

INFRASTRUCTURE MANAGEMENT OF INNOVATIVE ENTREPRENEURSHIP

Abstract

The article discusses the role of innovative entrepreneurship in the global transformation of the economy. A comparison is made of market and innovative entrepreneurship and an assessment is made of the role of the state, which is the main regulator of innovation activity and science – production – society relations. The advantages of innovative entrepreneurship and the ways of its implementation in modern economic conditions are considered. The development of fundamental science and the improvement of state regulation are the most important areas of state policy in the field of the development of science and technology. In modern conditions, innovative entrepreneurship is actively developing not only at the level of managerial decisions, but also in the scientific sphere. The article reveals the main components of innovation in terms of the structural problems of the economy and searches for the main ways of developing innovations in the domestic economy. The article discusses the main problems of formation and features of the development of innovative entrepreneurship, reveals the concept of “innovative entrepreneur”. The models of innovative entrepreneurship and their role in the development of business in the field of innovation are presented. The analysis of problems in the innovation activities of entrepreneurs allowed the authors to identify success factors that ensure the innovative development of the modern economy. The role and place of innovative entrepreneurship as one of the main strategic factors of the effective socio-economic development of the country, ensuring its competitiveness in the external and internal markets are defined.

Key words: innovations, entrepreneurship, infrastructure, innovation model, venture funds, competitiveness, efficiency, advantages.

In market conditions, the main driving force of economic growth is innovation, introduced both in production and in operation and in consumption. They ultimately determine the growth of entrepreneurs' income, as well as raising standards of living standards of the population.

The task of entrepreneurs is to modernize the way of production through the implementation of inventions, and more generally through the use of new technologies for the production of new goods or old products, but a new method, by opening a new source of raw materials or a new market for finished products until reorganization the former and the creation of a new industry [1].

The need for the development of innovative entrepreneurship is determined by the following factors:

- ♦ intensification of intensive factors of development of production, which contribute to the application of scientific and technical progress in all spheres of economic activity;
- ♦ the defining role of science in enhancing the efficiency of the development and introduction of new technology;
- ♦ the need for a substantial reduction in the terms of creation, development of new technology, an increase in the technical level of production, the need for the development of mass creativity of inventors and rationalizers;
- ♦ specificity of the process of scientific and technical production, expressed in the uncertainty of results, the multivariate nature of research, the presence of risk and the possibility of obtaining negative results;
- ♦ increase in costs and deterioration in the economic performance of enterprises in the development of new products; rapid moral wear and tear on technology and technology; objective need for accelerated introduction of new technology and technology, etc.

The classical model implies the organization of entrepreneurial activity with the expectation of the maximum return on resources.

It is believed that it is within the framework of this model that the basics of managing production growth are formed, when the resources of the enterprise are used for modernization, updating of the production base and in addition to them are necessary, there are external sources of financing and certain activities on the part of the state, in particular, to support and stimulate this production.

The second model is innovative entrepreneurship (productive), which involves the search for new ideas, ways of developing the enterprise, new technologies for managing it, which allows us to talk about the concept of growth management, in other words, innovations. The innovation process in one form or another is present in the entrepreneurial activity.

Dynamism is the main characteristic of innovation activity, providing the most complete manifestation of value in the commercialization of intellectual products (innovations) [2].

Creation of a flexible and integrated system of management of innovation processes, as well as management style, stimulates the creation and implementation of innovations and provides end-to-end management of innovative processes from the emergence of ideas to its implementation. Organizationally, this mechanism provides that services and departments dealing with technical policy and innovation management are dispersed at different levels of the management structure and there is an established system of interaction and coordination between them.

There are three fundamentally different forms of innovation management: sequential, parallel and integral.

Consistent form involves the phased implementation of innovation in turn in all functional units. After the completion of the stage in a particular division, the results are transferred to the company's management, which decides on the expediency of continuing the work on innovation. Among the positive aspects of this form are the repeatability of project evaluation at each stage and, as a consequence, reducing risks and simplifying the control system, since at each stage there is only a homogeneous activity.

The drawbacks are: the previous units do not have the opportunity to improve and adjust their stage of work after transferring it to the next group of specialists; subsequent specialists can not bring their ideas to the project in the previous stages; with each stage the cost of correcting previously committed defects and miscalculations is increasing; the project implementation deadline is extended due to the need for decision-making after each stage of the project.

The parallel form assumes carrying out of all works on the project simultaneously in all divisions. To adjust the work, it is sufficient to direct the project for change only to the relevant department. As the main negative features of this form can be called: the lack of a coordinating body; complexity of monitoring the implementation of each stage; The need for simultaneous analysis of the results of the company's top management. Typically, this form is used by medium and small firms with a flat management structure and a small number of functional departments.

With all the positive features of the consistent and parallel organization of works on the implementation of innovative solutions, there is a significant negative factor – a complete reorientation of all participating units to the project work in the event of a refusal to perform normal day-to-day functions for the traditional economic activities of the company.

To avoid this, many innovative companies are gradually introducing into the organizational structure integral forms of innovation management.

The most common form of integration form is the matrix system of organization. Its essence lies in the fact that, along with traditional functional and production divisions, project target groups are organized, headed by the project manager, who performs the coordinating function.

The project manager, when making the next innovative decision, creates target units, where specialists are invited from different divisions of the company for the duration of the project. They are at the same time in double submission – the project manager and the head of his unit. Conflict of subordination does not arise, as the functions of each leader are clearly separated. The project manager determines the tasks necessary to implement the decision of the top management, and the functional and line managers carry out the function of organizing and monitoring the entire course of work [3].

The advantage of the matrix system is:

- ♦ reduction of the project implementation time;
- ♦ prompt response to any external changes;
- ♦ simplification of the control system;
- ♦ no need to interrupt traditional economic activities.

A prerequisite for the effectiveness of this form is a clear definition of the functions and responsibilities of all the members of the target groups: to establish collective decision-making on the fulfillment of the project implementation tasks, and in the matrix structures there is the possibility of

participation of external experts; should strictly define the responsibility of the project participants; to ensure the fulfillment of these conditions, the company management must introduce a special incentive system for all members of the target units, focused on achieving the final result.

Creation of project groups occurs not only when making decisions on the introduction of product innovation strategies, it is effective in implementing any innovation.

As a form of target management, an innovative project is a system of interdependent and interconnected resources, timelines and implementers of activities for the implementation of innovations.

As an innovative process, an innovative project is a combination of scientific, industrial, financial, commercial and organizational activities carried out in a certain sequence, leading to innovation. At the same time, the innovative project is formalized in the form of technical, planning, economic and contractual documentation.

The main elements of the innovative project include the following:

- ♦ innovative goals, tasks of production development (target economic installations) and project performance indicators;
- ♦ a list of activities and content of the project implementation activities, linked by resources, terms and executors;
- ♦ legal and economic conditions for interaction between project participants, key obligations, sharing of risks and innovation results;
- ♦ list of measures for social and territorial harmonization of innovation and its support by state bodies;
- ♦ project management system.

The situational approach in decision making opens up a wide opportunity for maneuvering and adequate response to the transformation of innovation parameters.

The need for innovation arises every time competitors compete ahead of the economic entity in the efficiency of using production factors and selling products. The decline in profitability sharply reduces the accumulation and development opportunities. Termination of economic operations for certain non-competitive products frees assets that are dead without the rapid deployment of new business lines [4].

The enterprise experiences the specified negative phenomena as a result of decrease in competitiveness throughout all life cycle. Avoiding the severe consequences of competition allows innovative nature of entrepreneurial activity – innovative business.

Innovative business involves continuous and programmable changes in production technologies and products that meet the market requirements.

The programming of innovations in the real sector of the economy is based on the strategic goals of business and economic attitudes adopted within the framework of a specific development strategy. Practical implementation of an integrated, systematic approach to solving specific innovative problems requires the formation of a set of interrelated and interrelated activities aimed at achieving the objectives of innovation.

An innovation plan (project) is a system of organizational, legal, and financial-economic documents necessary to implement innovation at a particular enterprise and (or) a set of economic entities. It contains the main economic indicators characterizing the results of innovation, the state of the economic entity after the innovation for the future, and also describes the problems that will have to be faced in the way of implementing innovations.

Changes in the parameters and conditions of an innovative investment project are taken into account and evaluated in technical and economic calculations covering a time period equal to the life cycle of the product.

The stage of preparing innovation for implementation is nothing more than the concretization of the chosen innovation strategy. Here there is a combination of innovation parameters with the target economic setting for the object of innovation, as well as the formation of investment resources. At this stage the synchronization of the planned actions takes place for the first time, certain reserves for time and resources are put in the innovation plan.

Special requirements for the management of innovation require the following features: Innovative activity can be interpreted in part as a production process, partly as an information process; the period of validity of the innovative product is long enough; the difficulty of determining the coefficient of

efficiency single-product innovation product delivery; uncertainty about the success of research and development; the difficulty of determining the real amount of necessary costs; great requirements for creativity; opposition of technical thinking and economic approaches.

The main indicators characterizing innovation processes at the enterprise are:

- 1) intensity of innovation activity – total expenditure on research and development as a percentage of turnover;
- 2) share of innovation – turnover from projects / products no older than “x” years, relative to total turnover;
- 3) the time of the product’s appearance – the time from the idea to the introduction of the product on the market;
- 4) break-even time – the length of time during which the income exceeds the previously made investments;
- 5) indicators characterizing: the age structure of research projects; the ratio of research costs to development costs; the share of orders for research and development given to other executors; the number of initiated, continued and completed innovation projects for the year; the cost of development per one employed in the field of development; creation of value for each employee in the field of development.

The principles of managing an innovative project differ significantly depending on whether it is a purely research institution, a large enterprise that combines R & D and batch production or a small or medium-sized enterprise that arose on the basis of innovation activity.

The goal of the state policy in the field of the development of science and technology is the transition to an innovative way of the country’s development based on selected priorities [5].

To achieve the goal of state policy in the field of development of science and technology, the following main tasks:

- 1) creation of organizational and economic mechanisms for increasing the demand for innovations by domestic production, ensuring the advanced development of fundamental science, the most important applied research and development;
- 2) improvement of the regulatory and legal framework for scientific, scientific, technical and innovation activities;
- 3) adaptation of the scientific and technical complex to the conditions of a market economy, ensuring the interaction of public and private capital for the development of science, technology and technology;
- 4) rational combination of state regulation and market mechanisms, measures of direct and indirect stimulation of scientific, scientific and technical and innovative activities in the implementation of priority areas for the development of science, technology and technology;
- 5) perfection of the system of training of scientific and engineering personnel of the highest qualification in the field of science and technology;
- 6) support of scientific research and experimental development in priority areas of science, technology and technology development, taking into account world trends in this field;
- 7) strengthening the research sector of the Higher School;
- 8) activation of the transfer of knowledge and technology between the defense and civil sectors of the economy, the development of dual-use technologies and the expansion of their use;
- 9) accelerated realization of scientific and scientific and technical achievements that contribute to preventing the emergence of military conflicts, man-made and environmental disasters and reducing the damage from them;
- 10) development and modernization of weapons, military and special equipment, assistance to the development of the defense-industrial complex;
- 11) improvement of technical means, forms and methods of combating terrorism, including with international.

In general, the infrastructure of innovative entrepreneurship is formed by three main components: legal, financial and information.

The legal infrastructure of entrepreneurship is formed by legislative and regulatory acts issued by the authorities, as well as by a network of specialized legal institutions and relevant specialists responsible for drafting bills.

The core of the legal framework is a set of laws on the protection of intellectual property and the protection of copyright. The need for unification is conditioned by the processes of globalization and the internationalization of technological markets.

An important part of the legal support of the innovation sphere is the legal acts regulating and stimulating R & D in the interests of industry and the processes for transferring the results of the conducted research to the sphere of their use. The lack of unified and effective mechanisms for bringing the results of innovation activities to commodity standards is one of the factors that negatively affects and, accordingly, limits the development of material production.

Also an integral part of the legal infrastructure is a set of legal acts that determine the conditions for the activities of various institutions supporting and supporting the innovative business, its institutional infrastructure.

The financial infrastructure of innovative business is formed on the basis of developed financial and credit mechanisms of modern market structures that provide entrepreneurship with financial resources.

The following financial structures can work with innovative companies:

- ♦ banks that primarily engage in business lending because of the high riskiness of innovation do not work with innovations in the initial stages of development;
- ♦ various investment institutions: insurance companies, pension funds, etc.;
- ♦ investment funds that concentrate their efforts on certain types of business;
- ♦ share capital, which is formed to attract finance through the sale of shares;
- ♦ individual investors;
- ♦ venture funds are specialized financial institutions set up for activities in the sphere of high risk.

One of the main sources of financing is the enterprises' own funds. To support the state, it initiates the creation of extra-budgetary funds.

Information support must meet the following conditions: timeliness; reliability; targeting; completeness; the urgency of information; legal correctness.

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Аңдатпа

Мақалада экономиканы жаһандық трансформациялауда инновациялық кәсіпкерліктің рөлі талқыланды. Нарықтық және инновациялық кәсіпкерлікті салыстыра отырып, инновациялық қызметтің және «ғылыми – өндірістік – қоғам» қатынастардың негізгі реттеушісі болып табылатын мемлекеттің рөл бағаланады. Инновациялық кәсіпкерліктің артықшылықтары және оларды қазіргі заманғы экономикалық жағдайларда пайдалану жолдары қарастырылады. Фундаменталды ғылымды дамыту және мемлекеттік реттеуді жетілдіру ғылым мен техниканы дамыту саласындағы мемлекеттік саясаттың маңызды бағыттары болып табылады. Қазіргі заманғы жағдайда инновациялық кәсіпкерлік басқарушылық шешімдер деңгейінде ғана емес, сонымен қатар ғылыми салада белсенді дамып келеді. Мақалада экономиканың құрылымдық проблемалары тұрғысынан инновацияның негізгі компоненттері ашылып, отандық экономикадағы инновацияларды дамытудың негізгі жолдары қарастырылады. Инновациялық кәсіпкерліктің дамуының негізгі ерекшеліктері мен ерекшеліктері талқыланып, «инновациялық кәсіпкер» тұжырымдамасы ашылады. Инновациялық кәсіпкерліктің үлгілері және инновация саласындағы бизнесті дамытудағы олардың рөлі ұсынылған. Кәсіпкерлердің инновациялық қызметінің проблемаларын талдау авторларға қазіргі заманғы экономиканың инновациялық дамуын

камтамасыз ететін табыстылық факторларын анықтауға мүмкіндік берді. Инновациялық кәсіпкерліктің рөлі мен орны елдің тиімді әлеуметтік-экономикалық дамуының басты және сыртқы және ішкі нарықтардағы бәсекеге қабілеттілігін қамтамасыз ететін негізгі стратегиялық факторларының бірі ретінде анықталды.

Тірек сөздер: инновациялар, кәсіпкерлік, инфрақұрылым, инновациялық модель, венчурлық қорлар, бәсекеге қабілеттілік, тиімділік, артықшылық.

Аннотация

В статье рассматривается роль инновационного предпринимательства в условиях глобальной трансформации экономики. Проводится сравнение рыночного и инновационного предпринимательства и дается оценка роли государства, которое выступает главным регулятором инновационной деятельности и отношений «наука – производство – общество». Рассматриваются преимущества инновационного предпринимательства в современных экономических условиях. Развитие фундаментальной науки и совершенствование государственного регулирования являются важнейшими направлениями государственной политики в области развития науки и техники. Сегодня инновационное предпринимательство активно развивается не только на уровне управленческих решений, но и в научной сфере. В статье раскрываются основные составляющие инновационной деятельности с точки зрения структурных проблем экономики и осуществляется поиск основных путей развития инноваций в отечественной экономике, рассматриваются основные проблемы формирования и особенности развития инновационного предпринимательства, раскрывается понятие «инновационный предприниматель», представлены модели инновационного предпринимательства и их роль в развитии бизнеса в сфере инноваций. Анализ проблем в инновационной деятельности предпринимателей позволил автору определить факторы успеха, обеспечивающие инновационное развитие современной экономики. Определены роль и место инновационного предпринимательства как одного из основных стратегических факторов эффективного социально-экономического развития страны, обеспечивающего ей конкурентоспособность на внешнем и внутреннем рынке.

Ключевые слова: инновации, предпринимательство, инфраструктура, инновационная модель, венчурные фонды, конкурентоспособность, эффективность, преимущества.