

## THE MANAGEMENT MECHANISM OF INNOVATIVE COMMUNITIES DEVELOPMENT IN THE CONDITIONS OF POST-WAR RECONSTRUCTION OF THE TERRITORY<sup>1</sup>

### МЕХАНІЗМ УПРАВЛІННЯ РОЗВИТКОМ ІННОВАЦІЙНИХ СПІЛЬНОТ В УМОВАХ ПОВОЄННОЇ ВІДБУДОВИ ТЕРИТОРІЇ

*The formation and effective management of innovative communities within the territories of Ukraine is a necessary condition for their post-war recovery. The analysis of the activities of the leaders of innovative development shows that they are involved in the innovation process with almost all structures that act in a coordinated manner. Thus, the formation of the foundations of the organizational and economic management mechanism for the development of innovative communities in the current operating conditions is relevant. The purpose of the article is the formation of a complete set of tasks for managing the development of innovative communities in the direction of sustainable post-war recovery. Approaches to the separation of the function in terms of management of innovative activity and the formation of the corresponding mechanism are considered. According to the results of the analysis of the existing developments in the field of separation of functions for the implementation of various organizational and economic mechanisms, as well as based on the essence and content of the management of innovative development, the main functions of the organizational and economic mechanism of managing the development of innovative communities are highlighted. They are presented in blocks: functions of analysis of external conditions; functions of analyzing the internal environment of the community; the functions of producing (receiving) and using knowledge for the formation of competitive advantages of innovative communities to ensure their development; functions of managing the selection and implementation of directions and strategies of innovative development. In order to form a more reasonable list of principles within the framework of the mechanism, existing approaches to distinguishing management principles inherent in innovative development are considered. Therefore, the principles of the higher echelon include those that are basic for the implementation of innovative sustainable development. Medium-level principles include those inherent to any innovative and active entity that wants long-term development. The principles of the lower level include basic principles. It was determined that the mechanism's management object is the development strategies of innovative communities, and these strategies are the subject of management. The main subsystems of the mechanism include the subsystem of providing information and knowledge, analyzing the state of the components of the innovative development potential, and managing innovative development strategies. In general, the organizational and economic mechanism of managing the development of innovative communities is considered as a system of interconnected and mutually coordinated economic and organizational methods, levers, forms and management tools for the development and implementation of strategies for the innovative development of communities, which are oriented towards a "technological breakthrough" and bringing to the market "subversive" innovative products, formation of sustainable competitive advantages on this basis and ensuring high competitiveness of the community on national and foreign markets.*

**Key words:** organizational and economic mechanism, innovative communities, post-war territorial development, innovative development, development management.

UDC 332.122.62

DOI: <https://doi.org/10.32782/dees.15-2>

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*Для забезпечення повоєнного сталого розвитку території на сьогодні необхідною умовою є забезпечення формування та активного господарювання в їх межах інноваційних спільнот. Аналіз діяльності лідерів інноваційного розвитку свідчить, що на них у інноваційному процесі задіяні практично усі структури, які діють взаємоузгоджено. Таким чином формування основ організаційно-економічного механізму управління розвитком інноваційних спільнот в теперішніх умовах функціонування є актуальним. Метою статті є формування цілісного комплексу завдань щодо управління розвитком інноваційних спільнот в руслі сталого повоєнного відновлення. Розглянуто підходи до виокремлення функцій в розрізі управління інноваційною діяльністю та формування відповідного механізму. За результатами аналізу існуючих напрацювань в сфері виокремлення функцій для реалізації різного роду організаційно-економічних механізмів, а також виходячи з сутності і змісту управління інноваційним розвитком виділено основні функції організаційно-економічного механізму управління розвитком інноваційних спільнот. Їх подано блоками: функції аналізу зовнішніх умов; функції аналізу внутрішнього середовища спільноти; функції продукування (отримання) і використання знань для формування конкурентних переваг інноваційних спільнот для забезпечення їх розвитку; функції управління вибором і реалізацією напрямів і стратегій інноваційного розвитку. Для формування більш обґрунтованого переліку принципів в межах механізму розглянуті існуючі підходи до виокремлення принципів управління, які притаманні інноваційному розвитку. Відтак до принципів вищої ланки відносяться ті, які є базовими для здійснення інноваційного сталого розвитку. До принципів середнього рівня належать ті, що притаманні будь-якому інноваційно-активному суб'єкту, яке бажає довгострокового розвитку. До принципів нижнього рівня відносяться базові принципи. Визначено, що об'єктом управління механізму є стратегія розвитку інноваційних спільнот, а суб'єкт управління цими стратегіями. До сновних підсистем механізму відносяться підсистема забезпечення інформацією і знаннями, аналізу стану складових потенціалу інноваційного розвитку та управління стратегіями інноваційного розвитку. В цілому організаційно-економічний механізм управління розвитком інноваційних спільнот розглядається як система взаємопов'язаних та взаємоузгоджених економічних та організаційних методів, важелів, форм та інструментів управління розробленням та реалізацією стратегій інноваційного розвитку спільнот, які орієнтовані на «технологічний прорив» і виведення на ринок «підривних» інноваційних продуктів, формування на цій основі стійких конкурентних переваг і забезпечення високої конкурентоспроможності спільноти на національному і зарубіжному ринках.*

**Ключові слова:** організаційно-економічний механізм, інноваційні спільноти, повоєнний розвиток території, інноваційний розвиток, управління розвитком.

<sup>1</sup> Робота виконувалася за рахунок коштів МОН України, наданих на виконання науково-дослідного проєкту «Організаційно-економічне забезпечення повоєнного сталого розвитку територій на основі інфраструктурно-сервісної методології розвитку інноваційних спільнот» (№ 0123U100271)

**Introduction.** In order to ensure the post-war sustainable development of the territories, today a necessary condition is to ensure the formation and active management within their borders of innovative communities. The analysis of the activities of the leaders of innovative development shows that they are involved in the innovation process with almost all structures that act in a coordinated manner. This explains the high efficiency of their innovative activities. In addition, world experience shows that nowadays organization has taken a leading position among management functions and its importance is growing. At the same time, it is necessary to take into account the influence of economic factors. Taking into account the above, it is proposed to investigate the foundations of the organizational and economic mechanism of managing the development of innovative communities in the current conditions of operation.

**Analysis of basic research and publications.** Approaches to the formation of the foundations of the organizational and economic mechanism for managing the development of innovative communities were studied in the works of domestic and foreign scientists, such as: Korsikova N.M., Illiashenko S.M., Voronkova V. G., Shypulina Yu.S., Boyko O.B. and others. However, the existing developments are characterized by fragmentation, they reveal only certain aspects of the specified mechanism. And this does not allow to purposefully manage the processes of identification, strengthening and implementation of the comparative competitive advantages of specific innovative communities, to form on their basis strategies for sustainable post-war development, to ensure the conditions for long-term and sustainable innovative growth on national and foreign markets.

Thus, **the purpose** of the article is the formation of a complete set of tasks for managing the development of innovative communities in the direction of sustainable post-war recovery.

**Materials and results of the study.** In general, the organizational and economic mechanism for managing the development of innovative communities should include the following components:

1. The functions it implements.
2. Principles of formation and functioning.
3. Object of management – strategies for the development of innovative communities.
4. Methods, tools, criterion base of strategy management.
5. Subject of management of strategies for the development of innovative communities.
6. Subsystems and elements of the control mechanism, the order of their interaction.

Let's take a closer look at the functions, principles and subsystems and elements of the mechanism.

Let's consider the approaches to distinguishing the function in terms of management of innovative activity

and the formation of the corresponding mechanism. In general, the main functions of innovation management include: analysis, planning, implementation and control of innovation activities. The main functions of managing innovative development at the level of individual innovative communities are presented in works [1–5] and others.

Thus, according to the results of the analysis of the existing developments in the field of separation of functions for the implementation of various organizational and economic mechanisms, as well as based on the essence and content of the management of innovative development, the main functions of the organizational and economic mechanism of managing the development of innovative communities have been identified.

1. Functions of analysis of external conditions:
  - the external macro environment (national and international) and its development trends – determination and analysis of the level of macroeconomic stability, the presence of well-functioning private and public sector organizations, the level of infrastructure development, labor, sales and financial markets, analysis of the level of state orders for advanced technological products, the state of regulatory policy and support of innovatively active enterprises, analysis of the state of the venture market;
  - the external microenvironment (national and international) and trends in its development – analysis of the presence of a large number and quality of local suppliers, intermediaries and other contractors, analysis of the level of clustering and determination of trends in the further development of all components of the microenvironment;
  - innovative culture of the state (national level) – analysis of the level of all components of the innovative culture of the state and identification of trends to increase it;
  - global trends in the development of science and technology;
  - trends in the development of science and technology in the field and related fields;
  - trends in the development of science and technology in the actual and potential target markets of enterprises (industries of consumers – actual or potential);
  - trends in changes in consumer demand in actual and potential target markets – analysis of consumers' readiness for innovations, their level of experience.
2. Functions of analysis of the internal environment of the community:
  - the potential of innovative development: in general and by its individual components – analysis of the level of technological capability, the level of complexity of innovative activity, the level of costs for innovative activity, the level of decentralization of

management, analysis of the situation in the field of intellectual property;

- innovative culture – analysis of human capital's ability to innovate, their psychological readiness and the existing incentive system.

3. Functions of production (receiving) and use of knowledge for the formation of competitive advantages of innovative communities to ensure their development. This function is particularly important in today's economic conditions. After all, the new technological structure and Industry 4.0 provide for the active development of knowledge-oriented economy.

4. Functions of managing the selection and implementation of directions and strategies of innovative development:

- promising directions of innovative development of industries within the territories (adjacent industries);

- perspective directions of innovative development of enterprises;

- type of perspective strategy of innovative development.

- specific options for a promising strategy for the innovative development of communities.

To form a more reasonable list of principles within the framework of the mechanism, we considered the existing approaches to distinguishing the management principles inherent in innovative development [1; 6–8].

A systematic critical analysis and generalization of literary sources and business practices allowed to form a system of principles for the formation and functioning of the organizational and economic management mechanism for the development of innovative communities.

Therefore, the principles of the higher echelon include those that are basic for the implementation of innovative sustainable development:

- orientation towards innovative development – a clear awareness that innovations are a source of sustainable competitive advantages;

- the radical nature of innovative developments, they must radically change the existing needs and requests of consumers and other subjects of the innovation process, or form new ones;

- continuity (cyclicality) of creating and implementing innovations and fighting for leadership/maintaining it;

- forecasting/formation of trends in scientific and technological development – aiming at getting ahead of the curve;

- focus on knowledge as a source of innovative developments – focus on the quality of personnel (qualification level, continuous improvement, lifelong learning, work stimulation, etc.).

Medium-level principles include those inherent to any innovative and active entity that wants long-term development:

- maximizing profit (its growth rate) while simultaneously maximizing the well-being of each

employee – the main resource in the current operating conditions is people, their knowledge and experience;

- decentralization of management – freedom of creativity and work in general is an integral condition for the development of personnel abilities and their ability to innovate;

- aiming at the constant improvement of the level of technological capacity – today the main factors of anticipatory shifts are knowledge and technology, therefore the constant introduction and production of the latest technologies is a guarantee of long-term success;

- maximum consideration of the interests of the subjects of the innovation process;

- alignment of internal possibilities of innovative development (potential of innovative development) with external ones generated by factors of the external macro- and microenvironment;

- a reasonable orientation towards meeting the needs and requests of consumers - to be completely guided by the current requirements of consumers is currently not correct, because quite often consumers themselves are not aware of their needs; it is worth revealing hidden needs and directing efforts to their satisfaction.

The principles of the lower level include the basic principles:

- systematicity;

- scientific background (cooperation between science and production);

- alternatives (when choosing options for strategies, types of development, directions of development, etc.).

The organizational and economic mechanism of managing the development of innovative communities is considered as a system of interconnected and mutually coordinated economic and organizational methods, levers, forms and management tools for the development and implementation of strategies for the innovative development of communities, which are focused on a "technological breakthrough" and bringing to the market "subversive" innovative products, forming sustainable competitive advantages on this basis and ensuring high competitiveness of the community on national and foreign markets.

Let's consider the main subsystems of the mechanism.

The subsystem of providing information and knowledge includes a set of methods and tools for monitoring the state of the external macro- and microenvironment, components and elements of the potential of innovative development, as well as innovative culture. With their help, a knowledge base is formed, which is the basis for the formation and implementation of innovative development strategies.

Subsystem of analysis of the state of components of innovative development potential. It includes a set

of methods for diagnosing the state of the components of the enterprise's innovative development potential.

The management subsystem of innovative development strategies includes a set of methods that ensure the performance of all management functions: analysis and planning, organization, motivation, and control.

The effectiveness of the functioning of the mechanism is determined by the effectiveness of managerial influences on the main components of the success of innovative activity.

Their composition is defined as follows:

- management system (rational organizational structure, dynamism, flexibility, adaptability, change management, risk management, direct and feedback links, motivation, control effectiveness, etc.);

- knowledge (relevance, relevance, completeness, efficiency of production and use, etc.);

- personnel (knowledge, qualifications, creativity, rational age and gender structure, psychological compatibility, etc.);

- innovative culture (the degree of favorability of individual employees, groups of employees (subdivisions) and the organization as a whole to innovations, readiness to translate them into new products, technologies, management solutions, etc.);

- R&D (research and testing base, methods, patent activity, research units, practical orientation, effectiveness, etc.);

- marketing of innovations (personnel, organizational structure, relations with economic partners and contact audiences, methods, experience, practical orientation, effectiveness);

- production (techniques, technologies, contacts, personnel, traditions, production areas, productivity, etc.);

- material resources (finances, raw materials and components, technical and technological base, etc.).

**Conclusions and proposals.** Summarizing what has been stated, it should be noted that we have developed a conceptual model for managing strategies for the development of innovative communities. Its practical implementation will provide a fundamental opportunity to purposefully manage the formation and implementation of innovative development strategies focused on a "technological breakthrough" and bringing to the market "subversive" innovative products (products or services).

This, in turn, will make it possible to increase the efficiency and reduce the risk of innovative activity, reasonably develop strategies for the innovative development of domestic industry, ensure the high competitiveness of innovative communities on national and foreign markets, which will contribute to the economic growth of the territories and Ukraine as a whole.

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