

SCTMG 2020**International Scientific Conference «Social and Cultural Transformations in the
Context of Modern Globalism»****INNOVATIVE MECHANISM FOR DEVELOPMENT OF
REGIONAL COMPETITIVE ADVANTAGES IN NEW ECONOMY**

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Abstract

The ability to work with knowledge and outrun competitors in the interdisciplinary search for innovative solutions and breakthrough technologies is gaining prevailing importance in the context of the formation of a new economy as a particular historical form of development, characterized by a structural shift towards the increase in the share and role of science-intensive and creative industries in the reproductive potential of a country / region. As a result, the study of problems, the intensification of innovative activity in the context of the modern challenges of global economic dynamics is of particular relevance. The purpose of the work is to analyze modern scientific and applied problems of innovative modernization of the economy of Russian regions, taking into account the increasing intellectualization of all types of activities and the factors that have a direct impact on the formation of regional competitive advantages. The reasons for the low efficiency of the innovative development mechanism of national regions are determined. The key problems and tasks of the formation of regional competitive advantages in the context of updating the innovative type of development are identified. The recommendations are offered and the directions for the improvement of innovative development mechanism at the regional level are determined taking into account the priorities of competitive development. It is concluded that the economy of a region should be focused on the formation of a continuous innovation cycle that allows the effective implementation of innovations in practice and integration them into the systems of technological division of labor.

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1. Introduction

The activation of innovation is traditionally one of the fundamental conditions for the formation of competitive advantages of economic actors (Asheim & Isaksen, 2002; Cooke, 2001; Mahlup, 1966; Shumpeter, 1952). At the same time, such aspects as a significant increase in the role of innovations in the dynamization of economic growth, the increase of the knowledge-intensiveness of all areas of activity, production systems, environment, the deepening of integration processes, observed since the end of the 20th century, actualize the task of the analysis of key aspects of the competitive development of modern economic systems, including regional level, taking into account innovation factor.

2. Problem Statement

The transition to an innovative type of economic development is associated with an unprecedented complication of the structure and nature of the interaction of socio-economic, industrial and technological systems and processes, as well as the prevalence of the role of science and its entire infrastructure, which allows turning ideas into particular achievements. Thus, in the context of the particular importance of innovative orientation of modern economy, the acceleration of the rate of economic growth is possible only through the effective use of the innovative potential of regions, creating conditions for the attraction of investments, new technologies and innovative entrepreneurship (Breschi & Catalini, 2010; Kuzyk, 2009; Magro & Wilson, 2013;).

All the above mentioned factors actualize the search for a new non-resource-based model of economic growth, which involves the development of effective methods for the creation, development and use of competitive advantages based on the enhancement of innovation and turning innovation into an ongoing critical factor of success. As a result, the problem of the development and improvement of the innovative mechanism for the development of regional economies, increasing their reproductive potential in order to achieve sustainable development, necessary for the increase of the social and personal well-being of regional community, becomes very urgent. In fact, it constitutes the essential basis of new economy. The problem statement is described in this research.

3. Research Questions

The article studies the process of the increase of the effectiveness of production, distribution and use of available intellectual and other resources due to the development and improvement of innovative mechanism, interpreted as forms and methods of the implementation and regulation of innovative activities aimed at the dynamization of economic growth, social development and the increase of the competitiveness of regional economy in whole.

4. Purpose of the Study

The purpose of the study is to develop recommendations for the improvement of innovative mechanism for the development of regional competitive advantages based on the analysis of the problems of innovative modernization of the economy of Russian regions, identifying the risks of their adaptation to modern trends in global economic dynamics and the main tasks of increasing competitiveness in the context of updating the innovative type of development.

5. Research Methods

The research is based on the axiomatics of economic synergetics, in which a more effective method of the management of the competitiveness of economic systems is the creation of acceptable conditions necessary for self-organization of environment and monitoring the effectiveness of these conditions (environment).

From the point of view of the synergetic methodology, the process of ensuring the competitiveness of economic systems is aimed at the achievement of positive effects as a result of the coherent action of diverse mechanisms leading to qualitative modifications of the systems and orienting them to:

- the development of the organizational foundations of innovation, which are distinguished by consistency, complexity and focus on a non-linear future;
- the formation of institutional forms and relationships that stimulate and realize the ability to ensure sustainable development;
- the provision of synergies between the interaction of elements of economic systems through self-organization (Tumenova, 2011).

During the research the following methods were used: systemic, logical and comparative analysis, methods of empirical generalization and systematization. The methods used were described in the study.

6. Findings

The crisis that is currently evolving in the theory and practice of the management of the competitiveness of economic systems is due, on the one hand, to the need to identify and study the mechanisms of their development and evolution, which would guarantee the stability of functioning in new economy. On the other hand, it is reasoned by the inability of existing methods based on technocratic thinking, the classical theory of regulation, the theory of optimal control to effectively solve the problems of achieving the goals of the development of economic systems related to the acquisition of new qualities necessary for the implementation of progressive changes, adaptation to modern challenges and environmental conditions.

The study of methodological problems of the increase of the efficiency of innovation process and the competitive development of regional power plants revealed the main factors limiting the implementation of innovative potential of the regions and their adaptation to global development trends:

Firstly, the inconsistency of existing approaches based on the classical theory of regulation, technocratic thinking, the theory of optimal control is fully penetrate into the essence of complex, contradictory and highly dynamic social processes, perceive and interpret the features of the modern stage of economic growth and development, the dynamics of organizational and economic relationships, transformational processes.

In the context of the formation of a new economy, an adequate study and description of the synergetic basis of these processes and phenomena by means of the traditional approach is impossible. Thus, practice indicates a continuing accumulation of methodological difficulties associated with the inability of existing approaches in order to effectively solve the problems of ensuring the competitiveness of real economic systems in new economy, where the main advantage is knowledge (Aganbegyan, 2015; Frenzel, Tikhomirov, Lobzova, & Surkov, 2018).

Secondly, the economic systems considered in their historical retrospective are an extremely complex human-technical system together with environmental and cultural components that have

mastered new technology, in other words, complex self-organization from self-organized elements (individual actors) in which strong downward and upward “Whole-parts” correlations are observed, which are studied, as a rule, by qualitative methods. The result of this is the need to include in the object sphere of economic knowledge the value, cultural, social and other characteristics of the cognizing subject, as well as the emergence of new scientific areas of fundamental economic theory associated with the expansion of its subject space and a change in methodology (evolutionary economics, economic synergetics, etc.) (Tumenova, 2018).

Thirdly, the processes taking place in modern society are accelerated, and the increased role of an individual in socio-economic processes increases tension, which is associated with the increase in responsibility of not only those who make managerial decisions, but also those who translate these decisions into life (Cruz & Teixeira, 2011; Lin, 2011).

Fourthly, the intellectualization of activities and the factors that have a direct impact on the reproduction process result in the reduction in economic time and economic space; change in communication and transaction relationships; acceleration of automation, robotization processes and computerization of many spheres of life of modern society (Foray, David, & Hall, 2009; Haraguchi, Cheng, & Smeets, 2017).

Figure 1 presents the key problems and tasks of the creation of regional competitive advantages in the context of updating the innovative type of development.

PROBLEMS	TASKS
<ul style="list-style-type: none">✓ the inability of traditional approaches based on the classical theory of regulation to fully penetrate the essence of complex socio-economic processes, to perceive and interpret their specifics in the context of the emergence of knowledge economy for the effective solution of the problems of formation of specific advantages and provisions of competitiveness of economic systems on their basis✓ the lack of a holistic system of justification of the goals, opportunities and limitations of the competitive development of regional economic systems in the context of the emergence of knowledge economy✓ the lack of a clear system for the effective use of knowledge and management information.✓ the underestimation of the influence of various (new, exo-, endogenous) factors on the formation of regional competitive advantages under modern conditions	<ul style="list-style-type: none">✓ the search and development of global approaches that most adequately describe the modern dynamics of economic systems (evolutionary economics, economic synergetics, etc.)✓ the development of new scientific recommendations, leverage on the development of competitive advantages✓ the comprehensive study and critical rethinking of conceptual provisions, conditions, prevailing forms, methods of forming regional competitive advantages in the context of the formation of the economy where the main advantage is knowledge.✓ the development and effective use of advanced management technologies, organizational changes, etc., contributing to the development of key competence as a factor in the increase of regional competitiveness✓ the development of effective regional development strategies, taking into account possible scenarios for changing the conditions of the macro and microenvironment, the creation of a management system aimed at continuous innovation

Development of an innovative mechanism for the formation of regional competitive advantages

Increase of competitiveness of regional economy

Satisfaction of regional interests and needs

Figure 01. Key problems and tasks of the formation of regional competitive advantages in the context of the development of knowledge economy

Focusing on the current state of the innovation process in the regions of Russia, it should be noted that a significant part of them is characterized by:

- low level of innovative activity of business entities of various industries;
- imbalance in the development of the main components of innovative potential;
- the discrepancy between the subjects of regional innovation activity, both in quality, quantity and the level of tasks to be solved;
- low financing of innovative activities (Yasina, 2018).

The study revealed the most relevant reasons for the low efficiency of the innovative mechanism for the development of national regions, such as:

- the lack of competitiveness of economy in a globalizing world with the long-term consolidation of its technological backwardness;
- the lack of consensus regarding plans for the implementation of the modernization scenario of innovative regional development;
- insufficient effectiveness of state and corporate management mechanisms;
- the deterioration in the potential of financial and investment sphere;
- insufficient effectiveness of state and corporate management mechanisms;
- low level of fundamental and applied sciences;
- the lack of investment in modernization reforms, the need for large-scale investment in innovation.
- poor integration of various approaches of economics, management, marketing, strategic management in the selection and implementation of the most effective and efficient methods of competition in new economy, as well as the formation and use of competitive advantages based on innovation.

In various concepts of innovative development presented in the scientific literature (including national), the questions about the sources, driving forces and the organizational form of the solution of the problems of competitive development of regional economies are highly disputable. The fact that the relevance of choosing one or another development paradigm is not determined by the state of basic social institutions, the historically established socio-cultural characteristics of the organizational structure, technological potential, the availability of resources, access to knowledge, demographic, geographical, or climatic conditions of the country does not cause many disputes.

Table 1 presents the factors that we systematized and tools for the improvement of the effectiveness of innovation in Russia and its regions related to the accelerated development of physical, social and human capital.

Table 01. Factors of innovative growth of regional economies

Physical capital growth	The development of instruments for financing, commercialization and capitalization of innovations. The development of the system of promotion of development "from idea to innovation", Genesis of the National Innovation System
Human capital growth	The development of an education system adequate to the needs of an innovative economy. The formation of innovative market conditions ("cult of innovation", value, relevance, attractiveness of innovative activity). The formation of the personnel reserve of the innovation economy. The enhancement of the innovation culture of business community. The formation of a national strategy for the creation and promotion of innovative brands.

Social capital growth	The development and optimization of legislation and other institutions of innovative economy. The growth of online business forms. The creation of a support system for an innovative economy by political and administrative elites of the Russian Federation, a network of consolidated administrative and political support for innovative activities. The formation of information channels and communication space. Socio-political projects aimed at supporting innovation
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In the applied aspect, it is important to turn innovation into an ongoing critical factor of success. Concepts and strategies for the development of regional economy should be focused on building a continuous innovation cycle, which allows effectively implementing innovations in practice, integrating them into the technological division of labor (Figure 2).

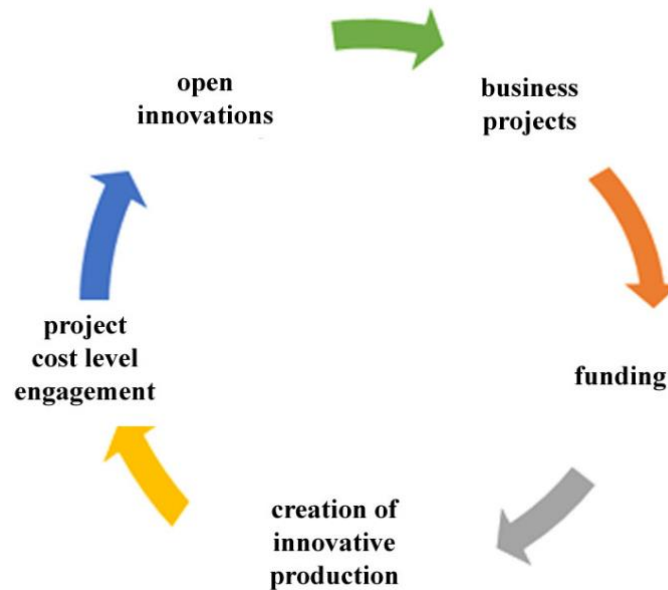


Figure 02. Innovative cycle of competitive development of regional economy

In the context of the abovementioned aspects, the main directions of the improvement of innovative mechanism for the development of national regions should be as follows:

- the increase of funding for basic research and priority areas of the innovation sphere, implemented on the basis of state programming;
- the formation of favorable business environment, including as a result of stabilization of the tax and legal systems, increasing openness for investment in the innovation sphere, and increasing the investment attractiveness of high-tech industries;
- the stimulation of competition between innovative companies;
- the removal of barriers restricting the growth of innovation activity;
- the creation of conditions for acceleration, creation and development of new, competitive products based on modern energy-, resource-saving, environmentally friendly technologies;
- radical modernization of information support, including through public-private partnership mechanisms;
- the deepening of the integration of education and science in order to improve the quality of training for high-tech areas.

7. Conclusion

The changes taking place in the socio-economic sphere during the period of fundamental transformations and the change of technological platforms and attitudes, pose new serious challenges for economic actors who are forced to adapt their strategies to the ever-increasing global competition, based on innovation today.

The main directions of the improvement of the innovative mechanism for the competitive development of national regions are related to the development of regional innovative potential and all its components, ensuring the involvement of all the subjects of innovation process in innovative networks aimed at the development of high-tech production, creating conditions for acceleration, development of innovative, competitive production on the world product market, using economic integration, etc.

The intensification of innovation in the national economy requires not only the attraction of significant financial resources, but also the latest managerial approaches with the growing role of regional authorities in ensuring the competitive development of the constituent entities of the Russian Federation.

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