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DIALECTICS OF DEVELOPMENT OF INNOVATION PERFORMANCE AND INSTITUTIONAL ENVIRONMENT: THEORETICAL ASPECT

The main ideas of such notions as "innovation performance", "innovation activity", "innovative capacity", "institutional environment" were specified in the work. The peculiar features of the notions in course of institutionalization of innovation economy were taken into account which made it possible structure the research and make specification of the given notions. Besides, the peculiarities and regularities of development of innovation performance and institutional environment in their dialectical unity and objective contradiction were revealed.

Keywords: innovation performance, innovation activity, innovative capacity, institutional environment, dialectics.

Introduction. Present-day innovative economy of Russia demands its qualitative support by way of institutional environment. Effective innovative performance is an essential condition for the process implementation as it generates real strategic resources. Scientific and technological activity is the basis of it. It includes creation, development, application and distribution of new knowledge in all the spheres of social life but first of all, it is important for science, technology and economy. Current developments in the branches of national economy, technological modernization (it appears in new positive phenomena and trends) lead the economy to the trend of its sustainable development. Understanding of underground processes, forming a new innovative economy, demand a search of new approaches in the carrying out researches. Thus, the study of the chosen process of development of innovation performance and institutional environment in respect of the aspect of their interdependence in the offered limits of economic theory should be carried out by means of dialectical method of cognition.

The goal of the research is to reveal the peculiarities and regularities of development of innovation performance activity and institutional environment in their dialectical unity and objective contradiction.

Problems. In order to achieve the goal of the research, it is important to solve the following problems:

- to specify the essential ideas of such notions as "innovation performance", "innovation activity", "innovative capacity" and "institutional environment";
- to reveal the peculiarities of functioning of innovation performance and institutional environment in their dialectical unity and contradiction.

Results interpretation and analysis. To study dialectics of development of innovation performance and institutional environment of the national economy, it is important to specify the essential ideas of such notions as “innovation performance”; “innovative capacity”, “institutional environment” with an account of their peculiarities in course of institutionalization of innovative economy. As a result, it will be possible to structure the research and to make specification of the given notions.

There are different interpretations of the notion “innovation performance” in research literature. Innovation performance is a complex of scientific, technological, organizational, financial and commercial actions aimed at commercialization of existing knowledge, technologies and equipment [1]. Besides, innovation performance is considered to be an activity aimed at implementation into practice both scientific knowledge, technologies, kinds of production and any new ideas if they can contribute to economic growth and competitiveness [2]. In accordance with the purpose of the research and decision logic of the tasks in hand, we offer our own definition for the notion “innovation performance” in modern economy of Russia. Innovation performance is an activity, process, implementation into practice of researches and ideas in form of new technologies and products of activity in different spheres of economy management, contributing to economic growth and competitiveness of the country. According to the logic of the research, we will specify the main types of innovation performance (Figure 1).

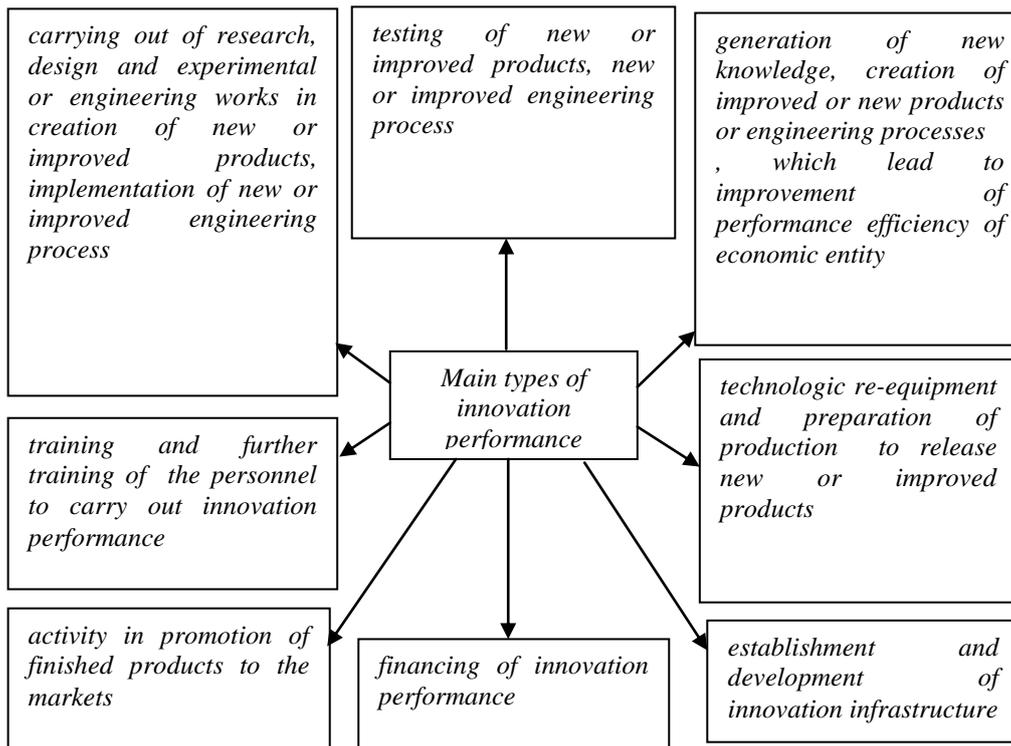


Fig. 1. Main types of innovation performance [3]

It is important to pay attention to the fact that “creative organizations”, based on the knowledge of society, associations of creative persons may serve as the entities of innovation relations to generate and distribute new knowledge. Both specially established innovation-active organizations and different structural subdivisions of ordinary companies belong to them. Besides, it is important to take into account traditional participants of innovative economy. They are:

- specialized research institutions, elaborating new products to sell them in the market of innovation technologies. Large organizations strive to set up their own research innovation enterprises, avoiding huge lump-sum costs and investing little by little. Last years businessmen were mostly interested in applied researches. Today they are more and more interested in fundamental researches;

- bodies of state administration. The role of government is to create more favourable conditions for development of competitiveness and entrepreneurship. At that, indirect forms of regulation are usually used. Provision of stimulus “production of technologically complex product, including introduction of tax and credit facilities ” is of high importance [4].

Innovation activity performs as more flexible status indicator and competitiveness in the existing economic entities: holders of a right to intellectual property (invention, know-how, technology, etc.); investors, participating by means of financing in manufacturing cycle of creation and usage of intellectual property and in organization of industrial production of new products. In other words, innovation activity describes the level of participation of economic entities in carrying out of innovation performance, their competitiveness during a certain period of time.

To transfer the economy of a country to an innovative way of development, it is necessary to significantly improve innovation and investment performance, to make the level of savings up to 30 % from gross domestic product, to go to the standards of developed countries in the sphere of budgetary policy. It should increase expenses to researches up to 3% from gross domestic product to 2020 year [5].

Innovation activity performs as more flexible status indicator and competitiveness of today`s economic entities. M. Porter speaks of it in detail in a well-known work “International Competitiveness” [6]. According to him, competitiveness depends on the following factors:

- capability of industry of a certain nation to introduce innovations and to modernize;*
- understanding of the fact that the basis of competitive struggle shifts to creation and mastering of knowledge;*
- capability of a company to achieve competitive advantages by means of innovations;*
- understanding of the fact that there is only one possibility to keep the reached competitive advantages – to improve them on a permanent basis;*
- capability to extract the advantages out from researches, carrying out abroad, thus the company should have highly trained professionals and form high level of research activity;*
- understanding of the fact that competitive advantages are the result of long-term improvements (not protection of today`s sectors).*

M. Porter associates competitive advantages of economic entities with their innovation activity and capability to implement it into production, i.e. with organization of innovative business. As a result, the subjects of economic relations, applying innovation performance, release innovative capacity, included into economic systems.

“Innovative capacity of an economic entity” may be defined as a combination of its available resources, which form capabilities and possibilities of realization of innovative purposes.

At the same time, the idea of capacity should not be restricted to a material component. In our case it is a combination of resources. Capacity is always a characteristic of inner possibilities (not revealed and not fulfilled yet) to implement the target purpose. First of all, these possibilities are connected with formation of a certain innovative environment in a company. Innovative environment in a company first of all depends on external environment, predetermining innovation climate in a country, which favours or reacting to innovation purpose achievement.

Studying of innovation performance, we will pay attention to institutional constituent of this phenomenon.

Innovation performance is as dynamic and changeable in its development as dynamic and changeable the institutional environment is. There are many forms of institutional environment and it is determined by a constant renovation of property relations. Significance of institutes in market economy was sharply defined by R. Coase in his Nobel lecture: “no reasonable market economy is impossible to exist without respective institutes” [7]. At that, dynamics of innovation performance is mainly determined by dynamics and changeability of institutional environment. This phenomenon is much stronger than influence of natural, geographic and demographic factors. The Higher level of development of private property institutes, the less contradictions in institutional environment and higher efficiency of its influence on development of innovation performance.

Under institutional environment we comprehend definite forms of organization of relations, formal and informal modes of behavior of the participants of economic processes as well as the mechanisms to strengthen these interactions. It is possible to agree with the professor V. Volchik that “institutional environment has its historical and social prerequisites. It defines direction and quickness of institutional changes. It creates conditions and orienting points for selection of effective elements of institutional structure out from alternative forms of economic coordination” [8].

Institutional environment serves as basic, central environment of all the complex of conditions, defining social development. It renders direct influence on innovation activity of enterprises and organizations, establishment and development of innovation relations. On the other hand, institutional environment forms restrictions for activity of economic entities, the institutes of property is the basis for it. It is impossible to find the most important directions for development of innovative economy as well as the orienting points on the basis of which formation and selection of the most effective economic and social institutes take place without an account of institutional environment.

In course of development of innovative economy, new institutes are established and the old ones cease to exist. Improvement of institutional environment takes place bit by bit. It is transformed in the changing conditions and renders positive influence on minimization of transaction expenses and growth of total revenue of the society.

Transforming activities in innovative economy should be accompanied by formation of more mature institutional environment, including all the set of fundamental political, economic, juridical, social rules and informal restrictions, called institutes. Nowadays the key components of such environment are property rights protection, development of corporate management, competitiveness, financial markets, increase of efficiency of public sector. This approach is approved at the level of Conception of long-term development of the Russian

Federation till 2020 [9]. These institutes serve as the most important and universal institutes. Vector of development and creation of institutional environment, favouring innovative performance, is aimed at the future, but today contours of it are rather sharply defined.

Institute is the main structural element of institutional environment. It expresses the prevailing and developed usual for the society or group of people mode of thought, fixed in the form of certain rules. Institutes establish criteria and types of human activity, render influence on allocation of resources, distribution of incomes as well as employment and real income.

Douglass North understands institutes as “the rules of game” in a society or, speaking more formal, “created by people bounding rules, which organize relations between people”, “rules, mechanisms, assuring their accomplishment and standards of behavior, which structure constant cooperation of people” [10]. Thorstein Veblen defines institute as: a) dominant or prevailing types of relations or mental interests; b) peculiar way of society life, particular system of public relations; c) modern system of public life; d) structure of production or economic mechanism [11].

We shall agree with the opinion of professor G.B. Kleyner, who offers the following definition of the notion “institute”: “institutes are relatively stable in relation to the changes of behavior or interests of individual entities and their groups as well as active for a relevant time period formal and informal regulations or systems of regulations, regulating decision making, activity and interaction of social and economic entities (natural and legal persons, organizations) and their groups” [12].

Economic entities are extremely various. They are a definite basis and social and economic conditions influence on it. Political and economic institutes, functioning in interaction and formulating institutional environment, are bounding limits in a way, which are also varying in time and space, affecting innovative economy. To solve the problem of formation of effective innovative economy and assuring economic growth in the country, limitation on executive power in the sphere of property interests and efficient structure of property rights and their guarantee have particular importance. Property will not successfully function without it and a trust to the concluding contracts is impossible either. Property rights are one of the institutes reducing uncertainty during interaction of individuals. The better property rights are protected, the easier it is to ensure more favourable conditions to form innovative economy.

In the present context, “transfer of the accent from stimulation of an offer (budgetary financing of researches and elaboration in scientific organizations) to stimulate an interest in business (including state industrial companies) for researches and elaborations, particularly, wide use of the mechanisms of budgetary co-financing of company expenditure at R&D “ are of high importance to activate innovation performance [13].

Despite the fact that financing out from the federal budget of researches and elaborations has grown for the last years, Russia slowly climbs down in the world competition of results of fundamental researches. The result of it is that Russia has to import more high-technology products, spending huge sums of money to it. It is obligatory to assume exhaustive measures to serious strengthening of such important institutes as banking system, financial market, organization in the sphere of patenting and insurance. The state shall take on problems of effective support at a certain level of fundamental researches.

In order to make deeper analysis of influence of institutions on innovation performance, it is necessary to make a classification of them. Typology of institutions depending on their functional role in the development of innovation performance is offered in Figure 2.

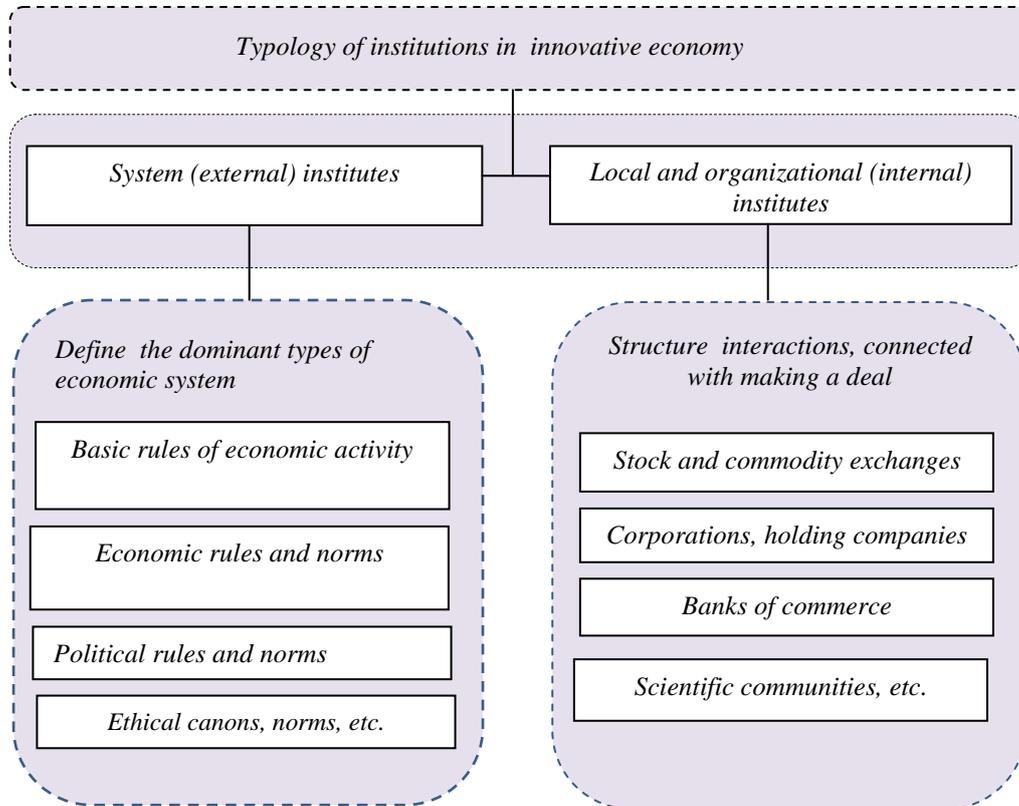


Fig.2. Typology of institutes depending on their functional role in innovative economy

Two types of institutions (system and local and organizational) are offered in the scheme. Systems institutes define the type of economic order and assure effective functioning of the economic system; local and organizational institutes structure interactions, connected with conclusion of deals both at the open market and inside organizational structures as well as contribute to vagueness reduction by means of establishment of stable structure of interaction between the individuals, deals between economic entities, i.e. they have a certain dynamics in their activity. Current innovative transformations in scientific, economic and entrepreneurial environment determine establishment of innovative institutions. As part of enhancement of innovation performance in economy and acceleration in the rates of economic growth, a demand for innovative institutions grows, forming and developing the institutional environment. The peculiarities of functioning of institutional environment in innovative economy should be shown (Fig.3):

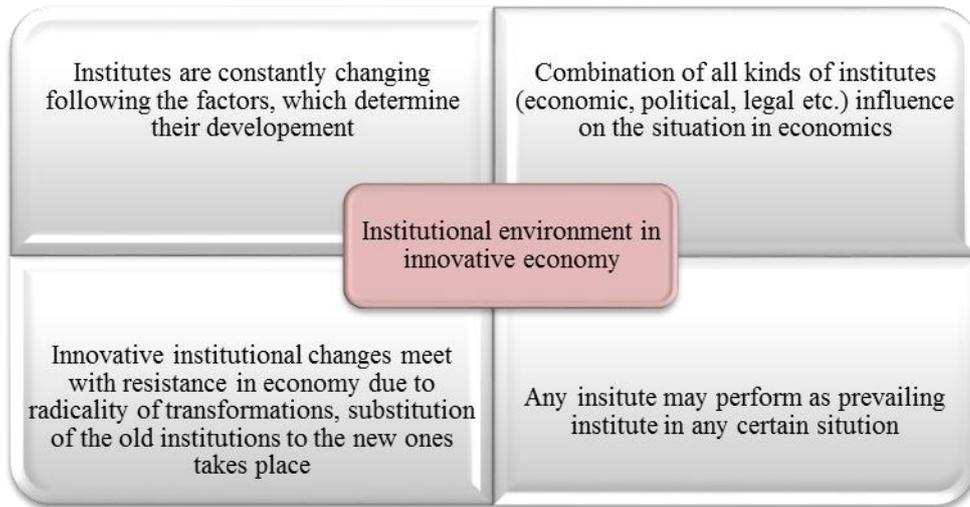


Fig.3. Peculiarities of functioning of institutional environment in innovative economy

According to the offered table, different factors, determining the change of institutional environment, influence on it. Besides, innovation performance in modern economy has a material effect on it. In course of changes, institutional environment determines appropriate behavior of economic entities within their innovation performance, i.e. at this level of development their dialectic interdependence between each other becomes apparent.

We shall specify that according to dialectic method of cognition, present reality is considered in its movement, development and objective contradictions. According to the law of the unity and struggle of opposites, any phenomenon in development contains internal conflicts and it is necessary to go through the effort of improvement of existing contacts, not elimination of the parties in conflict in case of aggravation of antagonism. Institutional environment and innovation performance are the performance example of this unity and struggle of opposites in economy. Institutional environment reflects good organization, innovation performance in conditions of Russian market economy reflects spontaneity of bond formation, acting for the one purpose. It is important to note that institutional environment and innovation performance function practically in any developed modern economic system to a certain extent depending on objective factors. Neither of these opposites are possible to be removed without elimination of the economic process. But it is allowed to search and find a certain place for an each opposite, its sphere of application and improving effectiveness of their interaction. It is also necessary to take into account that beginning and development of economic contacts is supposed to have the opposite entities. Deep contradictions become "visible" at the level personification of the entities, which are a part of economic relations. Contradictions between institutional environment and innovation performance, contributing to transformation of the processes between state regulation and market self regulation, become apparent here. Thus, the matter of contradictions of cooperating entities is defined by the contradictions of certain forms and levels of economic relations, participants of which they are.

Apart from origination and establishment, the process of development of contradictions includes the stage of resolution. According to dialectical logic of G.W.Hegel, aggravation of the opposite parties of contradictions to the last degree is the starting point of realization of possibility of its solution, in course of which a dominant party eliminates its opposite and destroys the old base on which this process was organized [14]. In this case, the destructive process leads to elimination of the institutes, which do not correspond to present-day reality, and contribute to prosperity of the institutes which provide the best results in coordination of activities of economic entities. According to many institutionalists, "effective organization of economy is the key to economic growth and institutional environment ensures it. The institutes which ensure a long-term economic growth are laws, rules, norms, forming motivational mechanisms" [15].

The process of impact of institutional transformations on innovative processes in the economy are expressed in elaboration of institutional mechanisms of functioning and development, usage of more effective forms and methods of organization of this impact.

Today it is important to set up new innovative institutes:

- multi-industry companies with serious research intensity and competitiveness;
- national research universities (top);
- educational and industrial complexes.

Invention of the mechanisms, stimulating new institutions to work, is also of high importance. Transformations of today may be complex only. They should include both deep reshaping of the structure of production and formation of effective institutional system.

Conclusions. In such a way, according to the purpose of the research and decision logic of the tasks at hand, the essential ideas of such notions as "innovation performance", "innovative capacity", "institutional environment" were specified. The notions were specified with an account of their specific character in course of institutionalization of economy. It all made it possible to structure the research and to make the detalization of the above mentioned notions.

The authors offered their own definitions of the following notions.

Innovation performance - is an action, process, implementation of researches and ideas by means of new technologies and with the use of the results of activity in different spheres of economic management, contributing to economic growth and competitiveness of the country.

Innovation activity describes the stage of involvement of economic entities in course of innovative activity, their competitiveness during a certain period of time.

Innovative capacity of an economic entity – is complex of its available resources, which form capabilities and possibilities in implementation of innovative purposes.

Institutional environment is a certain form of organization of relations, formal and informal modes of behavior of the participants of economic processes as well as mechanisms for strengthening of these relations.

Peculiarities of functioning of innovation performance and institutional environment in dialectic unity and contradiction were revealed. According to the dialectic method of cognition, they are studied in movement, development and objective contradictions. In this research institutional environment reflects good organization, while innovation performance in conditions of market economy represents the opposite side of it – spontaneity of bond formation. However, they are active in one direction in accordance with the vector of innovative development of economy of the country. It should be noted that neither of these opposites may be eliminated without elimination of economic process itself. Nevertheless, search of a place of any of the opposites, its sphere of application and improvement of

efficiency of their interaction may be and should be a way out. The objective and deep contradictions become "visible" at the level of personification of the entities, included in economic relations. The appearing contradictions between institutional environment and innovation performance determine transformation of the processes between state regulation and market self-regulation. In this situation, the matter of contradictions of interacting entities is determined by contradictions of certain forms and levels of economic relations, participants of which they are. In this case, aggravation of relations of opposite parties, the dominant party eliminates its opposite, i.e. destructive process is used. The process leads to termination of the institutes, which do not conform to present-day reality and contributes to effective functioning of the institutes which have the best results of their activity in the economy of the country.

It was revealed that innovation performance depends on institutional environment, which is the basic, central environment of all the complex of conditions, defining development of the society.

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**Ларионова Н.И., Загайнова Н.Л., Абрамова Е.Д.
ДИАЛЕКТИКА РАЗВИТИЯ ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ И
ИНСТИТУЦИОНАЛЬНОЙ СРЕДЫ: ТЕОРЕТИЧЕСКИЙ АСПЕКТ**

В процессе исследования уточнены сущностные характеристики понятий: «инновационная деятельность», «инновационная активность», «инновационный потенциал», «институциональная среда» с учетом их специфики в процессе институционализации инновационной экономики, что позволило структурировать научное исследование и провести детализацию данных понятий. Кроме того, выявлены особенности и закономерности развития инновационной деятельности и институциональной среды в их диалектическом единстве и объективном противоречии.

Ключевые слова: инновационная деятельность, инновационная активность, инновационный потенциал, институциональная среда, диалектика.

**Ларіонова Н.І., Загайнова Н.Л., Абрамова О.Д.
ДИАЛЕКТИКА РОЗВИТКУ ІННОВАЦІЙНОЇ ДІЯЛЬНОСТІ ТА
ІНСТИТУЦІЙНОГО СЕРЕДОВИЩА: ТЕОРЕТИЧНИЙ АСПЕКТ**

У процесі дослідження уточнено сутнісні характеристики понять: «інноваційна діяльність», «інноваційна активність», «інноваційний потенціал», «інституційне середовище» з урахуванням їх специфіки в процесі інституціоналізації інноваційної економіки, що дозволило структурувати наукове дослідження і провести деталізацію даних понять. Крім того, виявлено особливості та закономірності розвитку інноваційної діяльності та інституційного середовища в їх діалектичній єдності і об'єктивному протиріччі.

Ключові слова: інноваційна діяльність, інноваційна активність, інноваційний потенціал, інституційне середовище, діалектика.

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