development of organisations, and thus the creation of new jobs.

The strategy "Europe 2020" proposed by European Commission includes the following suggestions concerning innovative solutions for financing "smart growth" (Ołędrowicz, Krupowicz, 2010):

- efficient use of the EU expenditure in order to implement the aforementioned strategy; the use aimed at reducing the fragmentation of the EU financial instruments (for instance research and development, innovation, investment in low-emission technology, cross-border transport and power distribution networks);
- development of new financial instruments, particularly those created by private sector in cooperation with European Fund, European Investment

Bank. Furthermore, EC intends to accumulate extra capital for financing innovative and dynamically developing business entities;

- generating effective European venture capital, which should provide business entities with increased direct access to capital markets, and motivate funds from private sectors to finance the formation of innovative business entities;
- improvement of the conditions for conducting innovative activity by organisation (among other things, formation of patent court, the EU unitary patent).

It is worth emphasizing that smart and sustainable growth implies economy based on knowledge and innovations. Therefore, this comes down to attaching more profound significance to knowledge and innovations as driving forces behind future development. All the actions projected in the European Union should be characterized by a limited number of quantifiable objectives and become a part of leitmotiv. The leitmotiv is in fact smart and sustainable growth aimed at fostering social inclusion. The path to sustainable development requires certain conditions and determinants, i.e. entrepreneurship, financial resources – capital, consumer needs and opportunities provided by the market.

### **The concept of capital for financing innovative processes**

Experience gained by highly developed countries proves that innovations are driving force behind every economy, which determines the potential for growth in a long-term perspective. There is a positive relationship between the intensity of investment in research and development as well as level of economic development and competitiveness of economy. At the same time, the economies of countries with the greatest intensity of investment in R&D are the leading ones on a global scale\*.

The implementation of innovative undertakings, which enables enterprise to develop and increase its value, requires capital to finance these investments. Influx of capital into a given enterprise is possible when potential investors are inclined to believe that capital investments will produce the expected rate of return and thus accept the business-related risk.

Every enterprise seeks capital. Financial decisions play a leading and integral role in the process of management. The process of financing involves all undertakings implemented by enterprise that have generated capital and shaped the structure of the sources of financing in certain market conditions. One cannot indicate the best and universal way of financing innovative activity in enterprise. This is particularly difficult if capital that enterprise attempts to raise is to finance innovations. No particular model for financing this type of activity has been developed so far.

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\* Finland, Japan, the USA and Germany are among these countries.

Despite larger contribution of various financial resources, the level of innovativeness in Poland is still insufficient which is due to, among other things, underdeveloped legal regulatory framework. However, major problem is the lack of proper system of financial instruments (system of financing), which stems from insufficient contribution of private capital to innovation funding. In Poland, only 1/3 of funds for research and development are collected from private capital, and as many as 2/3 – from the budget. In the West, for example in the United States, Finland, Sweden, Germany, the structure of financing is totally different and Polish economy should aspire to such a model for financing innovative undertakings. The concept of funding for innovative projects makes it relevant to adopt so-called *financial engineering*, i.e. funds collected from different sources. A complementary principle is the programming of social partnership, i.e. cooperation between private and public bodies as well as integrated approach, which results from the lack of effective system for innovation funding in Poland. The success of innovation is determined by the creation of proper model of funding as well as specific relationship among particular entities (administration of the state, economic regions, enterprises, supranational relations) (Janasz K., 2012).

There are many types of financing. They are subject to various classifications based on different criteria. The literature on the subject provides a number of classifications presenting factors that may have effect on the selection of the structure of funding for innovative processes taking place in enterprise. These factors are, for instance:

- availability of capital sources - not all sources of financing are available to particular enterprises (formal and legal requirements)
- profitability achieved by enterprise - its level determines the potential that a given entity has for accumulation
- cost of capital rising
- selection of taxation system for a given business activity
- financial risk.

Lack of capital is commonly considered the main barrier to the innovativeness of enterprises in economies undergoing transformation. On the other hand, every innovative undertaking, to which capital is committed, requires proper legal environment and clear (not raising any doubts) definition of rights, obligations and relations among participants in innovative process. Legal environment may foster or hinder the development of all investment projects. If legal regulations entail additional provisions (leading to increase in the cost of investment and greater project-related risk), investors will be very reserved in deciding to invest capital in such undertakings.

In order to conduct and develop innovative activity, one needs financial resources to which enterprises still have limited access. One of golden opportunities may be the creation of proper model for innovation funding, i.e. financial engineering that may play a fundamental role in collecting resources for such an activity in the future. Therefore, it is worth informing Polish entrepreneurs and enterprises about benefits accruing from funds raised thanks to financial engineering.

## **Financial engineering in the management of innovative activity in organisation**

It is beyond any doubt that Polish economy needs a model (or models) for financing innovative activity that will enable Polish enterprises to develop dynamically. Proper model for financing, i.e. financial engineering, may stimulate the economy through investments in innovation, support enterprises with large potential for development as well as encourage to set up new and innovative firms. Such engineering can be extremely useful in supporting sustainable economic growth, creating new jobs and stimulating innovativeness. One ought to establish a proper framework for its functioning so that it could be adopted in an optimum way. The engineering under discussion should allow to finance research as well as purchase technology, machinery and knowledge from external sources. What is more, it should be supported by favorable legal and tax regulations. Only developed in such a way, financial engineering might become a driving force behind research and innovative activity, improve the transfer of knowledge by popularizing entrepreneurial attitude and finally facilitate the access to modern technologies and services. It should be a system of incentives and benefits for newly established and innovative enterprises. And last but not least, the engineering in question ought to reward readiness to take financial and economic risk at the initial stage of business development (Janasz, 2012).

The law should eliminate restrictions resulting from the size of enterprises and remove bureaucracy that is always limiting the effectiveness and positive influence of such initiatives.

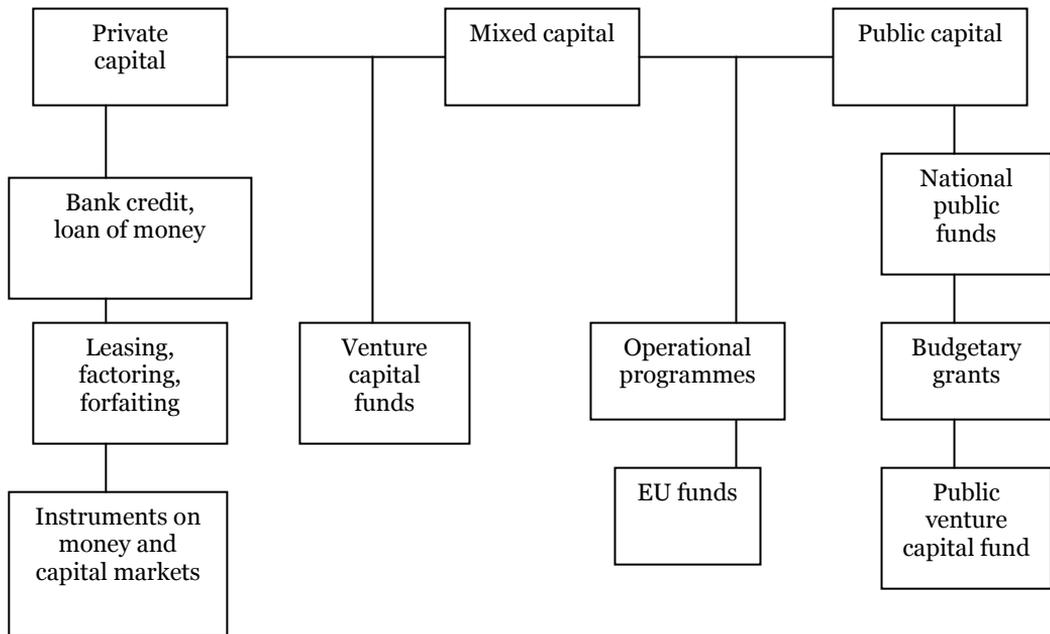
Public funds and resources ought to be invested only in the case of actual equity gap in funding from private sources. Public funds should be committed via the existing systems based on market mechanisms, i.e. private equity fund. It is advisable to create public venture capital fund with certain tasks and role, and financial resources ought to be spend only on objectives established in a given Act. Furthermore, funding from public capital should be reduced to less than 50% of the total investment value. Project financed in such a way should be assessed and monitored carefully at every stage of its implementation.

While creating proper model for financing innovative activity conducted by enterprise, one should pay attention to the type and category to which this activity can be assigned. Every component of innovative activity needs a different structure of funding. The use of a particular form of financing depends on the stage in the development of innovative project. With regard to project life cycle, the following phases ought to be taken into consideration (the division does not refer to R&D activities):

- project research
- prototype
- project verification
- patent
- implementation and commercialization.

Each stage in the development of innovative project requires a certain form of funding. A general scheme of financial engineering is presented below.

FIGURE 1. MODEL OF FINANCING OF INNOVATIVE PROJECT



Source: Author's elaboration.

State support for new and innovative firms is particularly significant in the case of financial engineering. Apart from the creation of public venture capital fund, this support may be provided in the form of tax relieves and exemptions for enterprises undertaking research and producing innovative ideas. Needless to say, whether such tax deductions are plausible depends on the state of public finance which is not very good in Poland lately. Nonetheless, it is essential to make a courageous and strictly political decision to make this type of financing priority as it is crucial for improving the competitiveness of Polish economy on global market. Yet, it is obvious that the effectiveness of tax relieves depends on their availability to all entrepreneurs.

There is no such thing as perfect model for financing innovative activity or the one that can be implemented in every economy (Polish as well) without effort. The model in question must consider geopolitical position of a given country, financial system adopted by this country, economic development, the functioning of financial market and taxation system.

Obviously, the model and concepts of financing innovative activity conducted by Polish enterprises are just a suggestion aimed at streamlining the process of innovation funding, and most of all finding optimum method or model for financing this type of activity. The development of proper financial engineering is an opportunity for Polish enterprises seeking capital for their innovations.

## **Conclusion**

Innovation management in organisation (and particularly the problem with innovation funding) is the issue relating both to theoretical sphere as well as business practice. This question has not been solved yet. However, it is beyond any doubt that the knowledge of capital theory, its structure and forms is a factor contributing to the creation of proper model for financing this type of business activity. This factor may become the main driving force behind the development of Polish economy and allow our country to attain the level achieved by the industrialized countries in Europe.

Issues relating to the development of optimum model (models) for financing innovative projects have a complex character and despite both theoretical and empirical achievements, they are still subject to discussion. Poland's accession to the European Union imposed certain obligations on our country in the form of strict requirements and new challenges so that enterprises and the entire economy could adjust to European standards. This obviously entails the necessity to constantly enhance the effectiveness and competitiveness of the economy. Undoubtedly, innovations favour the accomplishment of these objectives and are significant to stimulating economic growth.

The strategy "Europe 2020", announced in Spring 2010, is aimed at growth based on knowledge and innovations, enhancing production efficiency and improving the competitiveness of European economies. However, the main driving force behind actions is not the success in the competition with the United States as the leader, but fear of enormous scientific and technological power of the People's Republic of China.

It is worth emphasizing that economic power held by enterprise is always based on its financial activity the effectiveness of which is eventually expressed in such provision of capital that will not only protect it from the loss of financial equilibrium, but most of all will be a driving force behind development, and particularly - innovative development.

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