

Innovation in Organizations

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Abstract: Innovation is an integrating part of the re-vitalization plan of EU economy and it is one of the seven initiatives comprised in the 2020 Europe Strategy. The European Union supports through active policies the creative-innovative processes, as illustrated by the Cohesion Policy Program for 2007-2013 and by the "Horizon 2020" Program for Research and Innovation. The present paper presents, from an organizational perspective, relevant aspects related to the question of innovation and innovation management, while pointing out the most important internal and external factors that favour the introduction of innovation into the sphere of processes that are run by organizations, as well as into the sphere of products and services provided by organizations. At the same time, the paper briefly presents the essential attributes of organizations which obtain competitive sustainable advantages through innovation.

Key words: organization, innovation, management of innovation, contextual factors, intra-organizational factors, competitive advantage.

JEL Classification: D83, L21, L25, O31, O32.

1. Introduction

Innovation was one of the main topics approached at the 6th edition of the World Science Forum held at Rio de Janeiro on 24th-27th November 2013. Thus, the "Declaration of the World Science Forum" presents five recommendations, of which two refer to innovation activities [9]:

- ▶ training for reducing inequality and promoting sustainable science and innovation worldwide;

- ▶ ethical and responsible attitude in research and innovation.

At EU level, Europe 2020 Strategy is structured on three main pillars, i.e. intelligent growth, sustainable growth and enlargement growth [2].

Intelligent growth implies reinforcing knowledge and innovation as essential vectors for society and economy-based knowledge. In order to achieve this objective, the European Union, through its institutions, attempts to improve the quality of educational systems, to increase performance in the area of research, to promote innovation and knowledge transfer within the EU space and to enhance the entrepreneurial spirit, which is centred on market opportunities and the users' needs etc.

Innovation is an integrating part of the revitalization plan conceived for EU economy and it is one of the seven initiatives comprised in Europe 2020 Strategy.

The objective of this initiative is represented by the orientation of the research & development and innovation policy towards the challenges of contemporary society, such as climatic change, energy and the efficient use of resources, health and demographic change.

For the last years, the European Union has supported through active policies creative-innovative processes, as revealed by the Cohesion Policies Program devised for 2007-2013. Being an essential element of this program, innovation is supposed to have ensured sustainable development; consequently, 25% of all the structural funds were allotted to the Agenda for Innovation, which includes: research and innovation, ICT exploitation (Information and Communication Technologies), measures for enhancing the entrepreneurial spirit, as well as innovation at the workplace.

In 2013 the Program for Research and Innovation "Horizon 2020" was adopted; this program is a financial instrument used for implementing the Initiative "A Union of Innovation" within the reference period of 2014-2020 [10].

The Program "Horizon 2020" is mainly meant to reinforce the scientific and technological basis by creating a European Area of Research, within which researchers, scientific knowledge and technology may freely circulate.

Similarly, the Program for Research and Innovation "Horizon 2020" is going to support the development and implementation of the public-private and public-public partnerships, including the European Platforms for Technology, the Joint Program Initiatives and the European Partnerships for Innovation [8].

Benefiting from a budget of 70 billion of Euro, allotted for 7 years (2014-2020), "Horizon 2020" is the most important program of research and innovation in the world if we consider the fact that the precedent multiannual Framework Program (FP7) has benefited from a budgetary allotment of 53 billion of Euro for 2007-2013.

2. The concept of innovation.

Innovation management

The innovative potential of organizations is determined by the creative potential of the personnel, the competence of the managerial team and the existence of mechanisms that support the application of the new ideas, respectively their transformation into competitive products and services. The development of the creative and innovative potential of human resources within an organization is accomplished through the recruitment, adequate training and on-going specialization thereof.

Creativity is the capacity of human resources to identify new solutions for current problems, whereas innovation is the process whereby an idea is transformed into utility and is launched on the market. Consequently, creative and innovative activities are interdependent.

Given the importance of creative-innovative processes within the context of knowledge-based economy, we appreciate that it is absolutely necessary to have within the organizational structure of companies a department that is meant to plan, organize and develop innovation.

Moreover, it is necessary to apply management methods and techniques in the sphere of creativity and innovation. Due to the development of present technology and the increase of the funds allotted for research and innovation, the relation between the inspiration and the effort used to accomplish a new product or service becomes even smaller. Under these circumstances, creativity and innovation management must be directed towards the transformation of ideas into

products, services or combinations thereof.

From a managerial point of view, innovation can be defined as a process that implies a multitude of activities that are accomplished by a range of actors coming from one or more organizations, through a whole set of new combinations of means and/or goals, which aim at growth and/or the adoption of new products and services, which are developed and/or executed and/or implemented and/or transferred towards partners coming from old and/or new markets [4].

Managerial innovation poses a series of particular features, of which we mention: its object is represented by human activity; it has a multidisciplinary nature because it implies the settlement of economic, technical and human problems; managerial innovation is subject to a rapid moral usage rhythm due to the large number of dynamic variables on which it depends; it is the result of team work due to the variety and complexity of the elements involved in the managerial processes.

Innovation management has been defined by Sandrine Fernez-Walch and François Romon as "a set of actions performed in an organization and a set of options expressed in order to favour the emergence of innovation projects, to decide the launching thereof and to accomplish the trading of new products or the implementation of new processes for increasing competitiveness" (our translation; the original text is: „ansamblul acțiunilor întreprinse într-o organizație și al opțiunilor efectuate pentru a favoriza emergența proiectelor de inovare, a decide lansarea lor și a realiza comercializarea noilor produse sau implementarea de noi procese, în vederea creșterea competitivității") [3].

From the perspective of the final goal of the innovation process, innovation

management may be approached as a process that aims to identify, organize and allot available resources - human, technical, economic ones – in order to acquire new knowledge, to come up with ideas that allow for new products and services to be obtained and modernized, through the transfer of the best ideas into the sphere of production and commercialization [5].

The British standard BS 7000-1:2008 is a guide in the area of innovation management and it particularly refers to the design and development of competitive products [1]. The general principles of innovation management that are comprised by this standard may be applied both in economic organizations (firms), and in public organizations (institutions and public authorities), as well as in non-profit organizations. This standard offers indications that are structured onto three main coordinates:

- innovation management at organizational level;
- performance within innovation management processes;
- instruments and techniques used in innovation management activities.

The management of creative-innovative activities should be an important part of the development strategy for an organization; it should have clearly defined objectives, with clearly outlined strategic options, with allotted resources, as well as with realistic initial, intermediate and final terms.

3. Factors that favour innovation

Factors that favour innovation in organizations, i.e. the introduction of the novel element into the technical, technological and managerial plan, may be organized in two

large categories:

- factors related to the organizational environment (contextual factors);
- factors related to the internal environment of the organization (intra-organizational factors).

Of the contextual factors that help organizations acquire innovation and promote the novel in the processes they perform, as well as in their products and services, we mention [6]:

- the imperative need to develop or at least to maintain their position on the market (organizations must comply with the exigencies imposed by the ones who express demand by offering new or modernized products and services);
- market demand to diversify production (most companies resort to diversification strategies and, more rarely, they modify their activity profile);
- compliance with norms imposed by government, legislation, social demand (for the last years the most frequently modified norms have been the ones that refer to environmental protection, particularly to the products offered by enterprises that are active in chemical, pharmaceutical and car industry);
- increased prices for raw materials and energy (due to this state of facts, organizations are bound to modernize the technology they use or to adopt other technologies and, at the same time, to re-design certain products);
- harsher competition on the market (in order to remain competitive, an organization must permanently take into consideration the strategic actions

adopted by competing firms as regards the technology, prices and the distribution channels that they use, as well as the promoted marketing strategies and policies that they resort to etc.);

There are other contextual factors that bring innovation in organizations, i.e.:

- enhanced quality of products and services on the market;
- new competitors on the market;
- Internationalization of economic activities;
- Proliferation of equipment and symbolic products (cards, electronic trading, electronic banking, IT programs etc.);
- the new knowledge-based economy regarded as a whole.

Intra-organizational factors that favour creative-innovative processes are, basically, the following ones:

- the development strategy of the organization (which is based on a strategic vision of the managerial team and which emphasizes the creative-innovative potential of human resources, regarded as a main vector for obtaining the competitive sustainable advantage);
- the promoted managerial style (it is recommendable to adopt a proactive, flexible and innovative management);
- the system of objectives in an organization (e.g., entering a new market, developing new products or services, diversifying products, specializing certain products or a single product etc.);
- organizational culture, which in time cultivates good practice in the area

of innovation and which at the same time borrows good practice that has proved to be workable and efficient in other organizations;

- plain and flexible organizational structure and, if possible, with few hierarchical levels;
- the managerial instruments used in an organization (promoting a mix of managerial systems, methods and techniques, of which we mention: management through objectives, management through projects, product-centred management, budget management, total quality management, management of profit centres, diagnosis method, scoreboard, methods for simulating the creative-innovative potential of human resources etc.).

4. Competitive advantage

At present, creativity and innovation are important sources for the competitive advantage that may be measured at national, organizational and individual level. In fact, the efficiency of an organizational strategy is illustrated by the competitive advantage that one can win and that, basically, consists in creating a product or a service which is different thanks to its characteristics from the other products and services that are offered by competing firms. The strategic option that a company may use is, in fact, the source of competitive advantage. An essential condition for maintaining organizations in the sphere of economic and social efficiency is to obtain a competitive and sustainable advantage. Creativity and innovation are, in our opinion vectors that ensure a sustainable competitive advantage.

A new and improved product or service, a new or modernized technology, a new managerial method or a new organizational technique, which may improve organizational processes, are the result of creative-innovative activities and, at the same time, a source for competitive advantage in a more and more complex and competing business environment [Figure 1].

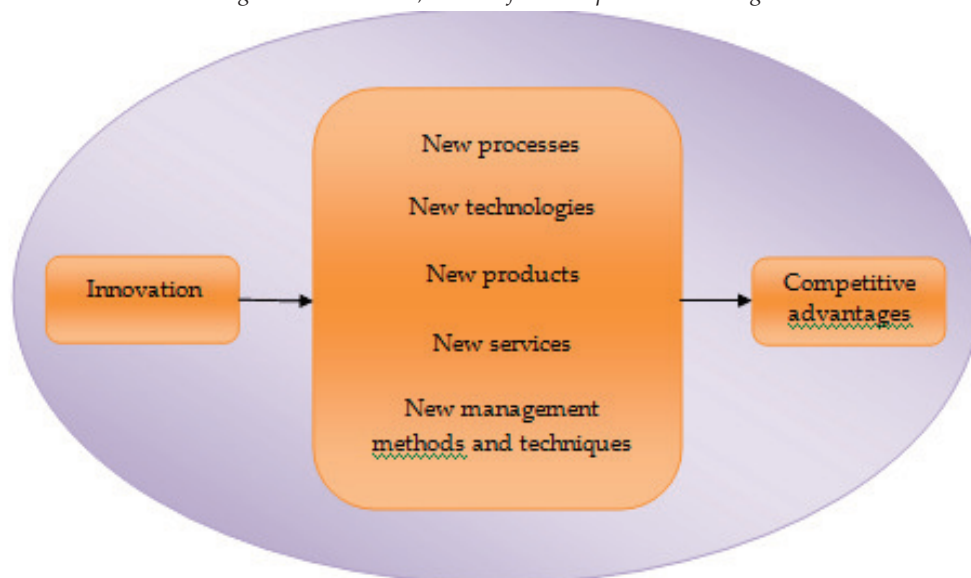
Due to the internationalization of the economic activities, firms must obtain competitive advantages both at national, and

at international level. Thus, M. Porter considers that there is a close link between the national and international competitive

advantage, a fact which may be explained thanks to the connections which exist between the economies of different states [7].

Coordinates that define the national economic environment significantly influence the possibility for a firm to obtain a competitive advantage. A dynamic business environment that is favourable from a legislative point of view determines organizations to act rapidly and efficiently when they compete with other firms, while modernizing their technologies and permanently enhancing their systems of management and offering products and services that satisfy the higher and higher expectations of consumers.

Figure 1. Innovation, source of the competitive advantage



The innovative organization is the one that obtains competitive sustainable advantages through innovation projects and activities from a technical, technological and managerial point of view. In consequence, the innovative organization is a knowledge-based organization and it presents the following essential features:

- the knowledge and competence of human resources is the main class of organizational resources;
- the processes and performed activities aim at producing, developing, accumulating and transferring knowledge;
- the knowledge and competence
- mastered by human resources are the

main factors that bring a competitive advantage;

- ▶ a knowledge-based organization is an organization that learns;
- ▶ a knowledge-based organization is a sustainable organization (it generates long-term performance; it is integrated into the economic, social and ecologic environment; it capitalizes in a superior way all categories of resources - human, material, financial, informational, knowledge etc.; it constantly creates competitive advantages in relation to competing companies).

5. Conclusions

For the last few years, the European Union has supported through active policies creative-innovative processes, a fact which is illustrated by the Cohesion Policy Program for 2007-2013 and, respectively, by the Program for Research and Innovation "Horizon 2020", „which is a financial instrument for implementing the Initiative known as "A Union of Innovation" for 2014-2020.

With a budget of 70 billion of Euro allotted for 7 years (2014-2020), the Program "Horizon 2020" is the most important

research and innovation program that has ever existed; the precedent multiannual Program - Framework (FP7) – benefited from a budgetary allotment of 53 billion of Euro for 2007-2013.

Management of innovation activities may be approached as a process that aims at the identification, organization and allotment of available resources - human, technical, economic ones – with a view to acquiring new knowledge, generating new ideas that facilitate the creation of new or modernized products and services thanks to the transfer of the best ideas into the sphere of production and commercialization.

The contextual factors that determine organizations to initiate and develop innovative projects are: the market position, the demand of the market for production diversification, observance of norms imposed by the government, legislation, social demand, intensification of competition on the market, enhanced quality in products and services, new competitors etc.

The most important internal factors that favour creative-innovative processes within organizations are: the development strategy, the promoted managerial style, organizational culture, organizational structure, as well as the instruments used by its managerial team.

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