ORGANIZATIONAL INNOVATIONS. QUALITATIVE GUIDELINES IN THE COMPANY’S ECONOMIC DEVELOPMENT


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Abstract:
Organizational innovation represents the implementation of significant changes in the structure of the company or in the management methods with a view to improving the already acquired knowledge, the quality of goods and services or the efficiency of the workflows.

Innovative companies are enterprises which have launched new or significantly improved products (goods or services) on the market or which have introduced new or significantly improved processes or new organizational or marketing methods. Not only do these companies improve or modify what already exists, but they also try to create new special values and satisfactions, new configurations – more productive, more efficient ones.

An innovative company is open to innovations and perceives the change as an opportunity rather than a threat. The article brings forward the need for innovation within organizations, pointing out through a case study the importance of minor ideas that represent the key to create the long-term competitive advantage leading to greater ideas.

Key words: innovation, strategy, research, awareness, risk, organization

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1. Innovation in Europe

According to an EC report, Europe needs to invest more and in a more “intelligent” way in research and development both in the public and private sectors in order to be able to get out of the current economic crisis as soon as possible. In this respect, the report concludes that it necessary to intensify cooperation in the field of research in the UE and internationally, as well as to make better use of the research results through a more effective protection of the intellectual property.

More “intelligent” investments
The countries with the highest level of performance in terms of innovation have focused their investments on smart specialization strategy which combines the supply stimulation policies (such as public subsidies for higher education, research and development for enterprises, risk capital and scientific and technological infrastructures) and demand stimulation policies (such as public procurement of innovative products, standardization based on performance and the procompetitive regulation of the product markets).

The training of highly qualified personnel must meet the business needs

Only 46% of EU researchers work in the enterprise sector (80% in the USA). EU Member States must adapt their educational systems in order to increase this percentage, while guaranteeing a better satisfaction of the companies’ needs.

2. The Innovation process

The innovation process should benefit from the advantages generated by an element of novelty (a technological innovation, a new managerial or organizational process, etc.). It is very difficult, if not impossible, to try to penetrate a new market or to obtain a modification of the existing market shares unless they adopt a strategy of innovation based on a new organizational form, on new methods of work management and organization, which should take place according to the new rules against the ones existing on the market.

The companies that have created competitive advantages, completing their process of innovation with market success, have taken further actions such as: a new method of distribution, a new approach to the sales process, a new method of manufacture, full avoidance of distribution intermediaries, etc.

The attraction of a large share of the benefits generated by a process of innovation depends on protecting or not the element of novelty by means of documents which protect the rights of intellectual property. In order to be successful, an innovation strategy should be designed rationally, emotionally and politically.

3. The innovation strategy

3.1. Development strategy of a company through a process of innovation

By the development strategy of a company through a process of innovation we understand the way in which a company uses its resources to achieve the objectives set by agreed deadline policy. Strategy is defined as the art of using all available means with a view to achieving the set objectives.

If the strategy is established to carry out an innovation in the company’s activity by means of a strategy, the correct answers to the following questions should be defined very precisely:
- What is the optimal change?
- What should be done to make this change with minimal effort and maximum benefit?

The answers to the above two questions represent, in fact, two sides of the same coin that cannot be separated, which implies the fact that the implementation strategy cannot be separated from its formulation.

3.1.1. The components of an innovation strategy are:

a. Vision - consists in the company’s prospecting in time, its results, structure and size. The vision satisfies the human need to have a goal, a target for action, shapes the future answering the question: What will the future of the company be over "n" years?

b. Objectives - are goals that support the mission and ensure the vision achievement, measured by at least one of the elements: time, investments, quality.

c. Means of achieving objectives - cover the major approaches with implications for all the company’s activities or for its major components and, on their basis, it is possible to establish the reasonable achievement of set targets.

d. Resources - are stipulated within global strategies under the form of investment funds, possibly indicating the percentages of human and material resources.

e. Terms - incorporated in the strategy, generally relate to: the date of commencing the strategy implementation, intermediate deadlines which mark the end of significant progress in achieving the objectives established, final deadline of the strategy implementation.

An innovation strategy should represent a systemic, global and coherent thinking, taking
into account the particularities of each set objective, as well as the previous experience acquired in the strategy implementation previously, to ensure harmonization of the objectives achievement and synchronization of set deadlines. (7,8,20,22)

3.1.2. Launch of an innovation program
The responsibility for organizing and maintaining a strict accounting of all actions to launch a program of innovation is incurred by the economic unit, which must take into account:
- market research,
- identifying opportunities,
- developing new creations,
- feasibility studies.
For the arisal of creative ideas, not only does an economic agent have to use incentive techniques of creativity, but the innovative ideas must also be accepted and the agent must actually encourage innovative, creative activity, thereby gaining a reputation as of creative innovation unit. (20, 21)

3.1.3. Develop your own product or buy a license?
In order to take a decision concerning the development of one’s own product or the purchase of a license, one should be able to answer the question:
- What is more economical and more efficient: to purchase technical expertise and reputation in the market or to generate this experience and reputation in the market on their own?
It is not easy to make such a decision. The economic agents must carry out an analysis of their own innovation capabilities, as well as of their market partners’ abilities.
As a rule, developing a new product through one’s own research and development efforts involves higher costs at first but opens the possibility of achieving higher revenues. (7,8,20,22)
Conversely, purchasing a license usually involves running costs from the very beginning.

3.1.4. Additional resources for the innovation process
The innovation process is a catalyst that can stimulate wealth creation and support, ensure economic growth and generate competitive capacity.
But innovation is merely a catalyst - an ingredient in the development of a process. It must be correctly stated:
 a). The type of knowledge which defines the creative characteristics and the complexity of the novelty underlying the innovation process.
 b) The necessary funds for the development, manufacture, marketing and distribution of the new products.
 c) The period of assimilation and technical development of the constructive element which gives novelty to the innovation process.

3.1.5. The tasks of an innovation strategy implementation
In order to successfully implement an innovation strategy, the management team is required to perform the following tasks:
a. Make sure that the employees understand the strategy of innovation.
b. Increase the employees’ emotional involvement in achieving the innovation process.
c. Improve performance at the workplace.

3.1.6. Principles of implementing an innovation strategy
a. The successful implementation of a strategy begins with the direct involvement of the management team in coordinating the change.
b. The employees may accept and support only what they understand.
c. The employees take on additional tasks only if they become passionate about what they do.
d. The implementation of the innovation strategy requires changing the way in which the work was previously performed.
e. Without an assessment of the changes made, the implementation of the new strategy is not effective.

3.1.7. Risk-taking in achieving innovation
For an innovation process to be successful it is necessary that the management team act so that staff benefit from:
- both the necessary organizational framework,
- and the opportunities and incentives to achieve something more than the current tasks.
The innovation process appears at the junction between passion and necessity, being a key action to produce value in a business by successfully introducing the result which has been obtained on the market. (7,8,20,22)
3.1.8. Risk generating incertitudes

An economic organization aiming to design and put into practice an innovation project may face two main risks generating uncertainty:

The technological uncertainty arises from the inability to forecast the technological development and complex dynamics which stabilize the technical standards.

The market uncertainty refers to the size and pace of new product market development. (20,21,28)

If it is impossible to make forecasts as to the future market of a product/service, the key to decide whether it is worth or not taking a risk consists in the following techniques:

- Cooperation with key users;
- Limiting exposure to the risk;
- Flexibility.

Without a proper definition, in full accordance with the reality, of the innovation project objectives it cannot be assessed which will be the increase in the market competitive advantages that will be generated by the exploitation of results and will be unable to assess whether or not this increase balance risk taking.

4. Risk-taking

In making a decision on whether to take a risk or not, it is necessary to analyze and understand the consequences of this risk and to compare these effects with the benefits that will be generated by the achievement of the project objectives.

In order to reduce the influence of risk factors on the achievement of a project, it is required to act in the following way:

- First of all address the areas with the greatest uncertainty;
- Agree upon the method that can stop or limit the execution of the project if the risk factor impact exceeds certain limits;
- Identify and record factors that could cause the termination of the project and then analyze each step, assessing the impact of these priority factors.
- Carry out activities involving major investments as late as possible. These activities are usually full-scale development program.
- Determine who is the project manager responsible for all the work involved in the project. After the appointment, the project manager can look for some support to develop certain specific activities;
- Test continuously, compared with the evolution of the business environment, the sustainability of the concept and the technology necessary to achieve the project objectives.

The project is carried out on stages, and the project management requires that:

- Each stage consists of a number of activities which are interrelated;
- Each stage usually involves higher costs than the previous one, and the analysis and implementation of each stage is a decision to stop, go further, reuse. (16,18,20,21)

| Market research, identifying opportunities |
| Generating an advantageous concept |
| Carrying out a feasibility study |
| Developing and testing the concept |
| Drawing up the development plan |
| Putting into practice the development plan |
| Promoting and launching on the market of innovation result |

Table 1 Carrying out an innovation project on stages
Innovation should be visible in all the company’s activities: the development of technologies, products and services, marketing, sales techniques, organizational methods, new management techniques. (25, 20)

At the organization level, the innovation manager helped by the company’s leadership should create, maintain and develop the spirit of innovation, include innovation in everyday activities at all levels and in all fields. (21, 28)

Many managers consider innovation important, but are frightened by the thought that they need to develop an innovative culture within the company, which takes time and money, being impossible to shape it overnight. (23, 24, 20, 26).

5. Innovative enterprises

Between 2008-2010, only 30.8% of enterprises in industry and services were innovative companies, decreasing by 2.5 percentage points compared to the period 2006-2008. Innovators fall into two categories: technological innovators that are enterprises that have introduced new or significantly improved products or processes and non-technological innovators who have implemented new organizational or marketing methods.

5.1. Enterprises with technological innovation

Enterprises that introduced only new or significantly improved products had a share of 2.4%, while companies that implemented new or significantly improved processes had a share of 3.6%, and those that produced both new or significantly improved products and processes accounted for 7.8%.

5.2. Enterprises with non-technological innovation

Non-technological innovators are those companies which have introduced or implemented new methods of organization, such as new business practices, new ways of organizing responsibilities at the workplace, new methods of organizing external relations, which have introduced new marketing methods such as significant changes in the aesthetic appearance or packaging of a good or service, a new way of advertising or product promotion techniques, new methods for placing the product and new methods for pricing the goods and services. Non-technological innovators can be simultaneously technological innovators, i.e. they can introduce new or significantly improved products or processes. (6, 11)

The share of enterprises with marketing innovations was 19.2%, exceeding 0.8 percentage points that of enterprises which introduced new methods of organization within the company of 18.4%. The share of non-technological innovators is higher in services 28.4%, compared with the industry, where the share is 25.0%. (27).

5.3. Large enterprises remain the most innovative ones

The share of innovative enterprises varies by enterprise size class. Out of the total of large enterprises, 56.4% were innovative enterprises, while 29.7% of small and medium-sized enterprises were innovative ones. (27)

5.4. Innovative activities and innovation expenditure

The main innovative activities undertaken by firms were their own research activities, research activities taken over from other enterprises or institutions, purchase of machinery, equipment and software, acquisition of other knowledge external to the enterprise (licenses, patents, know-how, etc.), as well as training for innovative activities, introducing the innovation results on the market, design work and other preparatory activities.

Innovation expenditure and their distribution are closely linked to the business strategy. Some companies allocate large sums for conducting their own or outsourced research, while others invest in the introduction of new technology or other types of purchases. All these activities lead to innovation. (4, 5, 13, 27).

6. Case study. The effect of minor ideas

Minor ideas are also a key to creating long-lasting competitive advantage, leading to great ideas.

An example in this respect is that from a factory manufacturing gearboxes for small and medium sized cars. Metal cutting machines consume tens liters of lubricating oil every year. As soon as each cutting machine cuts off a piece of material, it is cooled with an oil spray.
Years on end the lubricant oil for each machine was brought in a container trolley to be pumped into the machine which was working. Since the factory had more than 100 cutting machines to fuel, the company had to hire a full-time driver on a carrier to distribute the oil. (20,27,28)

At a certain moment an employee suggested installing a central container and an oil pump system to be sent to each car, instead of using containers. The idea had some clear advantages. Firstly, the operator's work would not have been interrupted so often by each delivery of oil and he could have as much fuel as he needed.

Secondly, the trolley could be eliminated and the driver could become available for more useful work. The proposal was carefully studied before being approved. However, once the pumps were installed, it became clear that no one suspected the myriad of opportunities this idea has opened for the company.

The first thing noticed was that now the company bought wholesale oil and its cost decreased significantly. Moreover, the new container took up half the space the recipients used to occupy, so a lot of space became available. The problem of empty containers storage, which contained oil wastes and were classified as hazardous waste, also disappeared.

And when the carriage stopped delivering, another advantage of the new system was noticed. Beforehand, every few months, one of the recipients used to fall from the tank and spill. While the costs of cleaning and oil loss were minimal, every event of this kind had to be reported to state environmental authorities, which was very bureaucratic and time consuming. (20,27,28)

With the new system, the oil was distributed through the suspended pump hoses as in the case of fueling a vehicle where the machine operator connects the hose to the pump oil. The nozzles were rulers measuring the handles. Only now, for the first time, the machine operators saw how much oil they used to consume.

After the lubricant was spread on the equipment, the oil flowed into a tank where it was recycled. An employee began to wonder why, if the oil was recycled, the car used to consume so much. He understood that the loss was due to oil filled metal chips that were being produced during the cutting and collected in a gutter.

The worker thought that if a 60 cm long screen had been attached to this gutter, the oil would have had time to flow through it. His idea saved about 35 liters per day for his machine. Considering the other 14 cars in this section, the savings totalled 525 liters per day. The idea quickly reached people in other departments who started coming with all sorts of ideas for saving oil for their cutting machines.

Why did the relatively simple idea of purchasing a container of oil have so great implications? Before its appearance, the lubricant cost was considered inherent to the business. Nobody had considered it a problem. But after the appearance of the measurement hoses on the scales, people became aware of this unpredictable source of losses. (20,2,3,27).

7. CONCLUSIONS

Europe has a lon-lasting tradition in producing resounding inventions; its wealth consisting in creative people, Europe can count on its cultural diversity. It laid the basis of one of the largest single market in the world where innovative products and services can be marketed widely. As far as our country is concerned, a more and more important part of the government and industry have become aware that innovation is the cornerstone of economic success, admitting at the same time the fact that it is a tool which is often ignored, untapped by most domestic companies.

"Romania is one of the leaders in the category of countries that “catch up” the basic group of EU countries. Performance in the fields of innovation is well below the EU average, but the rate of improvement of the situation is among the highest of all countries. Romania has relatively stronger points, compared with its average performance, in terms of innovative companies and economic effects of applying innovation, and relatively weak points in terms of finance and support and capacity of creating intellectual property. Within the organizations, minor ideas represent the key to creating long-lasting competitive advantage that leads to great ideas.

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