

Efficiency Management of the Enterprises Activity Based on the Principles of Innovative Development

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Abstract

The article examines the economic essence and approaches to determining the efficiency of the enterprise. The author in the study considers the effectiveness and from the standpoint of qualitative analysis of the effectiveness of change and implementation of enterprise development goals. It is established that the tool for ensuring qualitative impacts on the efficiency of the enterprise is the innovative development of the economic space of the enterprise. The article considers the dominant innovations that have influenced the means and methods of production. An organizational and economic mechanism has been recommended to coordinate the costs of innovation activities in order to ensure the efficiency of enterprises. The object of management in the organizational and economic mechanism is the innovation process in the enterprise: from the design of strategic goals of innovation, search and commercialization of innovations, to building and implementing innovation potential. The efficiency of the enterprise under the condition of realization of innovative potential will be characterized by steady competitive advantages and strategically-oriented behavior in the market.

Key words:

innovative development, technological way of life, industrialization, dominant innovations, innovative potential, efficiency of activity, enterprise.

1. Introduction

In the conditions of dynamic development of economy, transition of economic processes to new technologies, materials and means of production, innovations are the key factor of formation of stability and efficiency of economic systems. In historical perspectives, innovation is becoming a determinant of structural change both on the scale of macroeconomic systems and on the scale of individual enterprises. Therefore, the activity of enterprises in the conditions of innovative development should be aimed at the formation of innovation potential, which ensures the implementation of strategic goals of efficiency.

The article is devoted to the study of the patterns of influence of innovative economic development on the efficiency of the enterprise.

2. Literature review

The efficiency of enterprises is the main purpose of their operation, regardless of the manifestations and objectives. Therefore, many publications in modern scientific research are devoted to this issue. The works of many foreign scientists are devoted to the problems of ensuring the efficiency of the enterprise. The existing theoretical and applied bases of enterprise efficiency management need to be adapted to accelerate the innovative development of the economy.

Many leading scientists in their research have paid considerable attention to managing the efficiency of enterprises, ensuring their economic security and processes of innovative development, including: Averchev O. (2021) [1]; Butko M. (2019) [2]; Chazov E.L. (2019) [3]; Deng X. (2021) [4]; Garachuk Y.O. (2008) [5]; Ivanova N. (2016) [6]; Jiang D. (2021) [7]; Junevicius A. (2017) [8]; Khanin S. (2021) [9]; Kuzmina I.A. (2019) [10]; Menshikova M.A. (2018) [11]; Miler R.K. (2020) [12]; Popelo O. (2021) [13]; Popov G. (2021) [14]; Pryimak V. (2021) [15]; Samiilenko H. (2021) [16]; Shtal T.V. (2018) [17]; Dergaliuk B. (2021) [18]; Kovalenko N. (2021) [19]; Tulchynska S. (2021) [20]; Vankevich E.V. (2020) [21]; Zalutska K. (2021) [22] and others.

The authors of the article [10] proved that the current competitive advantages of enterprises increasingly depend on the ability of employees to develop and implement innovations, rather than on the degree of ownership of material values and capital resources. Scholars argue that this is the basis of economic growth based on scientific and technological progress and leads to increased investment in intellectual capital. After all, according to the authors, innovation is the basis for the development of industrial enterprises, and also allows to increase competitive advantages.

The purpose of the article [15] is to study approaches to assessing the effectiveness of the marketing management system of innovative energy activities of enterprises in conditions of uncertainty. In the study, the authors analyzed and selected the optimal input parameters, which included both quantitative and qualitative indicators. The scientists [12] developed and conducted an empirical study with the analysis of the original matrix, which

relates to the performance of organizational activities of the enterprise. Scientists believe that the results confirm the significant potential for widespread use of the matrix, which can be used as a universal tool for analyzing and comparing the effectiveness of integrated IT systems in the operational activities of enterprises.

The authors of the article [3] compiled a matrix of efficiency, which determines the impact of the required investment and planned flow on the economic performance of the project. Scientists have developed a ranking method based on the calculation of the integrated efficiency ratio. The authors argue that taking into account this ratio will facilitate the adoption of optimal management decisions, taking into account the impact of risk assessment in the case of projects with the same economic efficiency. The article [11] argues that the development of the enterprise in the international market depends on its ability to adapt the development of technology and implement innovations. Scientists have proposed a concept of formalizing the management of the effectiveness of international economic activity, which includes a strategic and tactical component of the management process at different stages of the ecological cycle of enterprise development.

The authors of the research [8] identified the factors influencing the efficiency of state-owned enterprises. Scientists have analyzed the impact of management control on the economic efficiency of state-owned enterprises through the use of management audit. As a result of the study, the authors developed an innovative approach to improving the management of economic activities of state-owned enterprises by applying audit principles, which are traditionally associated with assessments of financial performance.

The purpose of the article [22] is to study the processes of effective innovation of enterprises and the peculiarities of timely implementation of innovative projects. The authors argue that projects must meet and meet the requirements of the external and internal environment and help build their own potential with the focus of the enterprise on the long-term perspective of innovative development. The authors have developed methodological and practical recommendations for the development and implementation of a system of strategic management of innovative activities of the enterprise.

The article [1] proves that ensuring the balanced efficiency of economic activity of enterprises should be carried out with the help of resource opportunities that fully reflect the efficient use of resources. The authors argue that the maximum efficiency of economic activity is obtained under such a management system, which contributes to the maximum economic result under the conditions of establishing a threshold level of resource use.

The paper [7] argues that leadership is considered useful for sharing knowledge in a team and promotes innovative development. The authors investigated that

transformational leadership and authoritative leadership are differently related to the exchange of knowledge in a team.

3. Results

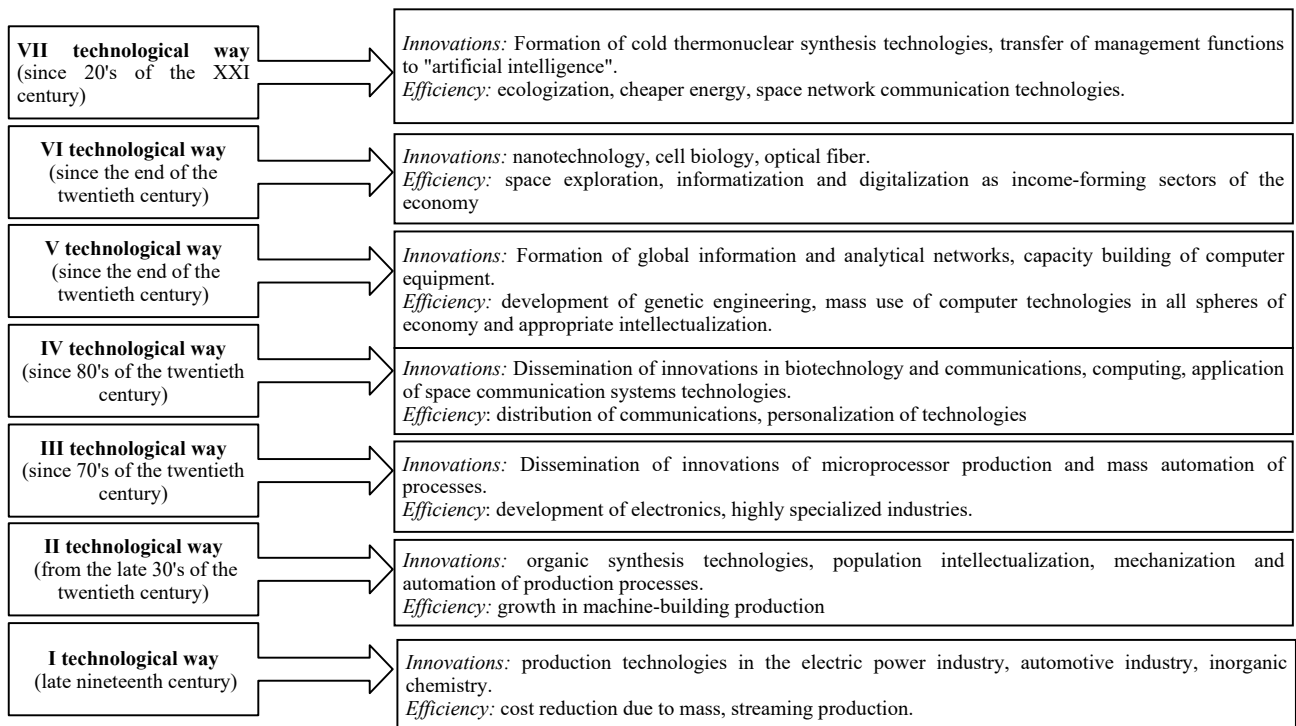
Establishing the economic essence of the concept of "efficiency" has been the subject of interpretations and hypotheses of many modern scientists. Defining efficiency as the ratio of the effect to the resources spent on its receipt, sometimes disclosed through the evaluation of the effectiveness of resource management. This approach allows, adjusting, for example, the cost of production or increasing the markup on products, to adjust the final result of the enterprise. At the same time, there are extensive changes in operational activities that do not affect the implementation of strategic goals. Instead, there is another point of view, in which efficiency reflects only a positive result. Therefore, we can assume that efficiency and effectiveness have fundamentally different interpretations, namely:

effectiveness - describes both the positive and negative aspects of the final impact;

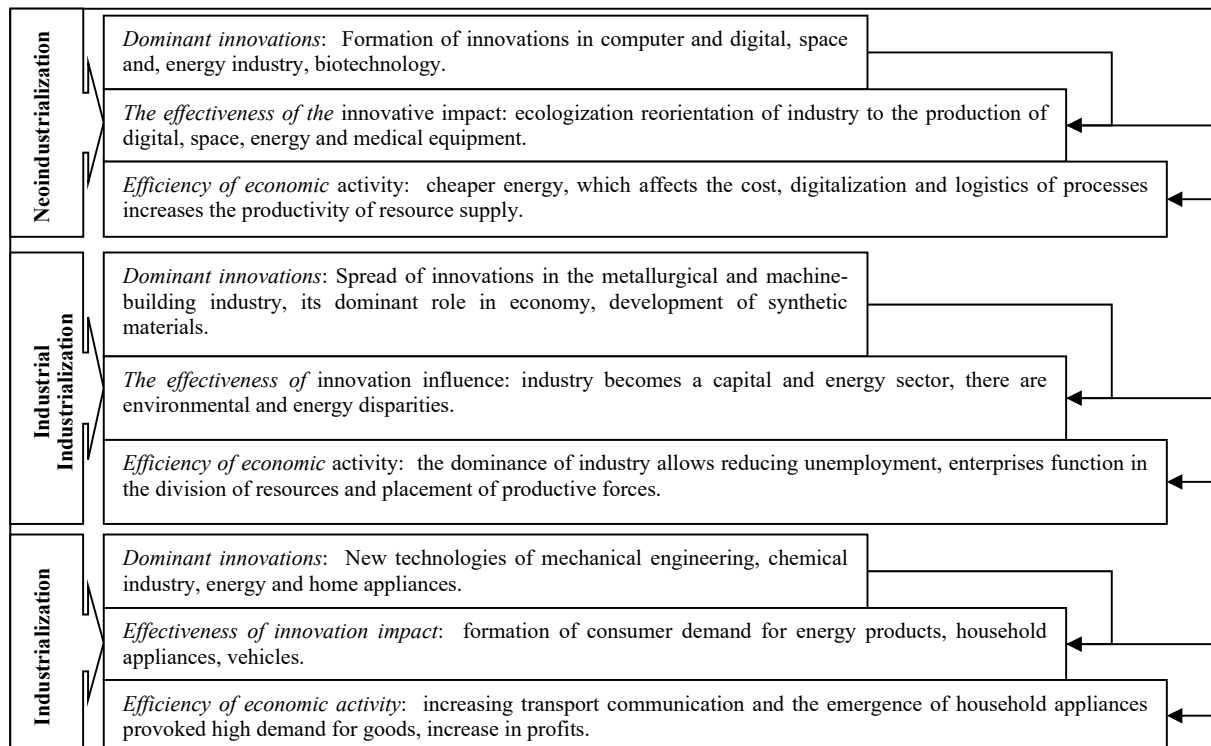
efficiency - only positive effects.

That is, to ensure efficiency, it is not enough to get the result of the sale of capital, but to ensure the positive aspect of this sale. Therefore, in scientific research we increasingly see the search for tools to increase efficiency not only through extensive use of resources, but also through management decisions, technologies or specific benefits. This thesis reflects the need not only for quantitative changes to ensure efficiency, but also qualitative, structural changes in the management of product policy and product competitiveness, intensification and modernization of production processes, the introduction of new technologies and materials into production. Such tools are the innovative development of the economic space of the enterprise.

Analyzing the publications presented in this article, as well as many others give the opportunity to conclude about the existence of different points of the choir on the impact of innovative development on the efficiency of enterprises. Thus, it should be noted that there are many concepts that explain the transformation of the economic system under the influence of key innovations. In particular, the emergence of new production tools, production technologies and materials provoke a change in technological patterns. Instead, in the concept of industrialization of the economy, innovations in the means of production become the impetus for a change in the methods of production. At the same time, the conceptual principles of ensuring the efficiency of enterprises are based on the pace of modernization and implementation of innovations (Fig. 1). Efficiency in the implementation of dominant innovations becomes first a competitive advantage, and then a prerequisite for the operation of the enterprise.



a) Innovations in the activities of enterprises when changing technological processes



b) Innovations in the activities of enterprises when you change your industrialization

Fig. 1 Dominant innovations that have influenced changes in the vector of ensuring the efficiency of enterprises. (Source: suggested by the authors).

Thus, the impact of innovative economic development on the enterprise is in accordance with the emergence and diffusion of innovations aimed at:

- creation of new means of production that increase the productivity and profitability of the enterprise;
- adaptation of the enterprise to the requirements of the meso- and macro-environment;
- formation of new competitive advantages;
- building the economic potential and goodwill of the enterprise;
- profitability of investment activity;
- introduction of existing technologies for modernization of the enterprise;
- conducting internal research, searching for innovative solutions and creating your own innovations;
- adaptation of innovations to the demands of ensuring the efficiency of the enterprise by their adjustment or changes in existing technologies;
- energy, resource efficiency, environmental protection and product quality assurance.

To preserve the strategic vector of development and justify long-term prospects for efficiency in enterprises in terms of innovative development, it is necessary to build an organizational and economic mechanism that, with a sequence of stages and influences of components, allows formalizing in accordance with the existing environment (Fig. 2).

The structural composition of the organizational and economic mechanism for managing the efficiency of the enterprise in terms of innovative development can be described as a sequence of cycles that together and in stages form a system of functional relationships between objects and subjects, methods and subsystems of development and implementation in life of innovation strategies and achievement of the purposes of increase of efficiency of introduction of innovations. The direction of management in the described organizational and economic mechanism of management of efficiency of the enterprise in the conditions of innovative development passes a cycle of development and development of innovative production or service to increase of innovative potential.

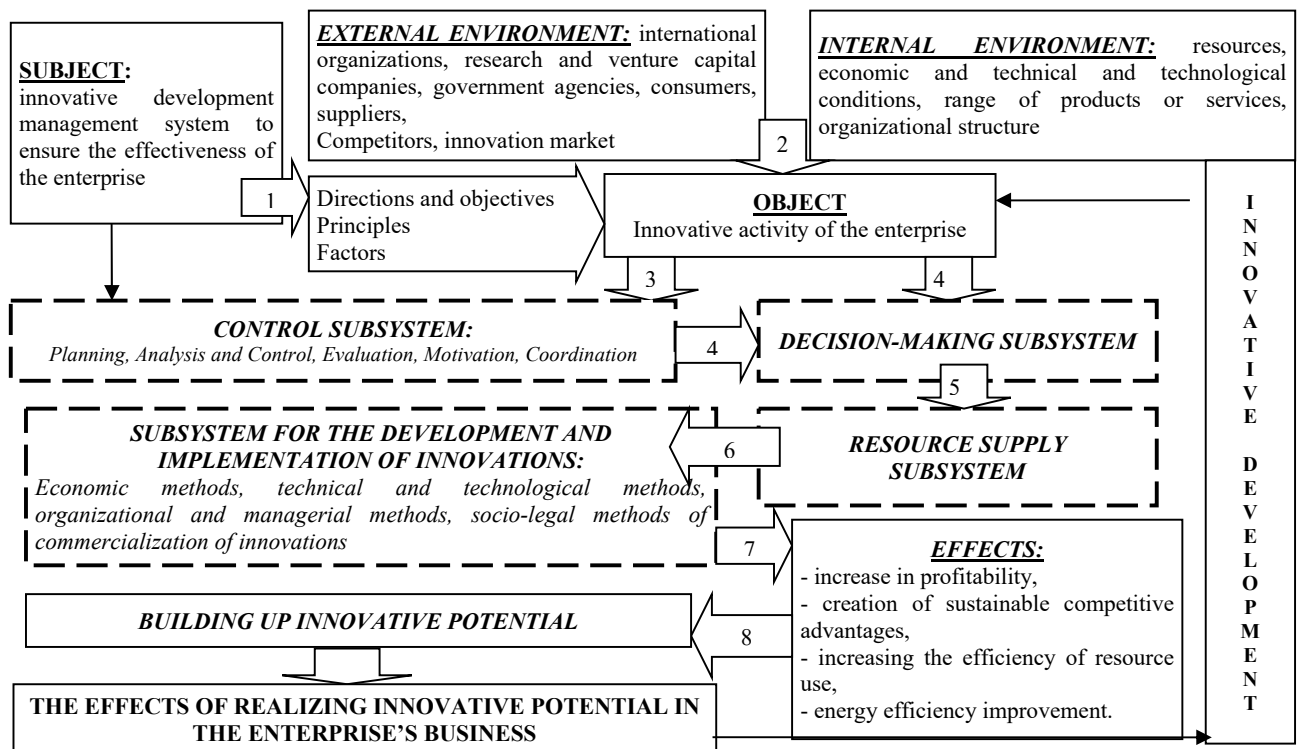


Fig.: 1. – influence of the subject on the object and determination of the goals of innovative development of the enterprise; 2. – analysis of factors of influence in the environment, analysis of existing innovations and possibility of their implementation; 3. – influence of the characteristics of the object on the management of innovative development and decision-making on new innovative projects; 4. – substantiation of innovative strategies and evaluation of their effectiveness for decision-making at the enterprise that the implementation of innovative projects; 5 – management of the implementation of directions, functions, principles in the formation of resource support, evaluation and optimization of resources; 6. – determination of sources of financing, methods of managing innovative projects, determining their effectiveness, 7. – obtaining effects from the implementation of the mechanism

Fig.2 Scheme of organizational and economic mechanism for managing the efficiency of the enterprise in terms of innovative development. (Source: developed by the authors).

At the first stage the analysis of a current situation, and also plans for the future period taking into account innovative activity is carried out and the purposes on increase of efficiency of activity of the enterprise at the expense of innovative development are established. When planning the innovative development of the enterprise, factors are taken into account that may be aimed at the emergence of new technologies within the enterprise. The possible nature of innovative principles of activity and the general strategy of development of the enterprise as a whole are subject to substantiation.

The second stage is devoted to a thorough analysis of the external influence of factors of different nature and identifies the actual resources, as well as organizational opportunities for innovation in the enterprise.

The third stage is devoted to identifying the most optimal tools for the formation of innovation strategies, assessing the effectiveness of future projects, the interaction and correlation of future innovation projects. This makes it possible to design a general management system of innovative strategies for enterprise development, management functionality, location and application conditions.

Carrying out such an analysis makes it possible to move on to the fourth stage. At this stage, a certain set of alternative options for innovation strategies is formed, from which the choice of the most optimal one is then made, which in various parameters is most suitable for the enterprise at this stage. At this stage the project documentation on the chosen project is developed, its efficiency is estimated.

The fifth stage is very important, which is to find the resource opportunities in the enterprise to implement the chosen innovation strategy for implementation. In that case, if the company's own resources are not enough to implement the project, investment resources are attracted for this project.

At the next stage there is a coordination of a specific set of measures for the implementation of an innovative project and the selection of specific tools for its implementation. In this context, it is very important to substantiate the optimization of the structure of project funding sources, as well as to build a clear work schedule. It should be added that the project can be one or more depending on the goals of innovative development of the enterprise.

In the future there is a process of implementation of innovative measures, which consists in monitoring their commercialization and summarizing. If the strategic goals of improving efficiency are not achieved, it is necessary to analyze problems, challenges and "weaknesses" and develop possible solutions. This will further minimize negative impacts and reduce resource costs, as well as adjust strategic goals.

The summing up must include the stage of evaluating the results of increasing efficiency, comparing them with the innovative values. With the correct substantiation of directions, tools and forecasting of effects the enterprise at the seventh stage of management of increase of efficiency in the conditions of innovative development receives the first economic effects which become a basis for formation and increase of innovative potential.

The final stage of managing the increase of enterprise efficiency in the conditions of innovative development reflects the effectiveness of the implementation of innovative projects and strategies.

In the conditions of growth of dynamics of innovative development of the enterprise coordination of the strategic purposes of maintenance of efficiency with new technologies, methods of management need coordination. The stability of the efficiency of the enterprise in the conditions of transformation under the influence of innovations is ensured through the observance of specific principles of management of innovative development.

Formalization of specific principles of ensuring the efficiency of enterprises in terms of innovative development is manifested in the following descriptions:

- the principle of harmonization: consists in the joint coordination of development goals with the goals of sustainable efficiency and is manifested through the combination of current and strategically oriented processes of renewal, modernization;

- the principle of updating: is to increase the functionality of existing enterprise systems by adapting them to innovative development;

- the principle of epimorphism: manifested in reliability, antientropy and cyclicity, resilience of innovative changes;

- the principle of sustainability: is the formation of reserve, stabilizing funds to cover requests for resources with increasing investment costs in the initial stages of innovation;

- the principle of acceptability of innovations: ensuring the continuity of innovation renewal allows for faster implementation of changes, as well as to identify strategic guidelines for their impact on the efficiency of the enterprise.

The proposed scheme of organizational and economic mechanism to ensure the efficiency of enterprises in terms of innovative development reveals the transformation of investment resources and existing innovative ideas into sources of efficiency and innovation potential. The proposed methodological tools should be specified in accordance with the target requests of individual enterprises, taking into account industry, regional, sectoral or market specifics in the activities of the enterprise or its products.

The implementation of organizational and economic mechanism to ensure the efficiency of enterprises in terms of innovative development requires long-term strategic management, consistency of all stages with the main production processes in the sectors of resource consumption, time and space communications. The choice of strategic guidelines for innovation, taking into account the need to ensure future efficiency in the enterprise has a high level of risk, stochasticity and unpredictability. Therefore, the choice of alternative innovation strategies should be based on the analysis and design of scenarios of innovative changes, their impact on the transformation of the enterprise and its economic results. After all, the growing globalization of markets, competition for innovative technology and investment sources provoke risks of losses, loss of market position. Therefore, it is necessary to implement innovative development at the enterprise taking into account the alternative of choice, the vector of modernization, the properties of resource provision and the direction of strategic management of enterprise development. Together, these aspects of the implementation of innovations form the accumulated innovation potential at the enterprise, the activation of which occurs in the presence of prerequisites and economic feasibility to increase the efficiency of activities.

4. Conclusions

The study allowed to form scientific approaches to the interpretation of the concept of efficiency and to determine the effects of innovative development on the enterprise.

Dominant innovations have been identified, which have become incentives to ensure efficiency in the context of changing the vector of development of economic systems. Dominant innovations in the historical perspective reflect the formation of new resulting production technologies, meeting the demands of the population and their effects on the formation of sustainable competitive advantages that ensure sustainable efficiency of enterprises.

Further research is devoted to the formation of organizational and economic mechanism for managing the growth of enterprise efficiency in terms of innovative development based on the sequence of creation, implementation and commercialization of innovations, as well as their transformation into innovation potential. Prospects for scientific research on the formalization of the impact of innovative development on ensuring the efficiency of enterprises are to develop economic and mathematical tools for assessing changes due to the implementation of innovation potential.

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