

STRATEGIC MANAGEMENT OF ADAPTATION OF ENTERPRISES INNOVATION ACTIVITY OF TO THE CONDITIONS OF THE SUSTAINABLE DEVELOPMENT

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Abstract. In the research the problems connected with the problems of strategic management of adaptation of enterprises innovation activity to the conditions of sustainable development are examined. Theoretical aspects of the strategic management in conditions of the sustainable development are considered. Interrelations of the strategic management of innovative activity and problems of the sustainable development are defined. The principles of strategic management of the innovation activity of enterprises were formed. The practical aspects of the innovation activity of enterprises in macroeconomic conditions were revealed. The features of the formation of the innovative strategy of the enterprise are set out. The article has outlined some aspects of the innovative development of enterprises in modern conditions. The indicators of the innovative activity of industrial enterprises are considered. The structure of costs for innovation is analyzed. A number of factors influencing the level of innovation activity of Ukrainian enterprises have revealed. It was determined that the strategic management of the adaptation of the innovative activity of enterprises to the conditions of sustainable development should provide a balance between the effectiveness and potential.

Keywords: adaptation, strategic management, strategy, innovation, innovation activity, sustainable development.

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Introduction. Transformational processes in the economic space necessitate the adaptation of enterprises, which will contribute to their development and growth, while ensuring an appropriate level of competitiveness and position in the market. The sustainable development of the economic environment is aimed at the formation in microeconomic structures and systems of strong links between the economic interests and needs of the existing structures and the potential interests and needs of future generations. The innovation activity of enterprises is one of the priorities of their strategic development, which allows the introduction of innovative technologies, products and developments as tools to adapt to the challenges of sustainable development. Strategic management of the adaptation of the enterprises innovation activities to the conditions of sustainable development should provide a balance between an effective activity and capacity. Today it is innovation that allows companies to adapt to change in a timely manner, respond to structural changes, maintain and develop capacity and ensure a compliance with strategic development goals.

The problem of enterprises and their adaptation to the conditions of sustainable development is related to the problems of their adaptability to the liberal theories of corporate relations, which often cannot be applied in various areas of the economy [1]. Such problems can be overcome through an effective mechanism of strategic management of the enterprises innovation activities, which will be adaptive in nature and promote the inclusion of the enterprises in the principles of sustainable development.

The leading scientists are: M. Lutskiy [1; 6], V. Novak [6], E. Romanenko [12], S. Smerichevskiy [10], O. Arefieva [2; 13; 20], Z. Poberezhna [2], S. Arefiev [13], T. Velichko [4], S. Tulchinska [3], O. Vovk [3; 8], O. Popelo [3], O. Yermakova [5], A. Kvilinskiy [11], A. Kuzior [11], S. Piletska [13] and others. However, the transformation of sustainable development requires the study of the adaptation of strategic management of the enterprises innovation activity.

1. Theoretical aspects of strategic management of the enterprises innovation activity in conditions of sustainable development

In modern conditions, the strategic management of an enterprise is an integral basis of its development and is based on the desire of enterprises for a continuous economic growth in all conditions and environments.

Transformations of the economic environment induce enterprises to innovative activities, which allow them to adapt to them and develop in accordance with current trends and challenges.

The strategic management of the innovative development of enterprises focuses them on effective functioning through the introduction of new technologies in production and management. At the same time, the strategic management of innovation development implies the implementation of a set of business processes, their integrity and consistency in competitive markets. Accordingly, innovativeness of the enterprise is considered as integrity of the allocated strategic groups [2]. In modern realities, the direction of functioning of each of the subsystems of the strategic management of the enterprise is aimed at ensuring sustainable development. At enterprises, an effective functioning system of strategic management of the innovation development allows you to summarize, process and analyze the information coming from the main functional subsystems of the enterprise management. Since innovation has its own specific characteristics, the lack of implementation of the strategy of one of the subsystems of the strategic management system has a negative impact on others [4]. That is, a subsystem of the strategic management, which is aimed at the innovation component of the enterprise, affects all other activities, since innovation is formed, implemented in interaction with other activities, or even a factor in the development of the main activity of the enterprise.

The system of the strategic management of the enterprise's innovative activity in conditions of sustainable development includes a set of developed functional strategies of enterprise subsystems, reflects their interaction. The implementation of such functional strategies will allow to achieve the objectives, taking into account the direction of the activity of the enterprise on the basis of the sustainable development and innovation [5, p. 92]. Such functional strategies can include: development of intellectual potential, digitalization, personnel development, production, information and communication and others. For example, the functional strategy of information and communication in the strategic management of innovation is a source of adapting the internal environment of the enterprise to the conditions of the sustainable development. After all, all decisions are made on the basis of information, and their implementation is based on communications [6], which often depend on the behavior of participants in innovation processes.

A priority of support for the sustainable development of the enterprise or its focus on development, in particular innovation, depending on the type of sustainability by the nature of the response to changes and factors of the internal and external environment is presented in the Table 1.

Table 1

Types of business development at different levels of sustainability

Type of sustainability by the nature of response to changes	Type of development/functioning of the enterprise	
Short-term financial sustainability	Maintainance of functioning	Narrowed reproduction in perspective
Long-term financial sustainability		Narrowed or simple reproduction in perspective
Static economic sustainability		Simple reproduction
Dynamic economic sustainability	Orientation to development	Expanded reproduction, intensive development, passive reaction to changes
Sustainable development		Expanded reproduction, innovative development, expectation of change, incentives for desired change

Source: [7, p. 34]

No less important direction of the strategic management of adaptations of the enterprises innovative activity is resource availability, because innovation is resource-consuming processes. Such great waste of resources is contrary to the principles of the sustainable development. Therefore, modern innovations are aimed at reducing the use of natural resources while increasing the use of intellectual, digital and information. Nevertheless, the effectiveness of innovative projects depends on the cost of attracting assets and the quality of their structure, compliance with the objectives of innovation policy. An analysis of domestic and foreign experience in stimulating the innovation activity showed the limited forms and lack of economic opportunities in practice to attract public resources in the innovative processes of the enterprises modernization. Innovative projects at enterprises are implemented at the expense of accumulated own investment assets [8]. That is, the strategic management of adaptations of innovative activity should take into account the limited financial support of innovation within the capabilities of stakeholders.

In this context, in view of the transformational and dynamic economic environment, sustainability of development and the need to harmonize the features of the functioning of environmental and economic potential and natural laws to reduce the burden on the environment it is necessary to implement the principles of circular economy of the sustainable development to ensure quality innovation resource supply based on the 3R model (Figure 1).

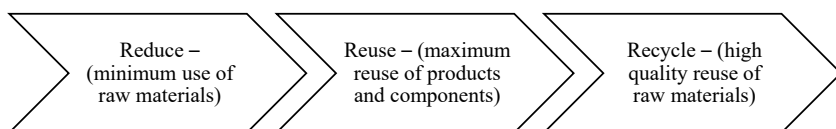


Figure 1. Principles of circular economy of the sustainable development

Source: developed according to [9]

The functional strategies of the innovative activity of the enterprise can include the strategy of logistics development, which is part of the logistics strategy. Such strategies are aimed at increasing the level of efficiency and adaptation of the innovation process management in order to improve the efficiency of business processes and reduce the cost of implementing innovation, which will ensure the growth of competitiveness in a sustainable development environment. The logistic concept of the strategic management of innovation ensures the integration of all possible processes in the enterprise – from the supply of raw materials to the sale of an innovative product to consumers. That is, the introduction of logistics tools in the strategic management of innovation will optimize the management of resources, materials and raw materials used innovation activities. Also logistic activity and logistic system of the modern company, as well as any other activity, need innovative approaches that will increase competitiveness and ensure sustainable development of the company in a dynamic market environment [10].

At the same time, the strategic management of the enterprises' innovation activities in the conditions of sustainable development requires taking into account external factors affecting the company. In particular, the peculiarities of achieving the relationship between public administration,

public and enterprises, which is one of the main challenges in achieving the sustainable development, must be taken into account. Since the enterprises' activity and especially innovation is a public type of activity, it must take place within the framework of modern civilizational development of the country [11]. Provision of strategic management decisions on innovative activity should be adapted to the economic interests of the society, which are formed in the changing conditions of the country development.

When adapting the strategic management of the companies' innovative activity, it is fundamental to consider its stages, and special attention should be paid to a strategic choice, which consists in the development of other strategies for the innovation activities, taking into account the strategic benchmarks for the sustainable development, types of innovation, assessment of expected results [12]. The strategic management of adaptations of the innovation activity will allow to vary effectively alternative strategies that will maximize the goals, objectives and development of the enterprise.

2. Assessment of innovative trends in the development of enterprises in modern conditions

In modern economic conditions, in order to increase the level of economic efficiency and stability, enterprises must implement and accelerate the processes of the innovative development. Currently, the enterprises' innovation development is one of the important components of the national economy development in the sustainable development. The innovation activity of enterprises plays an important role in the process of maximizing profits as one of the main indicators of enterprises under the conditions of dynamic economic environment.

The basis of the effectiveness of the enterprises' innovative activity is the formation of an effective innovation development strategy, the elaboration of which includes a number of interrelated stages (Figure 2).

Thus, the strategic management of the enterprises' innovative activity should comply with the fundamental principles (Figure 3), reflecting the diversity and wide opportunities for the synergy of strategies and innovation in terms of sustainable development. Such principles include: economic interests, integration of management systems, intellectualization, adaptability, unity and indivisibility, stimulation, harmonization, durability.

Stages in shaping an innovation strategy for an enterprise	1. Definition of goals and objectives of innovative development	Formulation of goals and objectives aimed at maintaining the market position, increasing the level of product competitiveness, increasing profits, defining environmental and social intentions.
	2. Diagnostics of the company's internal environment	Diagnostics of powerful and weak sides of the company supposes analysis of peculiarities of marketing policy and sales system, assessment of production capacities and level of production diversification, infrastructure provision, analysis of peculiarities of ecological safety of production operations. During the analysis of the internal environment it is necessary to estimate company's assets, to analyze the size of capital investments and the size of investments and return on capital. It is necessary to assess the labor management and research-and-development potential.
	3. Assessment and analysis of the external environment of the company's operations	This involves assessing the political, economic, social, technological, legal, and demographic factors of the macro environment.
	4. Development of the innovation strategy of the company	Development of the methodology of innovative projects selection and forming of the innovative strategy taking into consideration results of the diagnostics of the innovative potential attraction performed on the previous stages.
	5. Implementation of the innovation strategy of the company and its monitoring and control	Provides control and correction, if necessary, in the process of implementing the innovation strategy, as well as assessment of the impact of innovative activity on the level of the enterprise development and the level of competitiveness.

Figure 2. Peculiarities of forming the innovation strategy of the enterprise

Source: developed according to [14; 15; 17]

At present, innovative activity of enterprises is based precisely on the introduction of digital technology, which contributes to the rapid development of business in a dynamic environment. This is partly due to the need to increase investment in innovation due to the economic losses caused by the COVID-19 pandemic, because innovation activities contribute to ensuring economic growth in the future.

In the face of the significant human and economic losses caused by the COVID-19 pandemic, governments and businesses in many parts of the world have increased investment in innovation, indicating a growing

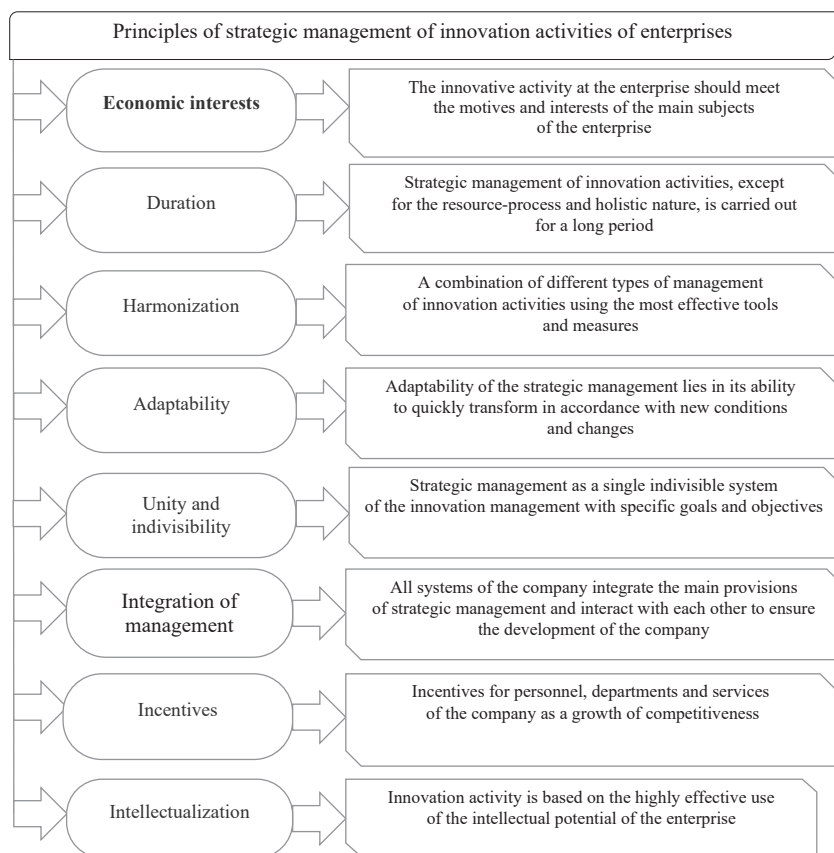


Figure 3. Principles of strategic management of the enterprises' innovation activity

recognition that new ideas are critical to overcoming the pandemic and ensuring economic growth in future periods. . Let us analyze the indicators of innovation activity of industrial enterprises in Ukraine for the last 10 years (Figure 4).

The data of Figure 4 shows that during the period under consideration there has been a decrease in the number of innovation-active industrial enterprises and, in particular, in the number of the industrial enterprises

Collective monograph

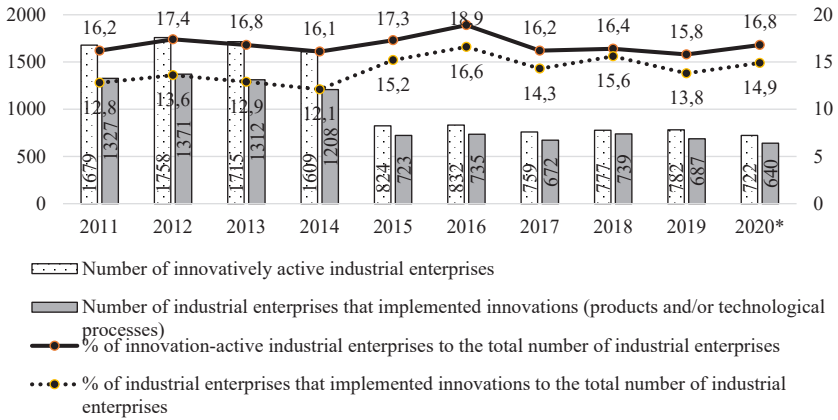


Figure 4. characteristics of the innovative activity of industrial companies for 2011–2020

Source: compiled from the data of [18]

that implement innovations. The share of the innovatively active enterprises is also low (15–16% on average), compared to individual EU countries. The share of innovatively active enterprises on average in the EU member states is 51%. For example, in Belgium – 68%, Finland – 65%, Portugal – 67%, Germany – 64%, Luxembourg – 64%, the indicator is much lower in Romania (10%) and Poland (22%) [19].

Evaluation of the number of implemented types of innovative products (goods, services) shows significant growth in 2020, which is partly due to the impact of the COVID-19 pandemic, because one of the key responses to the crisis phenomena is to strengthen the implementation of innovation.

The domestic society is undergoing neo-industrial modernization, the features of which are the spread of information technology in all areas of life, the transition to a digital society, the capitalization of public knowledge [20, p. 5–6]. The low level of innovation activities of Ukrainian enterprises is due to a number of factors, in particular it [21, p. 103–104]: the underdevelopment of information infrastructure, insufficient level of regulatory and legal regulation, resource constraints, gaps in data security and privacy, lack of qualified professionals, lack of competence of future users, low level of digital culture, the significant cost of projects involving

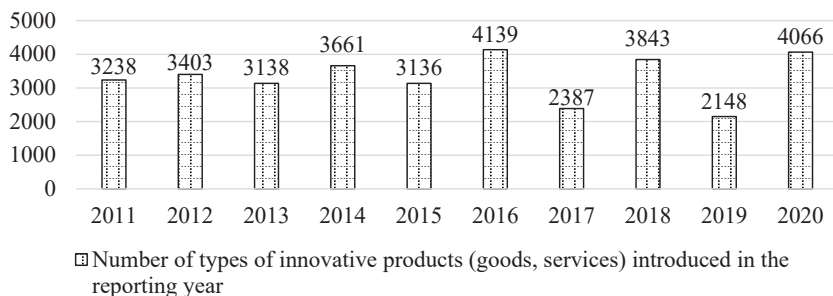


Figure 5. Trends in the number of implemented types of innovative products (goods, services) in 2011–2020, units

Source: compiled on the basis of the data [18]

the use of innovative technologies. The desire to maximize their own private profits is also a deterrent to the development of digitalization, in particular the level of investment of resources by asset owners in innovation, and the application of the latest technologies in most cases requires significant costs and is associated with certain risks.

In this context, let us analyze the dynamics of innovation costs of industrial enterprises (Figure 6).

During the period under review, the dynamics of expenditures on innovation of industrial enterprises is characterized by non-sustainability there is also a significant reduction in expenditures on innovation in

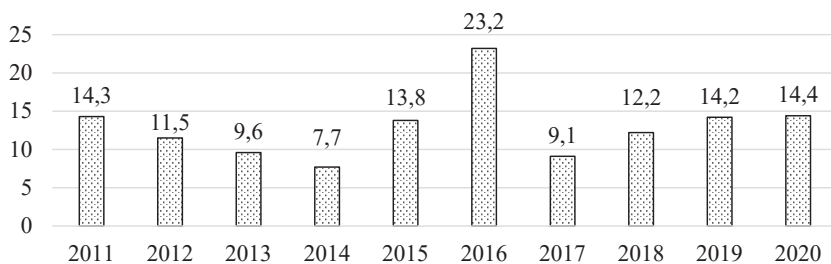


Figure 6. Dynamics of costs for innovations of industrial enterprises for 2011–2020 billion hrn

Source: compiled according to the data [18]

2017 compared to the previous year. The priority of support for the enterprises' sustainable development requires a focus on innovative development; accordingly, since 2017, there has been a gradual increase in innovation costs of industrial enterprises.

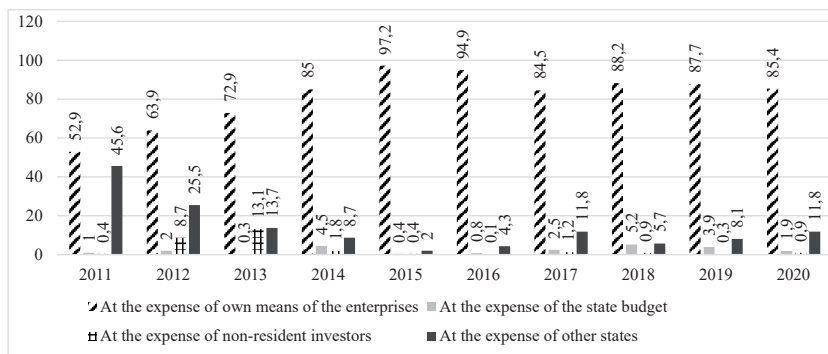


Figure 7. Share of sources of financing of innovation activity of industrial enterprises (in % of the total expenditure on innovation) for 2011–2020

Source: compiled from the data of [18]

The analysis of the sources of financing innovative activities of industrial enterprises (Figure 7) shows that in most cases, the main sources of funding are the enterprises' own funds, which is explained by the importance of enterprises investing in innovative products to increase the level of competitiveness and economic efficiency of their activities.

Thus, modern economic development trends due to such global trends as globalization, increasing level of informatization and the role of human capital, the focus on innovative and technological development and digitalization of different social spheres, require enterprises to support and develop an appropriate technological level and define the innovative development as one of the strategic priorities to ensure a proper level of competitiveness and the economic efficiency.

Conclusions. The transformational nature of the economic space necessitates the adaptation of enterprises, which will contribute to their

sustainable development and growth, while ensuring an appropriate level of competitiveness and maintaining market positions. The strategic management of adaptations of innovation activities of companies to the conditions of sustainable development is designed to provide a balance between performance and capacity.

When adapting the strategic management of innovation activities of enterprises, it is important to consider the peculiarities of the innovation strategy of the enterprise formation, involving the consistent implementation of the interrelated stages to ensure the effectiveness of innovation in general in the context of limited resources and the influence of the external environment. The strategic management of innovative activity of enterprises should correspond to the fundamental principles that reflect the diversity and wide possibilities of synergy of strategies and innovations in conditions of the sustainable development, which include the principles of economic interests, integration of management systems, intellectualization, adaptability, unity and indivisibility, stimulation, harmonization.

Concerns of the strategic management of adaptation of innovation activities to the conditions of the sustainable development is a fairly thorough study, according to which the innovative activity of the enterprise requires a preliminary strategic analysis by applying modern innovative management concepts and methodologies and approaches to decision-making.

Innovative trends of the modern enterprise development require revision of strategic priorities and industrial policy of the state in order to overcome gaps in the industrial sphere and increase competitiveness of created goods and services both in Ukraine and abroad. Implementation of innovations gives impetus to the development of all spheres and contributes to increasing the level of attractiveness of the domestic economy for investment, in particular, contributes to strengthening the competitive position of domestic enterprises by accelerating automation of production processes, increasing productivity, increasing the efficiency of management processes, expanding the boundaries for cooperation.

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