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THE USE OF INNOVATION MANAGEMENT AT THE ENTERPRISE

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Abstract

The article examines the theoretical and applied principles of innovation management as an important component of modern enterprises. Given the current trends in economic development, innovation is seen as a necessary tool for competitiveness and economic growth. The purpose of the study is to highlight the key aspects of managing innovation processes in organisations, in particular in the context of international economic activity. The main objectives of the study are to analyse innovation as an economic phenomenon, study the functions of innovation management and determine its impact on the productivity and competitiveness of enterprises. The research methods used include systematic analysis, analysis of scientific sources, and a comparative approach to the study of international experience. The paper emphasises the importance of introducing innovation management into the Ukrainian economy and provides examples of countries that have successfully implemented innovation strategies. The structure of the paper includes an analysis of the basic concepts of innovation management, a study of modern innovation processes and proposals for improving the management of innovation projects at enterprises.

Keywords

Innovation management, innovation processes, competitiveness, innovation management, international economy, technological innovations.

Problem statement

Historically speaking, it should be noted that the understanding of innovation activity as an object of managerial thought is relatively new, and, accordingly, the need to manage such activity has arisen not so long ago. For a long time, the innovation process of development was seen only as an opportunity to compete in the market and was implemented from time to time, and not because of the social need to modernise a particular industry. Therefore, since the 1920s, the dominant view has been that the development and implementation of new technologies, both in terms of technology and in terms of management, organisation and control of the company's personnel, can have undeniable advantages in the market.

Over time, scientific approaches to managing such activities were also developed. Today, the relevance of the issue of managing innovation processes in an organisation remains high due to the growing pace of innovation and the need to continuously improve the management of such activities.

It is worth noting that innovation management is a set of scientifically based principles, forms, methods, techniques and means of managing innovations in the field of their creation, development, production and promotion to the market for profit.

Therefore, innovation management should focus on the development, implementation and continuous improvement of the innovation strategy. The enterprise should constantly monitor and promote the development and creation of new products, as the innovation process affects all areas of the business process.

Innovative activities should be aimed at constant renewal, not at achieving a certain final level of development. Such a dynamic system requires constant development of theoretical and practical approaches to management. The experience of the last century shows that for the development of society it is possible and necessary to manage the innovation process and the means of managing economic processes.

Relevance of the chosen topic

First of all, it is due to the fact that support for innovation management should be one of the priority areas of state policy in all countries with developed economies. This is how sustainable development of a company is supported. The analysis of scientific opinions on this term highlights different approaches to understanding the concept of innovation management.

Analysis of recent research and publications

The issue of innovation management is being actively studied by domestic and foreign scholars. A significant contribution to the development of the theory of innovation was made by J. Schumpeter and N. Kondratiev, who considered innovation as one of the key factors of economic development. Modern research is focused on finding effective methods of innovation management, as well as on optimising innovation processes in business. Ukrainian scientists, in particular O.A. Havrysh and V.V. Dergachova, study the problems of implementing innovations in the context of the national economy and infrastructure development.

Purpose of the article

The purpose of the study is to highlight and substantiate the theoretical and applied principles of innovation management in the activities of enterprises, in particular, in the context of international economic activity.

To achieve this goal, the main objectives of the study are to clarify the essence of innovation and the importance and features of innovation management in the activities of organisations, as well as to take into account the experience of various companies in this area.

Presentation of the main research material and results obtained

In the broadest sense, innovation is the beneficial use of ideas and inventions in the form of new products, services, organisational, technical, socio-economic, financial and commercial solutions.

This category is characteristic of human intellectual and production practice and is a process activity:

- New phenomena, products and services are created and commercialised in economic activity;
- Improvement of the objects of the material sphere already created by man;
- Methods, means, forms of organisational, economic, social and legal nature are developed.

Innovations are seen as a tool for influencing the socio-economic development of society. Therefore, innovations need to be managed. This process is called innovation management (Mykytyuk, 2007).

Innovation management is a set of economic, motivational, organisational and legal means, methods and forms of managing the innovation activities of a particular management object in order to achieve the economic results of this activity in the most optimal way.

Many authors pay attention to innovation management as a functional management system and consider it as one of the types of functional management, the direct purpose of which is innovation processes in all spheres of the economy.

Functional innovation management is aimed at effective management of the process of development, implementation, production and commercialisation of innovations, with an important point being the improvement of Coordination of the production operating system, personnel management and control over the innovation process.

Innovation management as a mechanism for managing innovations involves the creation of a certain hierarchical organisational structure, which includes special management units, managers of different levels who are authorised to make and implement relevant management decisions and are responsible for their results (Denysenko, 2008).

Innovation management creates conditions for the survival and growth of economic organisations, the formation of knowledge-intensive industries, which leads to fundamental changes in the choice of markets for products, to the growth of labour productivity, to the competitiveness of enterprises and the state.

It should be noted that today, valuable inventions and the creation of prototypes based on them require enormous efforts of many teams and financial costs. Often, the initial cost of an innovation project increases many times over, especially when several ideas need to be combined into one viable innovation.

In addition, introducing innovations to the market involves a great deal of risk. According to the American economist E. Mansfield, the results of about 60% of the research and development conducted by 120 American industrial companies did not reach the market. Out of every ten products whose production was monitored, five failed market tests, and of the five that remained competitive, only two proved to be competitive (i.e. 8% of 100% of R&D). All this determines the details of innovation management (Bagrova & Cherevko, 2010).

Innovation management should coordinate and harmonise the function and interaction of internal and external structural components of the innovation process, and create a certain coherence of work. Harmonious development of the innovation process, according to scientists, is the main goal of innovation management.

The main objectives of innovation management are:

1. Ensuring the long-term functioning of the innovation process based on the effective organisation of all components and systems that make up the process;
2. Creating competitive innovative products and technologies in the most efficient and optimal way.

In accordance with the goals set, innovation management tasks are created, the main ones being:

- Formulation of strategic, long-term and short-term goals of innovation activities;
- Development of plans, programmes, projects and their implementation;
- Creating an organisational structure and production and management structure of innovation activities;
- Observation (control) over the implementation of stages, stages of the innovation process in time and synchronisation of all activities;
- Selection and placement of personnel, creation of a creative and motivational atmosphere for intellectual work;
- Comprehensive formation and use of the innovative potential of the enterprise;
- Observation and assessment of global trends in scientific and technological development (Ilyashenko, 2010).

Innovation is an economic phenomenon. Schumpeter believed that technological progress is a powerful factor, as it allows an entrepreneur to temporarily earn profits that are significantly higher than the industry norm. Data characterising the economic development of highly developed countries confirmed his opinion. As is well known, the share of new or improved technologies, products, equipment containing knowledge or new solutions in developed countries is between 70 and 85% of gross domestic product growth.

The first innovative observation was made by N. Kondratiev in the 1920s. He noted that the global economy goes through cyclical fluctuations for 44-55 years. Kondratiev's 'long waves' are associated with changes in basic technologies, which is a clear confirmation of the crucial role of innovation in economic development cycles. Schumpeter came up with the idea of 'Kondratieff's Galileo' in his theory of cyclical processes of business activity, which links cycles to innovation. He argued that the emergence of a group of new technologies leads to an economic boom, which in turn leads to market saturation. In his opinion, each basic innovation produces long waves, which are a large number of innovations of an improving nature (Vasylenko & Shmatko, n.d.).

The scientist interpreted innovations as a deviation from routine behaviour and argued that they always lead to a disturbance in equilibrium. In other words, the imbalance of neoclassicism is considered undesirable and must be overcome. Schumpeter, as the founder of the theory of evolution, valued the lack of equilibrium as one of the main conditions for development. That is why an economic boom is followed by a recession, during which the structure of prices, costs and mass production is restructured. The dynamics of the recession often reveal the dynamics of its development. As J. Schumpeter put it, 'depression is the response of an economic system to a boom or an adjustment to the situation in which the system finds itself as a result of a boom'.

In the work of the famous German economist J. Mensch 'Technological Stagnation: Innovations Overcome Depression', it was concluded that a high concentration of basic innovations allows overcoming 'technological stagnation' and drives economic growth on a qualitatively new basis.

The introduction of basic innovations turns out to be the only opportunity for profitable investment during the depression phase, which J. Mensch sees as creating the conditions for the emergence of new products.

Scholars emphasise that innovations contribute to the competitiveness of companies, as there is a strong correlation between market activity and new products. Product and technological innovations help to win and retain market share and increase profitability in these markets.

The experience of economic development in leading countries confirms that the evolutionary process in the economy is driven by innovations. Like a train, they drive the modernisation and restructuring of the entire economy. Innovation is the main criterion for a company's development. Therefore, a country that stands aside from the 'innovation competition' remains the last in the hierarchy of the global community's development (Zablotskyi, 2007).

The United States is the undisputed leader in this competition at this stage, as more than 60% of all technical innovations have occurred in the last half century. The United States has become one of the richest countries in the world mainly due to the best organisation of the innovation process and the effective use of technological innovations in production.

The formation and development of an innovative type of economic growth is accompanied by significant activation and transformation of the entrepreneur, according to G. Nevit, into a 'hero of our time'. This is due, firstly, to the unprecedented popularity of entrepreneurship, the growth of its scale (for example, in the USA and other developed Western countries tens of thousands of organisations are created annually), and secondly, to its spread to all Western countries. neoconservative reforms of the economic apparatus, most of which result in an increase in the degree of economic freedom of entrepreneurship, deregulation of the economy, abandonment of many administrative and legislative restrictions), policy of promoting the development of small and medium-sized businesses, encouraging scientific and

Thirdly, the emergence of qualitatively new areas of integration of science and production (innovative entrepreneurship). One of the most important conditions for the success of innovations is the presence of an innovative entrepreneur who is passionate about a new idea and is ready to make every effort to implement it in production practice.

For a long time, the object of management was a stable production process, unchanged production and technical base, and a relatively stable product range with a high level of standardisation. The innovation process was of a short-term local nature and was implemented thanks to the knowledge of experts and managers, using resources and methods designed for stable processes. However, the new economic conditions that have developed today require intensive innovation activity, increased attention to the efficiency of research and development, organisation of innovations at all stages of the product life cycle, and reduction and mitigation of innovation risks. conditions for entering into innovations.

When deciding on the production of a new product, introduction of a new technology, technical or other organisational innovations, it is necessary to take into account their potential, i.e. the amount of benefit that the organisation will receive from the implementation of the innovation. The potential of an innovation, in turn, depends on the phase of its life cycle at which the organisation decides to involve it in its activities.

The innovation life cycle is the period from the birth of an idea, creation of a new product and its practical use to the moment of its withdrawal from production.

The innovation life cycle by its nature corresponds to the typical product life cycle and goes through the stages of development, market promotion, growth, maturity and decline, which are characterised by a different ratio of costs associated with the development and launch of a new product and revenues from its sale, the development phase. It includes the stages of generating an idea, performing research and development work to transform the idea into a product suitable for industrial production and developing its production technology (Bagrova & Cherevko, 2010).

The first stage of the life cycle of an innovative product involves scientific and technical research, as well as scientific and technical preparation of production. The sequence of application of scientific and technical preparation of production:

1. Basic research aimed at studying the theoretical foundations of the problem. Their result is a revelation.
2. Applied research. Identify areas of practical application of knowledge acquired in the process of basic research. Their result is new technologies, materials, systems.

Technical preparation.

At this stage, the technical characteristics of the new product are determined, engineering and technical documentation is developed, prototypes are created and pilot production begins.

Technology is the final link and form of implementation of fundamental research. An important characteristic of modern technologies is their ability to change. For example, in the field of information technology, changes occur even within a few months.

However, some technologies are conservative in terms of change. Egor Ansoff, a well-known American expert in strategic management, distinguished three types of technologies by the degree of variation:

1. Stable technology, which remains almost unchanged throughout the life cycle of demand;
2. Fertile technology, which allows changing the products manufactured with its help, constantly improving their ability to meet the needs of consumers;
3. A changing technology, in which new underlying technologies are used for its production throughout the life cycle of product demand (for example, TV sets, which remain an integral part of housing, have survived several generations of underlying technologies - from tube to digital) (Vasylenko & Shmatko, n.d.). The choice of technology type depends on the area in which the organisation operates.

The risk of innovation can be significantly reduced through a detailed study and preliminary assessment of the effectiveness of innovations, especially those with a multi-level content (Kukurudza, 2012).

The first stage of such work should be the creation of a feedback system for timely assessment of the actual and expected results of the approved innovation project. The second is a critical analysis of all innovative actions, their design, results and effectiveness. At the third stage, conclusions are drawn on the overall results of innovation activities for a certain period.

Partial reduction of risks in the company's innovation activities can be achieved by creating strategic alliances with industrial, commercial and research organisations or by redistributing risks to competitors.

The following methods of risk reduction are used in the practice of innovation project management:

1. Distribution of risks between project participants (transfer of part of the risk to implementation partners);
2. Insurance against road accidents;
3. Saving money to cover unexpected expenses. Risk allocation is carried out during the development of the project's financial plan and contractual documentation. At the same time, project participants decide to increase or decrease the number of potential investors. This is where negotiations need to be flexible.

Insurance against road accidents means the transfer of certain risks to insurance companies. This is done when a large project is likely to experience delays in execution, which leads to an increase in the cost of work and, consequently, a deviation from the original project cost (Vasylenko & Shmatko, n.d.).

Setting aside funds to cover unexpected expenses involves establishing a link between potential risks that affect the project cost and the costs required to overcome obstacles in project implementation. The accuracy of the initial project cost and its components should be taken into account. Estimating unexpected costs helps to minimise cost overruns.

The experience of industrialised countries is an example of how their organisations implement an innovative strategy, increasing production, sales and profits, increasing labour productivity, accelerating the turnover of invested capital, controlling and supplying high-quality new products to the market in order to increase profit margins. The need to constantly update the variety of products and their production technology makes it necessary to introduce research and development into the organisational system, which is aimed at accelerating innovation processes.

In this way, science, technology and production merge into a single entity, which generates innovations and accelerates them. A timely approved innovation strategy, promotion of science and technology as an organic part of the technological and innovation process, and prioritisation of technology development and improvement have made Japan one of the most developed countries in the world (Zablotskyi, 2007).

The functioning of the system of state funding without payment does not require return of the funds invested in R&D, and this, in turn, does not allow the country to experience revolutionary technological changes in production. Statistics for 1999-2009 show that the tendency of lagging behind the technical level of new types of equipment and technologies from the world level, lagging behind in the field of introduction of the latest technologies and management of production on their basis of fundamentally new types of knowledge-intensive products, reduction of the level of implementation of scientific achievements and technology in the foreign market

In 1999, only 13.5% of industrial enterprises in Ukraine were engaged in innovation. In 2008, this share slightly increased to 16.8%, and in 2009 it decreased to 10%. Most Ukrainian enterprises are aware of the need to implement innovation policy, but its successful implementation should be based on an appropriate legal and

regulatory framework.

The strategy of innovation infrastructure development in Ukraine should be aimed at

- strengthening the role of the regional aspect in the creation of innovative territorial structures
- development and implementation of an economic mechanism
- state financial support for innovation infrastructure at the first stages of its creation
- attraction of extra-budgetary sources of financing, in particular venture capital funds, provision of services on favourable terms to enterprises that are part of technology parks and technopolises
- Organisational support by improving the management bodies of these buildings
- providing legislative, regulatory and legal support for the effective functioning of innovation infrastructures (Ilyashenko, 2010).

In a market economy, the effective development of enterprises in the long term is possible only if the achievements of scientific and technological progress are taken into account. Therefore, the development of the innovation sphere, through which innovative achievements are promoted in production, is particularly relevant, as it requires serious attention and study. Without flexible innovation management, which is the driving force behind its development, long-term stability of efficient production is impossible.

In this regard, the problem of timely promotion of innovation opportunities, concentration of resources, and operational management of the innovation process with minimal risk from the wrong choice of innovation direction is quite acute. The strategy of innovation management should be a component of the overall strategy of enterprise development management, and the issue of selection and evaluation of innovation strategies should be central to the long-term problem of enterprise development (Kukurudza, 2012).

The success of product innovation activities is largely determined by the level of technological support for product production. Therefore, the sale of technology is one of the main tools for penetrating the modern market and consolidating its position.

It is worth noting that joint ventures, in addition to technology transfer, combine efforts, knowledge and experience in the production of new products for a given market, and distribute possible economic risk. Obtaining a new technology at the beginning of a joint venture contributes to significant cost savings in the process of implementing product innovation projects (Dergachova & Perminova, 2015).

Savings in the procurement of necessary technologies are also achieved through the conclusion of agreements and contracts for technical assistance. In this case, the object of the contractual relationship is technical services, research, training and education. In this case, the contracts should contain elements of engineering services, subcontracting, and lease of tools and equipment. A separate clause in the contracts sets out an agreement on the transfer of technology or the supply of technological equipment.

One of the most important factors in global economic development in recent years has been the widespread use of innovation. The modern economy is characterised by a focus on intellectual resources rather than raw materials, as they will ensure high rates of economic development, reduce emissions from production, reduce labour costs, and thanks to these resources, local factories will be able to upgrade their production cycle and means of production.

Innovations are needed at the organisational, scientific and financial levels, as they combine to produce the most effective results. That is why today the entire enterprise is faced with the task of developing an effective system for managing the company's innovation activities.

Despite the large number of works related to the study of the essence of innovation management, none of the scientists has focused on the process of managing innovation activities as one of the components of the organisation's management as a whole. In general, innovation management is a complex operating mechanism of the management system that creates favourable conditions and opportunities for the development and achievement of an effective result of the innovation process and innovation activities.

As a type of activity and a process of management decision-making, innovation management is a set of procedures that constitute a general plan for managing the innovation process. This system consists of the relevant management functions, each of which is divided into separate types of work (phases) related to the multifaceted activities of the enterprise and performed in the appropriate sequence (Mykytyuk, 2007).

Conclusions

In the conditions of our country, when property relations are being reformed and entrepreneurship development is being stimulated, when innovations have become a necessary element in all structures, from public authorities to medium and small businesses, the use of scientific methods of innovation management is becoming relevant. an important factor in the development of the country, its survival, competitiveness and commercial success of any organisation and at the global level. We are talking about innovation management as a management system

designed to address unsatisfactory situations in change management, which is focused on the development of the company and meeting its needs.

Innovative management creates conditions for the survival and growth of economic organisations, the formation of knowledge-intensive industries, which leads to fundamental changes in the choice of markets for products, to the growth of labour productivity, and to the competitiveness of enterprises and the state.

The foregoing gives grounds to conclude that innovations are of great importance for the economy of an enterprise. They are seen as a factor of product competitiveness that ensures the efficient use of production resources, increases the degree of adaptation of the enterprise to the external environment, expands the enterprise's ability to enter new product markets, and creates conditions for long-term stability. The pace of life is the determining factor of innovation in the modern world. Those companies that have managed to include the pace of life of a modern person in the list of parameters most important for innovation have won and received millions and billions of dollars in profits.

The organisation of the process of managing it is very important for the success of innovation. Only by building a clear process for transforming ideas into practical developments can interesting ideas be turned into systemic innovations. Therefore, innovation management is the core of entrepreneurial activity, a prerequisite for successful business, because it is innovations that improve the quality and reduce the cost of products, ensure their competitiveness, and hence the effective presence of enterprises and organisations in society.

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