УДК 338.1:330.13  
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ІНСТИТУЦІОНАЛІЗАЦІЯ РЕАЛІЗАЦІЇ ІННОВАЦІЙНО-СОЦІАЛЬНОЇ СТРАТЕГІЇ РОЗВИТКУ РЕГІОНА

Визначено, що соціальні цілі та соціальна ефективність є одним з головних критеріїв оцінки будь-якого інноваційного проекту. Запропоновані принципи формування раціональної інноваційно-соціальної стратегії регіонального розвитку. Виокремлено основні завдання інституційно-організаційного спрямування для побудови опорних інституційних структур майбутнього індустріального парку. Розроблено алгоритм побудови технологічної дорожньої карти інноваційного розвитку регіону. Визначено комплексні показники щодо соціальних ефектів інновацій та найважливіші сфери інноваційних змін в організації регіону. Досліджено роль інститутів розвитку в якості каталізаторів приватних інвестицій у приоритетні сектори і галузі економіки щодо упровадження інновацій та удосконалення інституціонального середовища. Розроблено механізм фінансового регулювання інвестиційної діяльності. Проаналізовані інструменти податкового стимулювання інвестиційної діяльності населення, запропоновано набір компонентів та узагальнений показник динаміки якості інвестиційного потенціалу регіону. Доведено, що соціальна спрямованість технологічної політики вимагає прискорити організацію та підвищити ефективність діалогу держави, бізнесу і науки шляхом формування відкритих майданчиків для комунікації цих співтовариств і узгодження їх інтересів.

Ключові слова: інноваційно-соціальна стратегія регіонального розвитку, технологічна платформа, індустріальний парк, технологічна дорожня карта регіону, спеціалізовані інститути розвитку.

Рис. 3, Табл. 2, Літ. 10.

Г.В. Жаворонкова, В.А. Жаворонков, В.В. Клименко

ИНСТИТУЦІОНАЛІЗАЦІЯ РЕАЛІЗАЦІЇ ІННОВАЦІЙНО-СОЦІАЛЬНОЇ СТРАТЕГІЇ РАЗВИТИЯ РЕГІОНА

Определено, что социальные цели и социальная эффективность является одним из главных критериев оценки любого инновационного проекта. Предложены принципы формирования рациональной инновационно-социальной стратегии регионального развития. Выделены основные задачи институционально-организационного направления для построения опорных институциональных структур будущего индустриального парка. Разработан алгоритм построения технологической дорожной карты инновационного развития региона. Определены комплексные показатели по социальным эффектам инноваций и важнейшие сферы инновационных изменений в организации региона. Исследована роль институтов развития в качестве каталлизаторов частных инвестиций в приоритетные сектора и отрасли экономики по внедрению инноваций и совершенствованию институциональной среды. Разработан механизм финансового регулирования инновационной деятельности. Проанализированы инструменты налогового стимулирования инвестиционной деятельности населения, предложен набор компонентов и обобщенный показатель динамики качества инвестиционного потенциала региона. Доказано, что социальная направленность технологической политики требует ускорить организацию и повысить эффективность диалога государства, бизнеса и науки путем формирования открытых площадок для коммуникации этих сообществ и согласования их интересов.

Ключевые слова: инновационно-социальная стратегия регионального развития, технологическая платформа, индустриальный парк, технологическая дорожная карта региона, специализированные институты развития.
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INSTITUTIONALIZATION OF INNOVATIVE AND SOCIAL STRATEGY OF REGIONAL DEVELOPMENT

It is determined, that social goals and social efficiency are the main criteria for assessment of any innovation project. The principles of rational innovation and social strategy of regional development are proposed. The main objectives of institutional and organizational direction for constructing of supporting institutional structures of future industrial park are allocated. The algorithm for constructing the technological roadmap of innovative development of the region is developed. The comprehensive indicators of the social effects of innovations and important areas of innovative changes in the organization of the region are determined. The role of development institutions as catalysts of private investment in priority sectors and industries of economy regarding the introduction of innovations and improvement of the institutional environment is investigated. The mechanism of regulation of financial investment is developed. Instruments of tax stimulation of investment activity of households are analyzed. A set of components and generalized indicator of quality of regional investment potential are proposed. It is proved, that the social dimension of technology policy requires the acceleration of organization and improvement of efficiency of interactions among government, business and science by creating open platforms for communication of communities and coordination of their interests.

Key words: innovation and social strategy of regional development, technological platform, industrial park, technological roadmap of the region, specialized development institutions.

It is well known that innovations have a significant impact not only on the economic situation of the company but also have external effects that significantly alter the role of institutions and ways of managing society, state, region. Social goals and social efficiency should be one of the main criteria for evaluating any innovative project, as its ultimate goal is to increase the standard and quality of life of society, its harmonious development.

The works of leading Ukrainian scientists, such as Amosha A., Bazhal Yu., Geyets V., Gritsenko A., Mandybura V., Fedulova L., Chukhno A. and many others, were devoted to the study of issues related to innovation and social development of the region, institutionalization of its implementation.

However, researchers are paying insufficient attention to the formation, development and institutionalization of innovation and social strategy of the region in the context of sustainable development and providing efficiency of social innovations that is extremely important during the transformation of the economy.

The purpose of this article is to develop the principles and provisions necessary for the institutionalization of innovative social strategy of postindustrial society implementation at regional level.

The definition of innovation and social strategy in the region was discussed in detail by the co-author in [1], and the basic provisions about the establishment of appropriate strategies were determined. These principles of forming a rational social and innovation strategy of regional development were proposed: compliance with national strategies; regional perspective; accessibility and clarity of strategy objectives for the residents of the region; mandatory public participation in developing and implementing regional strategies; scientific provision and quantitative certainty; complexity (strategy should cover all subsystems of region).

The problems of innovation activity in the region, according to the EU countries, may be decided by creating of technological platforms. Technological platform is a tool and a communication platform with the introduction of innovative projects of technological
development of the region.

The main objectives of this technological platform are contact between small and medium businesses, research organizations, higher and secondary educational institutions, development of innovation sphere, creation of a technological product, the formation of business demand for innovation, realization of investment and innovation projects, etc. [2].

Mechanisms of interaction between science, government and business in the framework of realization of the appropriate regional programs include three areas of action: 1) projects implemented in the priority areas of scientific and technological sphere of Ukraine to further their commercialization; 2) important innovative projects of regional importance; 3) projects of technology commercialization according to the themes proposed by business.

Combining within a single technological platform of management system of the knowledge and technologies exchange cycles allows building of basic institutional structures of the future industrial park (IP) in industrial regions, which combines fundamentally new industries in its organization.

The research [3] proposes to solve the following tasks of institutional and organizational direction in the implementation of project for building an industrial park:

1. Create technology infrastructure of IP of businesses and organizations on the basis of regional research or innovation centers and regional centers of technology transfer.

Analysis of the existing technological infrastructure in Ukraine, held in [4], shows its underdevelopment, functional imperfection and inability to cover all aspects of innovation and technological process. Only a few elements of the infrastructure have established, virtually there are no venture funds in regions of Ukraine, and the creation of technology transfer centers is at an early stage.

2. Create a fund of technologies and technological equipment of companies and organizations, including dynamically updated database of important technologies and technological needs of companies and organizations, and database of potential partners for technology projects.

3. New information support for all phases of IP activities of companies and organizations requires the creation of modern internet portal that will facilitate the formation of information exchange environment for participants of technology transfer.

4. Create a network of information transfer agents at enterprises that provide timely formation of technological proposals for the organization of production of new products in the region.

5. Ensure effective search of technology partners for enterprises and organizations located in the region.

The main goal of the construction of technological roadmap as the basis for implementing the strategy of innovation and social regional development is an identification of a strategy at a time and focusing on issues of key technologies, which should be implemented in products to meet market needs.

The main objectives to achieve this goal are the follows: consensus about the set of needs and technologies necessary to meet those needs; elaboration of mechanisms for predicting technological developments in industries that are objects to target influence; forming of concepts that facilitate the planning and coordination of technological developments in production; determination of critical technologies and technology gaps that must be completed; identifying ways of efficient use of investment in research and development.

The use of the methodology of construction of technological roadmap of innovative regional development solves the problem of creating the most clear and transparent conditions for joint work of science and business. The algorithm of construction of maps should include the following steps:

1) formation of a "portfolio of technologies" by analyzing the relevant information database;
2) identifying of priority areas and selection of such technologies ("drivers of product"), which will be the basis for the production of competitive products;
3) reflection on the map the start and end points of technologies – moments, when the technology or the wants will be implemented in the product;
4) reflection of the agreed positions of technologies and wants;
5) prediction of technologies for each industry;
6) reflection of the nature of changes in the investment policy on the scale of the map as the basis for technological monitoring;
7) formation of a "portfolio of technological programs";
8) identification of appropriate technologies that underlie the activity of strategic business units of the region;
9) development of the system of indicators for assessing the factors affecting the choice of technologies.

As a result, it is necessary to identify a list of priority technologies and establish a plan of action regarding their development. This technological roadmap of the region is able to answer the question of where resources provide a vital market diversification.

The results of the implementation of innovations, the result of the effectiveness of their implementation should be [5]:
- increase in productivity, improvement of product competitiveness, overcoming of technical and technological gap, modernization of the economic structure of the state and foreign trade;
- a new standard of living;
- easing the growing burden on people.

The social effects of innovations can be grouped into four complex parameters:
1. Standard of living (working conditions, meals, living conditions, environment, leisure, education and others).
2. Way of life (health, human capital, social and psychological climate, socio-political and cultural activities, behavioral habits).
3. The quality of the relationships among enterprises, society and the state.
4. Saving of leasure time due to innovation (appearance of new products and services allows more time to meet the spiritual needs, personality development, human capital).

Social innovations in the modern social state form an innovative environment that promotes scientific, technical, technological informational innovations and provides the acceleration, more efficient use of new techniques and technologies, reducing the innovation costs.

Formation of innovative environment and social innovations are aimed at solving the problem of expanding reproduction of social, human and labor potential. This requires government intervention in the market economy, the scope of employment. The government of Ukraine should provide economic freedom to market self-regulatory processes to stimulate social and economic growth.

For Schumpeter, the development of an economy is inherently unequal, intermittent, it destroys existing structures and more like a series of explosions, rather than on a soft transformation. The main actor in this process - the firm-innovator. The company is providing innovation, if classic version of "economic golden rule" is implemented: the rate of profit (or net profit) growth greater than the rate of revenue growth, rate of equity growth, rate of assets growth, and is more than 100%.

The major areas of innovative changes in the region are:
1. Innovative transformation in the environment of the organization, which is usually associated with the actions of competitors on the market launch of new products.
2. Innovative changes due to the introduction of new technologies, new products, which can lead to the formation of the new market demand and expand its capacity.


4. Innovative changes in the corporate culture: the introduction of a new style of management, new forms of employee motivation, methods of work and rest, training and staff development.

5. Innovative structural changes: the transformation of the organizational structure, changes in the system of authority and responsibility, changes in control systems, etc.

In the current economic conditions, domestic businesses are focused on ensuring the stability of major financial and economic indicators that are associated with stability increasing revenues, capacity expansion, which acts as condition for the increasing the life activity of organization on the internal market. Ukrainian business is based on sustainability of external environment, understanding it as a necessary condition for stable organization and efficient operation of all economic system. The stability of the external environment serves as a basic condition for the formation and development of regional business, strengthening its competitiveness.

The following problems make significant influence on the formation of stability of regional entrepreneurship [7]:

I. Lack of coherent policy concerned with the coordination of businesses structures activities.

II. Taxation of regional entrepreneurship. Regional and local authorities create conditions of aggressive behavior of the external business environment, contribute to the destabilization of business organizations, and reduce opportunities for formation of their sustainability.

III. Availability of administrative barriers.

IV. Availability of financial services to regional businesses. Availability of foreign direct investments is a priority for businesses in the region. Unfortunately, the conditions for investments in Ukraine are extremely unsatisfactory.

V. Availability of regional business personnel. Today training is out of economic development strategy, the challenges of market, and development forecasts.

VI. Excessive regulations of business activity in the region.

VII. Violations of antitrust laws and attempts of legislative redistribution of industry markets. A new type of limited competition is formed and has systemic nature.

VIII. The dramatic deterioration in general conditions for regional business due to lack of legal support.

Specialized organization with state participation is the mechanism that contributes to solving the aforementioned problems. This development institutions can be a catalyst for private investment in priority sectors and industries, will promote the introduction of innovation, will improve the institutional environment.

Most countries face a shortage of investment resources needed for the development of the national innovation system. There is a structural imbalance between supply and demand in the field of innovation financing [3]. To realize its priorities the state has to intervene in the processes, occurring in the financial market, including the establishment of specialized development institutions (organizational and economic structure that facilitates the allocation of resources for projects with potential for economic growth, which hampered the inflow of private capital). The distinctive features of these institutions are [8]:

- redistribution of resources in favor of development projects to create economic growth potential in the area of infrastructure, human resources, new technologies and supporting new sectors;

- availability of permanent organizational structure and certain rules allows to institutions of development to provide the systematic activity, and a clear system of responsibility and control;
development institutions are non-profit organizations;
- their activities are focused on the development of private businesses.

The potential of small business innovations can be a powerful factor in the growth of the productive forces at the regional level in conditions of establishing an adequate system of funding. However, the sector is traditionally characterized by risky nature and instability as a result of diverse factors. It is therefore an important area of modern innovation policy is to ensure enabling access for small enterprises to innovative sources of various resources (Table 1).

Thus, the shift of the region on innovative socio-economic type of development requires the intensification of investment activities financing. Financial potential is an indicator of regional economy reaction on managerial decision-making. It describes the increasing effectiveness of implemented policies, competitiveness and sustainability of the region.

Syndicated loans are an important tool for attracting foreign investments into the national economy. Syndicated loan refers to multiple lenders, and it is structured, organized and managed by one or more banks - authorized organizers. [9] The share of syndicated loans is about 1/3 of the total borrowing on international level.

The current structure of the global syndicated lending market consists of primary and secondary markets. The primary market is divided into two segments: market of organizers of syndicated loans that act as sellers, and market of investors - buyers of credit risk. The world market for syndicated loans influenced by:
- an imbalance in the rate of return on capital in the developed countries and developing countries (and as a result - cross-border migration of capital);
- the appearance of significant amounts of dollar liquidity outside of the emission country, formation of Eurodollar market, where growing demand for US dollars coincided with the intensification of their inflow, and the recognition of the US dollar as the world currency under the Bretton Woods system;
- consolidation of efforts of banks from different countries to provide loans under a single contract (joint work of international lenders);
- the recognition of LIBOR rate as a base in providing international credits.

**Table 1**

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<th>Resource support of small and medium innovation businesses</th>
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<td><strong>Type of resource</strong></td>
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<td>Financial</td>
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<td>Technological</td>
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<td>Informational</td>
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<td>Tax</td>
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<td>Market</td>
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One source of funding can be social investments - investments in all their forms in different social objects to achieve the social and economic impact. The subjects of social investments are government, nonprofit organizations, businesses and households. The government performs its social functions via regulatory documents; business and non-profit
organizations engaged in social investments - through programs and projects. Households provide social investments in private order.

There are three strategies for socially responsible investment:

1. The selection and screening of investment portfolio of companies whose activities meet certain social, ethical and environmental criteria.

2. Defending the interests of shareholders is the actions of socially responsible investors, who act as shareholders of companies, including participation in the dialogue with the management of social, environmental and ethical aspects as well as the preparation and implementation of management decisions on resolutions by proxy.

3. Investments in local communities, which is an important strategy, aimed on public and social development. Financial institutions of public investment provide loans to small businesses, venture capital companies, finance construction of housing, educational institutions and health care programs.

Thus, a deliberate policy of social responsibility of agents-recipients of investments, affects virtually all key indicators to attract social investment. In our country, this relationship is only beginning to emerge. A business that ignores the demands of society is unstable and vulnerable, as it is in developed countries.

Most economists consider the financial potential of the region as a combination of financial resources and assets, distinguishing them only in composition. According to Bulatova Yu. [10], the financial potential of the region is a combination of financial resources involved and created as a result of economic activity and directed at the disposal of economic entities operating in the region and contributing in the achievement of the objectives of social and economic development of the territory.

The mechanism of financial regulation of investment activity is a combination of methods and tools of impact on investment activity, which is achieved through the effective use of forms and methods of state regulation and stimulation by local authorities, aimed at mobilizing of financial resources and use them to finance investment processes in the region (Figure 1).

Achievement of sustainable socio-economic development of the region serves the purpose of the mechanism of financial regulation; its task is to promote investment and efficient use of financial potential of investment activity in the region; the level of investments and the value of financial potential of investment activity in the region are the measures to assess the effectiveness of the regulatory impact.

Savings of households are an important financial resource that is not fully involved in the investment market. Accumulation and subsequent attraction of savings in the economy of the regions should be a priority direction to stimulate investment activity. It is necessary to extend the current tax techniques by introducing new, in order to increase public interest in the long-term accumulation of capital.

In order to encourage the population to attract funds for deposits in financial institutions whose activities have an innovative and investment character, we propose to use the tools presented in Table. 2.

The use of the proposed tax instruments create the conditions for the growth of long-term savings of regional households and for directing them to invest.

Thus, financing investment can be activated and, as a result, sustainable socio-economic development of the region can be achieved through the formation and regulation of the financial potential of investment activity of regions based on the integrated use of administrative, economic and legal methods of regulation with emphasis on providing tax incentives.

As a relatively separate and open, quality management system of investment potential of the region receives information about the external environment that affects the management object, changes its settings, because it is classified as open systems.
The subjects of management by investment activity of the region

The goal is ensuring sustainable socio-economic development of the region

Stimulating of investment and innovation activity

More efficient use of financial potential of investment of the region

1. The mobilization of financial resources of

- Businesses
  - undistributed corporate profits;
  - depreciation;
  - funds of investment institutions.

- Households
  - savings;
  - income from financial assets;
  - bank and corporate loans.

- Government
  - budget revenues;
  - international credits;
  - budgetary credits.

2. Management of financial guarantee of investment activity of the region

Methods of regulation of investment activity

- administrative
- economic
- legal

Tools of investment activities regulation

- public and regional investment policy;
- strategy of investment development;
- governing mechanism by the investment strategy

- tax incentives (tax breaks);
- budgetary funding;
- monetary instruments (issue of corporate securities, targeted lending)

- investment legislation;
- development and adoption of targeted investment programs;
- guarantees on investor obligation;
- guarantees of the rights of investors

Informational
Normative and methodical
Financial

The level of investment activity

Financial potential of investment activity

The level of socio-economic development of the region

Figure 1. The mechanism of financial regulation of investment activity in the region
Table 2

<table>
<thead>
<tr>
<th>Tools of tax incentives for investment activity of households in the region</th>
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<td>The forms of tax incentives</td>
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<td>Exemption from individual income tax</td>
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<td>Tax deductions on individual income tax</td>
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In accordance with the objectives of improving the quality of investment potential, an administration agent processes this information and produces routine information (the information about the desired quality parameters of the investment potential of the region). Figure 2 shows a set of components of the investment potential of the region.

**Figure 2. Components of the investment potential of the region**

Information interaction of individual components of the region's potential in the formation of the information environment of the management of its quality has a pronounced hierarchical character. It meets the following management requirements: reliability of data; temporal, methodological and territorial comparability; the timely receipt of different users. In the process of quality management of the investment potential of the region information acts as an element for elimination of uncertainty. Thus, the most important its qualities is value to the management process, so it has adequately interpreted and understood by persons involved in the management process. This is the pragmatic approach to the information, in which the main ones are its properties in terms of consumers, in relation to the purposes of its use. The information required to ensure process of quality management of the investment potential of the region is directly linked to the quality assessment of investment potential, which is its integral important part. Primarily, this is connected with closure of the contour of investment potential management, that is shown in Figure 3.
Economic and statistical evaluation of the quality of the investment potential of the region determines the economic impact that it has been caused by its change. The calculation of modified composite index of investment quality ($I_k$) is theoretically the most appropriate to study the generalized indicator of the dynamics of quality of investment potential of the region. It is calculated by the formula:

$$I_k = \sum_{i,j} i_k \cdot q_{ij}$$

(4.7)

$q_{ij}$ – actually received amount of investments for each sector of the region in the studied period;
$i_{kj}$ – individual quality index for all sectors of the region, defined as the ratio of the actual amount of investments to the based amount of investments (actual amount in the base period, or planned amount).

Economic and statistical measurements of quality of the investment potential of the region should be carried out separately for each component. The program of quality research of investment potential of the region includes the following steps:

1. Development of the statistical survey over the quality of the investment potential of the region during the development of investment policy.
2. Organization and conducting of statistical observation.
3. Statistically-mathematical processing of the results of observation to calculate generalized parameters, construction of regressive equations and correlation coefficient calculation.
4. Organization of periodic accounting of the quality of investment potential based on the using of that regressive equations of connection between specific parameters of the quality of investment potential.
5. Working out of recommendations on the use of economic indicators of quality in the system of quality management of investment potential of the region.

Thus, these approaches allow to provide efficient use of investment potential of the region and will be reflected in integrated indicators that affect the quality of the investment potential of the region in its overall assessment and specific components.

However, underdeveloped infrastructure, fragmentation of entrepreneurship, lack of public awareness of the specialized organizations in providing training, consulting and information services prevents the formation of civilized business, including innovation, leaving the entrepreneur alone with a lot of difficult questions for him/her. The issue of youth entrepreneurship in regional innovation systems is not solved. It is necessary to develop and
implement the territorial programs of youth employment through the development of youth entrepreneurship in regional innovation systems.

So, in terms of institutional approaches, effective use of mechanisms of balancing of human and technological development involves the formation and sustainable reproduction of innovative social culture. The main objectives of innovation culture development in the system of implementation of social objectives are: stimulation of the transformation of social values towards the recognition of the creative work priorities, self-improvement and self-learning, stimulation of the socially responsible business and legal competence. The social orientation of technological policy requires speeding up the organization and improving effectiveness of dialogue among government, business and science by creating open platforms for communication of these communities and coordination of their interests.

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