

PROJECT-BASED APPROACH TO FORMATION OF INNOVATIVE REGION RECEPTIVITY

Galina Yakovlevna BELYAKOVA

Dr. Habil. In Economic Sciences, Professor Department of Economics and Business Processes
Management Siberian Federal University
gbelyakova00@bk.ru

Gennadiy Pavlovich BELYAKOV

Dr. Habil. In Economic Sciences, Professor Department of Organization and Management of the High
Technology Production Siberian State Aerospace University (named after Academician Mikhail F.
Reshetnev)
belyakov_gennadiy@list.ru

Ekaterina Vladimirovna SUMINA

Ph. D. in Economic Sciences, Associate Professor Department of International Business, Siberian State
Aerospace University (named after Academician Mikhail F. Reshetnev)
ekaterina.v.sumina@mail.ru

Artem Alexandrovich BADYUKOV

Post-Graduate Student Siberian State Aerospace University (named after Academician Mikhail F.
Reshetnev).
a.badyukov@inbox.ru

Abstract

The present research is devoted to the formation process of innovative region responsiveness on the grounds of a project-based approach to management. The factors and content of the project-based approach as a methodological basis for management over innovative activity were elucidated. The role of human capital assets in providing innovative development of regional social and economic systems was determined. The formation levels of innovative regional economy responsiveness at the main stages of innovative project were presented. It was proved that innovative entrepreneurship has a key role in a region's innovative responsiveness formation. The methodological basis comprises a number of Russian and foreign fundamental research works on regional economy, innovative development, and project management. The following scientific research methods were used during the research: system analysis, factor analysis, statistical analysis, component analysis.

Keywords: project-based approach, innovative region receptivity, formation process of the innovative responsiveness, innovative entrepreneurship.

1. Introduction

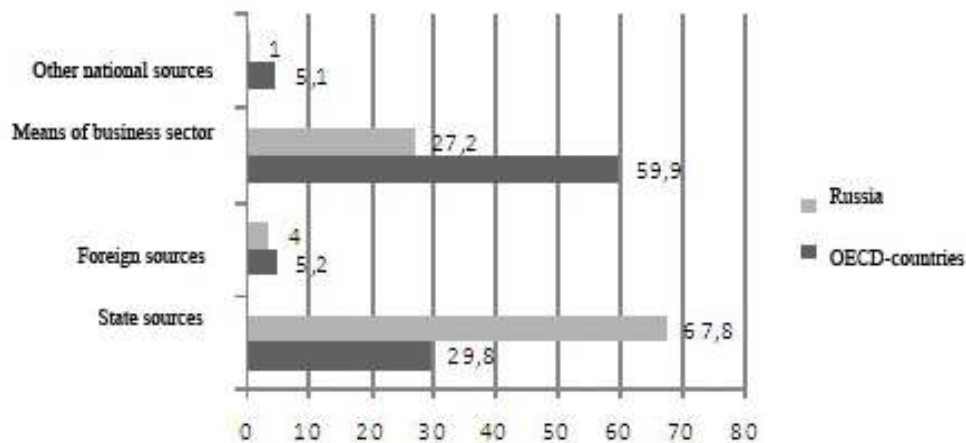
The required reindustrialisation processes of the Russian economy form the agenda by laying the emphasis on a role of innovations in solving modernization problems of diversified economy growth, as well as that of industrial potential development, and an increase in science-based technologies. The Russian economy has faced some external geopolitical challenges and objectives whose scale and complexity are similar to those encountered in the 1920s. The industrial potential should be restored on a new technological basis. It is necessary to develop a strategy of reindustrialisation or "new reindustrialization" taking into account up-to-date technological structure, which should serve as a response to the modern challenges of the international market and as a way to solve internal social and economic problems. Over the last 13 years, the industry increased only 1.6 times, with natural resources dependence of the Russian economy remaining unchanged (Valentey, 2015).

2. Literature review

B. Santo considers innovation as a public, technical and economic process that leads to the creation of products and technologies with improved characteristics if it is based on economic benefits and ideas and inventions are implemented (Santo, 1990). J. Schumpeter treats innovation as a new scientific and organizational combination of production factors motivated

by the entrepreneurial spirit (Schumpeter, 1982). According to the international standards of Oslo, innovation is a result of the innovative activity implemented as a new or enhanced product introduced to the market (Guidance of Oslo, 2010). The analysis of numerous interpretations of this concept allows to define the key characteristics and the role of innovations in a regional management system. Innovations, being both a factor and a result of the most favourable scenario of a region economic development, reflect the possibilities and needs of the entrepreneurial sector as well as the demand for innovative products. According to the annual reports of World Economic Forum (WEF), Global Competitiveness Index (GCI) of the Russian Federation has grown from the 64th (2013-2014) to the 45th position (2015-2016) in a general rating (The Global Competitiveness Report, 2015–2016). It should be stressed that the position of Russia has improved in many respects due to the macroeconomic external factors but the innovative potential of the national economy remains unrealized. Despite the prevalence of higher education, the infrastructure condition, the significant size of the domestic market, and other strong points, the Russian economy has "innovative unresponsiveness", i.e. a set of factors preventing practical implementation and commercialization of innovations. The entrepreneurial sector of the economy has a critical role in these processes. The modernization of the Russian economy implies the development intensification and qualitative changes in production factors, which remains the priority over a long period of the Russian history. However, taking into account the current structure of expenses and economic recession, the reserves for a structural manoeuvre are rather low. Attempts to increase the productivity of a research and development (R&D) sector, represented by an increase in governmental financing programmes for the R&D without the coordination with business development strategy do not give the due result. The structure of the expenses for the R&D by financing sources in Russia and the member states of the Organization for Economic Cooperation and Development (the OECD) in 2012 is shown in Figure 1 (Semenov, 2014).

Figure 1. Structure of expenses for researches and developments by financing sources in Russia and member states of the OECD (6)



Therefore, new administrative approaches, such as the project-based one, should be introduced globally. They allow to raise social and economic effects, to accumulate and to optimize limited resources, to systematize factors and to make innovative processes at the level of both regional and business systems transparent. In essence, a "project" (derived from Lat. "projectus" - "thrown ahead", plan) is a kernel of innovative development. Besides, the project-based approach, being a modern administrative one, is a definite solution with no alternatives in a complex interaction and influence of factors of micro-, meso- and macro-environments (Gurova, 2015). Heizer, J., Render, B. define the basic characteristics of the project (Heizer and Render, 1999). Meredith, J., Morris, P.W.G., Thomsett, R (Meredith, 2000; Morris, 2000, 2004; Thomsett, 1993) research the essence of a project-based approach in enterprise management, application of project-based approach in the management of research activities. The objective of the present paper is to examine the role and the content of project-based approach as a necessary methodological basis for the formation of the region's "innovative responsiveness". The essence of innovative activity as a new knowledge

reproduction justifies the demand for the project-based approach at the level of regional systems.

3. Materials and method

The research methodology comprises a number of Russian and foreign fundamental research works on a project-based approach to management, a regional economy. Some of the works are devoted to the problems of innovative regional economic systems development and to the formation of regional government tools. In the course of the research, the authors applied the methods of synthesis, various types of analysis, namely system, scientific, formal and logic, comparative ones; as well as some economic and statistical methods.

4. Results and discussion

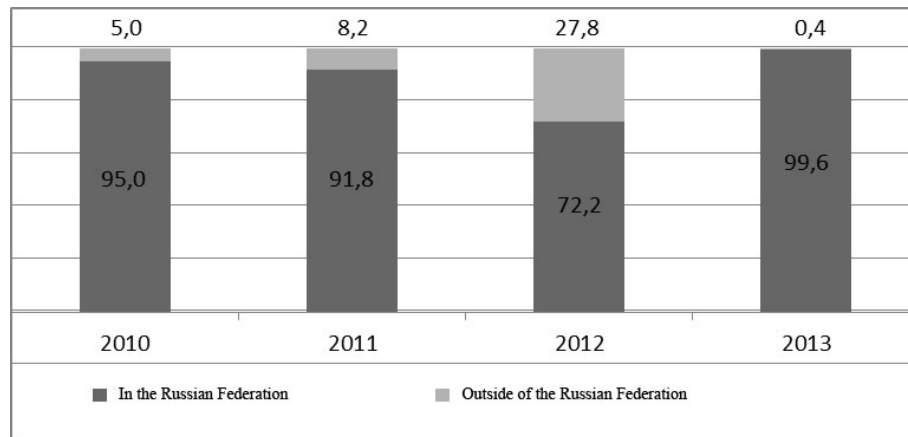
The "Innovative responsiveness" category is used by researchers in the field of innovative development, regional management and is mentioned in legal acts (Suslov, 2007). Innovative responsiveness is a complex indicator of a national economy as a system and is interpreted in the scientific literature as the ability to implement innovations in various social and economic systems. At micro- and meso-levels, innovative responsiveness is treated as an innovation preconception mechanism, as a degree of a system's readiness to develop and implement innovative projects and programmes. A region's innovative responsiveness consists of availability and ability of regional subjects and their executive bodies to create, carry out and realize innovative processes, proceeding from available conditions and resources and within specific regional innovative policy (Ivanova, 2008; Belyakova and Vladimirova, 2011).

The gravity of the problem is confirmed by the fact that only 10 % of all scientific developments made in the Russian Federation were commercialized within 20 years of market transformations. The lag of Russia from the advanced countries is estimated as 40-50 years in this sphere. The implementation of innovative projects provides developing countries with 50 to 85 % of Gross Domestic Product (GDP) growth. In Russia the proportion is reverse: 80 % of GDP growth is secured by raw materials, which also proves the necessity for innovative transformations as a basis of reindustrialization. The empirical research has proved that the distribution of innovative activity among the regions is extremely uneven. In 2013, 65.4 % of all Russian innovative products were produced in two federal districts (FD) - Central (Moscow and Moscow oblast) and Volga FD (the Republic of Tatarstan and Samara oblast). For the first time since 2008, the capital of Russia yielded its leading position among the Federal subjects of Russia in the innovative development rating composed by the Higher School of Economics (HSE). The third place was taken by St. Petersburg. The first ten positions in the rating included also Mordovia, Kaluga oblast, Nizhniy Novgorod oblast, Tomsk oblast, Chuvashiya, Khabarovsk Territory, Penza oblast ("Tatarstan got ahead of Moscow by Innovative Development", 2016).

Regionalization is also observed in the countries with significant centralization level, such as South Korea or Kazakhstan. There are two reasons for an inclusion of a region's innovative responsiveness factors as a region's position criteria in the innovative development rating. Firstly, the accomplishment of regional technological development goals is proportional to the scale of industrial innovations. Secondly, the innovation commercialization is determinative innovative policy element that requires attention (Gusev, 2009). According to the results of the research carried out by the Institute of Statistical Research and Economy of the National Research University "Higher School of Economics", high level of a region's innovative development depends mainly on the quality of an innovative policy. It should be mentioned that it is a factor that can be improved within rather short term (Gokhberg, 2015). The innovative products ration in the total amount of shipping volume distributed among marketing outlets is demonstrated based on the example of Krasnoyarsk region in order to justify the key factors of the innovative development of a region as a Russian Federal subjects (Figure 2). The problem of innovative unresponsiveness of the Russian economy, which was earlier presented in a great deal of research, is proved by the share of Russia in the universal volume of innovative products manufacture and export (0.3-0.4 % in manufacture, excess on 1.2 % in export of consumption share in the domestic market). Innovative unresponsiveness is defined by low level of demand for innovative products. The data on regional cross-section

presented in Figure 2 shows a slightly different situation, which is proved by indicators of other regions of the Russian Federation. The consumption structure of innovative products on trade areas is defined by specificity of the region and its technological orientation.

Figure 2. Specific share of innovative products in the total amount of shipped innovative products in market outlets



Source: Statistical collected book No. 1.34.018: Krasnoyarskstat, Krasnoyarsk, 2014, 31 p.

Different information content of innovative product structure indicators in market outlets and innovative products share in the total amount of exported or consumed production in the market should be considered as well. The later piece of research presented by the National Research University "Higher School of Economics" shows that the share of the innovative products entering the domestic market did not exceed 4.4 % in 2009, and 6.7 % in 2012. The specific share of innovative products in the total amount of export increased more than twice in 2012 compared with 2010.

The consideration of regional economic systems' complex behaviour allowed to define some possibilities and threats to their development in regards to the development stability, the systems' ability for self-development and self-organizing (Romanova and Nelyubina, 2010). In terms of objectively developing processes and changes in economy, the innovative responsiveness at a regional level is both an ability and readiness for reindustrialization. The innovative responsiveness as an ability of economy to create and implement up-to-date technological solutions becomes a basis for modernization of a region's economy. The achievement of the set goals of a country's innovative development, the reindustrialization towards the increase in the hi-tech branches share in the economy's structure is possible only based on the project-based approach benefits (Lapin, 2012).

The innovative responsiveness of an economy depends on an objective possibility to introduce new technologies into existing production processes. Nowadays, many researchers define a number of factors that constrain innovative development in the regions. The first two factors are decrease in and optimization of financing scientific research determined by crisis phenomena in the world economy. The third factor is the drawbacks of innovative development infrastructure. The lack of personnel and information resources as well as that of coordination among support infrastructure elements can be added to the list. The final factor is the level of entrepreneurship development in the national economy (Starbuck, 1992).

We assume that the main factor constraining innovative development is a number of reasons for the innovative unresponsiveness of a regional economy, which can be divided into two groups based on the innovative cycle's basic phases: the reasons constraining generation of innovations and for their low implementation level. The first group defines a set of infrastructural, institutional, social and economic factors causing low level of entrepreneurial activity of the population and that of investments into scientific research and developments. The complex of the first group reasons is connected with the new knowledge reproduction, the level of investments into education, research and developments. The second group is formed by infrastructural factors of innovations commercialization.

The presented conclusions are confirmed by the European statistical research of the regional economic systems' innovative development. Education, professional training and

lifelong professional improvement are essential to build a region's ability for innovative development (Eurostat, 2016). Dynamic business environment has great importance for the promotion and distribution of innovations. The goal is to use R&D through business in order to implement new knowledge in competitive products and services. Therefore, in the context of knowledge generation, the measures directed to the promotion and concentration of knowledge (for example, by the creation of technological markets and licensing programmes) as well as to state order system have the same importance as investments. The analysis of the regional situation shows that innovation indicators improved in 155 of 190 EU regions within seven-year period from 2004 to 2010. In the other 35 regions located in 15 member-countries, the productivity of innovations worsened. The European innovative development strategy until 2020 aims at reaching a low of 3.00% EU's GDP for R&D investment. According to the numerous researches of the United Nations Organization (UNO), the R&D expenses in the Russian Federation do not exceed 2 % of GDP, while a minimum of 2.4 % of GDP has been stated as a target. China and Japan stand out by the number of sources for R&D financing. In these countries, the means of business sector make about 80 % of all expenses for R&D. In Russia this indicator makes not more than 30 % (Figure 1), which proves favourable environment for innovations and the level of innovative responsiveness (UNESCO, 2016). According to the report "Global Innovative Index 2015", Switzerland, the United Kingdom, Sweden, the Netherlands, and the United States of America are the leading innovator-countries in the world. It is notable that the group, which the report calls "dynamic innovators", consisting of states with higher results but similar GDP compared with other countries, has also included some developing countries with a low personal incomes and other economic indicators. These dynamic innovators reach better results in the field of innovations due to the improvement of their institutional basis, the formation of qualified labour, the support for enterprises, considering different progress level in the countries that belong to this group. Overall, the innovations in Europe remain at the high level. Many European countries are in the top-ten and large European countries, such as Germany, have improved their rating among 25 leading countries (The Global Innovation Index, 2015). In this connection, it is interesting to research regional systems' innovative responsiveness in order to define a system's ability for innovative development depending on its stability. The ratio of regional economic systems' stability degree to current global economic crisis defines a regional ability for innovative development. The presented results prove that the more unstable a regional economic system is, the more responsive to innovations it is (Gokhberg, 2015). This conclusion is confirmed by G.Mensch, the successor of innovative cycle theory by J.Schumpeter. An innovation, as a result of a novelty having been commercially applied, has special significance during recession phase (depression period) of the economy. According to G. Mensch, the economy is structurally ready for the introduction of the basic innovations during this period. In a crisis economy, entrepreneurship acts as a gatekeeper for innovations, since no alternative appears to be possible for their implementation in order to preserve market positions (Mensch, 1979).

In this respect, it is necessary to understand that the need for innovations, which defines innovative responsiveness of the economy, is especially important in the conditions of the global economic crisis, while the key administrative task is identification and effective application of factors increasing innovative responsiveness of the economy.

The reduction of expenses for R&D in the economic crisis and political tensions has strategic delayed negative effects. In terms of economic theory, this type of investments can be related to those in new knowledge and human capital. In the light of human capital theory, the labour power having creative and innovative potential is becoming an increasingly important factor for public production's and economic development of a country. According to G.Becker, the founder of this theory, human capital consists in the reserve of knowledge, skills and motivation of each individual. In the majority of countries, human capital exceeds the half of the accumulated national wealth. This reflects a high level of their advance. For example, Finland took the leading position by the level of human capital's development, according to the World Economic Forum in 2015 research (World Economic Forum, 2015; Becker 2003).

According to some estimation, the US investments share in the human capital is stated to amount to more than 15 % of GDP, which exceeds "pure" private capital gross investments in

plants, equipment, and warehouse. This makes it possible to assume that one of the world highest level of investments in human capital is directly connected with that of economic development. The Japanese experience of economic innovative development is necessary to mention. The post-war reforming of Japan's economy (1950-1960) and the so-called "Japanese miracle" phenomenon can serve as a striking example of the role of human capital in the country's economic development. By the late 1950s, the country has achieved significant success in the field of professional improvement of the labour force, the development of managers' creative abilities, which allowed easy and global introduction and application of modern foreign technological innovations. The example of electronic industry shows that this situation allowed to introduce Japan's own innovations and developments later. Post-war Japan annually raised labour productivity by 9.9 % (Shigeto, 1981). Substantial investments in developing education, science, and new knowledge converting into products are essential for making human capital a factor for a country's social and economic development. An increase in the business share in financing R&D is becoming a major priority.

Innovative process, which is inherently connected with project activity, is new knowledge the reproduction. Any innovative process has certain phases, duration, objective, and is realized proceeding from limited resources. Inherently innovative result is unique, which makes it similar to project activity (Heizer and Render, 1999). The project development mechanism at any level requires consecutive passing of several stages. The first one is an analytical stage when the problem-focused analysis of a situation is conducted. The second stage is conceptualization, i.e. forming the hierarchy of goals and objectives. The third stage is a selection of effective tools for activities within the scope of the project. The next stage implies the activity mechanism specification (up to the actions and their order (schedule)). These stages are followed by project budgeting and the determination of its implementation efficiency criteria, expected indicators, and evaluation methods. An innovative process is a complex of works directed to the creation and commercialization of new knowledge in the form of scientific and technical products. The innovative process can consist of several interconnected stages, such as fundamental and applied research, experimental developments (development works), introduction of products into market (introduction in manufacture), manufacture, and sale (Haas, 2006).

The project-based approach in the state and municipal management is a methodological basis for management of innovative activity, which ensures an increase in innovative responsiveness level of the economy. In domestic practice, project management is reflected in a wide-scale application of special-purpose programme involving the formation and performance of target complex programmes that comprise a set of interconnected actions directed to specific social and economic objectives achievement. The expanded system of projects and programmes is implemented in both scientific and innovative spheres. Innovative projects and their implementation programmes constitute an essential part of an emerging economic management mechanism of a country's scientific and technical development. The domestic practice of project implementation is characterized by the lack of project activity standards, an account of social effects of project implementation in a public administration system (Kadyshev, 2012). The introduction of the project-based approach into a regional management system and securing an economy's innovative responsiveness functionally include the formation of administrative and expert blocks as well as that carrying out monitoring and supervision, interaction with regions, territories, and their specific problems.

The innovative development programme is an integration of innovative projects. Considering the example of complex target programmes in the state administration system, it is a hierarchy of projects and programmes at various territorial and regional levels of a branch orientation.

We think that the project-based approach to secure a region's economy innovative responsiveness is integrated and implemented at two interconnected levels. The first level is a business system level, entrepreneurship development, which defines the natural market environment forming the need for innovations and a regional economy's responsiveness. The second level is executive bodies functioning, the introduction of project activity methodology

into the regional administration system at the level of mechanisms, procedures, institutional basis for the development of innovative activity in the region.

The purpose-oriented programmes are the key tools to implement the state innovative development policy and to influence the industrial, economic, and social processes within the commission of federal, regional, and local authorities. The expanded system of projects and programmes is implemented in both scientific and innovative spheres. For example, the Russian state programme "Economic Development and Innovative Economy" consists of sub-programmes, including federal purpose-oriented programmes (Russian State Programme, 2016). Under these conditions, the implementation of both social and economic development programmes and a country's innovative development strategy until 2020 (Russian State Programme, 2016) should be carried out with the help of mechanisms and modern project-based management approach.

In forming the innovative development programme as a set of real projects aimed at solving specific problems and interested in the proper project implementation in order to develop a certain territory, the project-based approach can serve as a technology that helps make social and economic problems urgent.

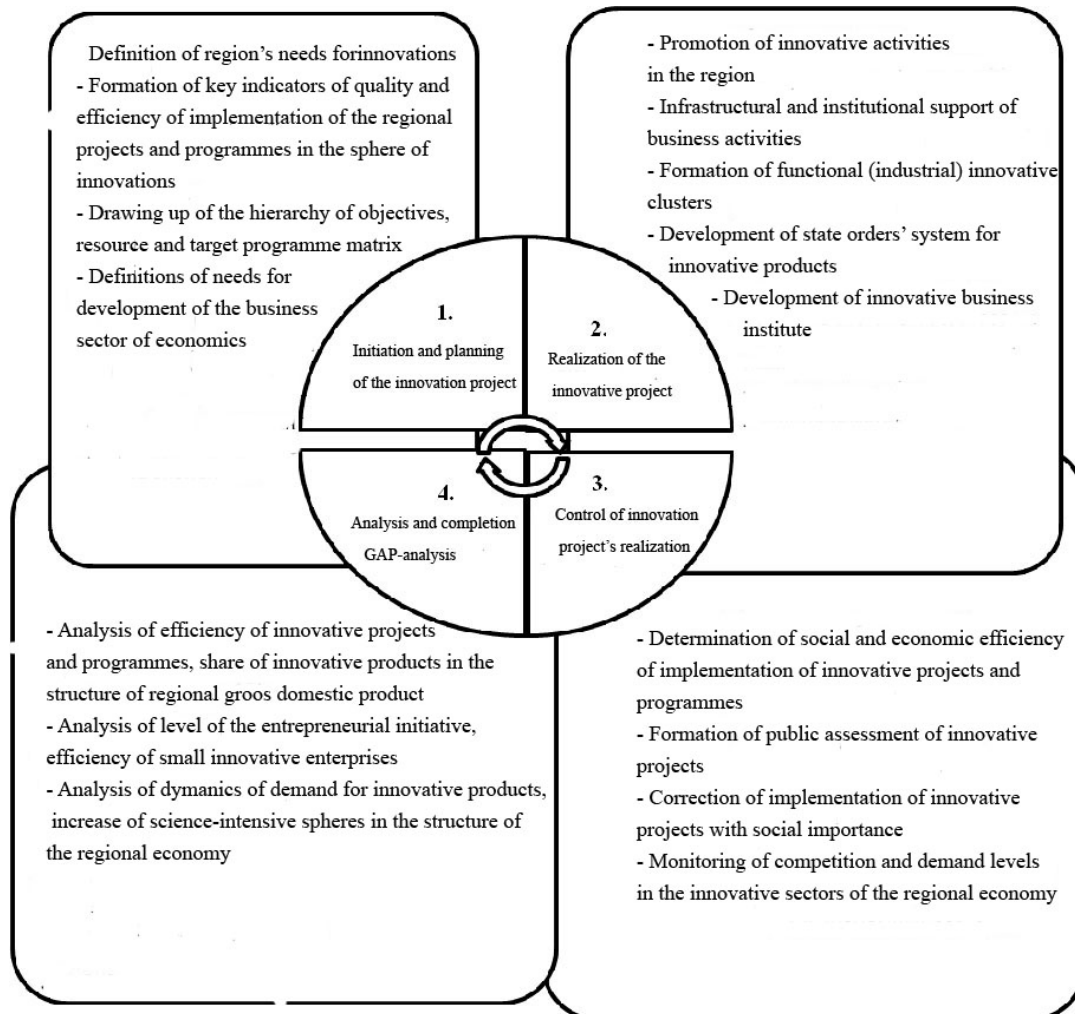
The project-based approach triggers innovative solutions, generates stakeholders to implement each project. Hence, the social and economic efficiency of managerial solutions in the regional administrative system increases, which is a paramount parameter of implementing any projects and programmes in the crisis economy. In the body of scientific literature, there are various approaches to the differentiation of innovative project's stages, taking innovative process stages by its content starting from the generation, conceptualization, optimization, and realization stages into account.

The majority of researchers define the following stages forming a project's cycle in the innovative activity (Meredith, 2000; Thomsett, 1993): initiation, planning, realization, monitoring and control, analysis, completion. An innovative process is a complex of works directed to the creation and commercialization of new knowledge in the form of scientific and technical products, the production technologies improvement, the new knowledge implementation in a product.

The mechanisms integrating the project-based approach into a region's innovative development system should be defined and reactivated in the organization of innovative business from seed to IPO (Initial Public Offering) stages. Each stage of the innovative process entails the selection of institutional and instrumental support for regional innovative activity (Figure 1).

At the level of business systems, the project-based approach allows to initiate and realize each entrepreneurial plan, and at the level of regional systems, this approach provides a corresponding infrastructure, tools, and processes. At the organization level, the efficiency of the project-based approach realization depends on its integration into the regional administration system, infrastructural and institutional support for business and innovative activities. An increase in the innovative activity productivity and a regional economy's innovative responsiveness is defined by the interrelation of the following: the indicators of innovative projects' realization at the business systems level and the integration of the project-based approach into the regional government system. The formation stages of a region's innovative responsiveness on the basis of the project-based approach are presented in Figure 3. Innovative business is the key factor and mechanism to increase the economy's innovative responsiveness, which is the only possible option in case of global economic crisis and lack of resources for an innovative system "completion" (Sumina and Badyukov, 2015).

Figure 3. Formation process of the innovative responsiveness of the region on the basis of project-based approach



At the second level (meso-level) the necessary infrastructural and institutional conditions for each stage of a project's implementation are defined. The priorities of the business initiative taking into account regional range of problems and social and economic effects should be formed at this stage. Therefore, each innovative project's implementation should be based on the balance of all stakeholders' purposes and interests. These goals are hardly achievable without an active role of contact groups in the system of organizational environment factors, i.e. without public at large, active civic position, and business culture. If only the second level of the innovative responsiveness formation is used, the infrastructure development can result in wasting budgetary funds and other resources along with the greater concentration of power and strengthening the state influence.

The entrepreneurial variant implements and boosts the importance of the innovative process stakeholders' inducements. In accordance with the innovative process implementation stages, the innovative activity support level in a region includes the determination of a region's need for innovations with due consideration of its specific features and social and economic problems. Besides, it includes the formation of new organizational forms, namely, innovative clusters, systems of state orders for innovative products, institutional and infrastructural basis for innovative business activities development in a region, which are the initiative taken at the grassroots (by consumers of innovations). The scale of these new organizational forms should be defined by the general need for innovations of the private sector and the state.

The first stage of the regional innovative responsiveness formation is connected with the first stage of the innovative project implementation including its initiation, generating new knowledge (products, new technologies, processes) at the business system level. Viewing from the position of particular regional executive bodies, the first stage includes the

determination of the region's need for innovations, the key indicators for selection of innovative business concepts consistent with the region's problems and branch priorities. This is the stage of planning and determination of resource and target architecture of a project's implementation into a regional development strategy.

The second stage, the innovative project realization, implies start-up and the transition to the early growth. The regional authorities should render assistance in resource support and elimination of administrative barriers for the innovative business development. The institutional and infrastructural business support in a region is very important at this stage. In the science-intensive sphere, this aspect is highly influenced by new organizational forms, innovative regional clusters, which allow to maximize economic and organizational efficiency of the project's implementation and to optimize the expense of resources. The emphasis should be laid as well on the development of the innovative business institute, natural market competitive conditions, the formation of the system of state orders for innovative products selected at the inception of business ideas, which enhances the possibilities of the innovative project's implementation.

The third stage of control and the innovative project implementation includes the assessment of intermediate project's results, application of the system of innovative business development target indicators. The target indicators should be determined based on the balance among the interests of society, business, and authorities. The creation of public institutes for control over innovative projects and programmes implementation and the systems of public assessment of the project are very important as well. The monitoring of the competitive environment and the dynamics of demand for innovative products in key industries of a region should be conducted. Correcting decisions concerning the further development of the innovative business and the innovative project should be made. The research potential and scientific and technical progress are the key prerequisites for the innovative business development that include regional possibilities, infrastructure, research, design and engineering organizations and higher educational establishments with top priority for the regional industrial policy. The scientific and technical progress can stimulate brand-new product models (product innovations, breakthrough innovations) and the formation of new market requirements. The choice of the most promising scientific and technical developments for modernization and recovery of the industry is defined by the market requirements confirmed by technological platforms in the territory of a particular subject of the Russian Federation. New objective need for solving social and environmental problems based on innovative business should be highlighted. The society's interests and social regional problems form the needs for innovative and technological solutions. The projection of the social element on the innovative entrepreneurship requires new tools, support and implementation mechanisms in order to satisfy stakeholders of the innovative project.

At the fourth, final stage, the assessment of economic and social efficiency of the project implementation is carried out, and further market potential of the project's implementation is drawn up. The renewal of a new cycle of regional innovative responsiveness formation requires constant information, administrative, resource, organizational support for innovative business initiatives. Active state participation at the regional level is required in completion and preservation of the reached level of innovative activity and infrastructure, institutes and support tools. The basic vector of the state participation should be defined according to support for the innovative entrepreneurship, which is direct organizational mechanism of a transfer, the introduction of new developments into manufacture, the commercialization of innovations by "research-manufacture" principle. This integration level assumes the creation of specialized and expert bodies, executive bodies functioning, their openness to other contact groups, the project management. The involvement of the whole stakeholders' system of projects' implementation at different levels defines the necessity to improve mechanisms of state and private partnership in the innovative sphere, development of innovative business sector of the economy.

5. Conclusions

The key result of the research is decomposition of the regional innovation responsiveness formation's levels and stages on the basis of the project-based approach, which will benefit

the innovation policy implementation at micro-level. It will allow to create a system of business search for and selection of innovative initiatives, to raise both the efficiency of organizational changes introduction and the level of organizational flexibility, and that of resource efficiency and provision, as well as to increase market potential of the products. At the regional level, the present interpretation of the innovative process will allow to create the necessary organizational conditions of innovative activity, taking into account features of each innovation process stage. The application of the project-based approach in this form will allow to accumulate the administrative resource at directions of the regional innovation development of the first priority and to reduce the risk level of their implementation. This fact can improve the innovation responsiveness level of regional economics. Decomposition and synchronisation of the innovation process implementation stages at all levels of social and economic systems will allow to improve the efficiency, to apply the mechanism for the determination of the regional innovation policy priorities based on a free entrepreneurial selection with an account and limit of social effects, and with the innovation initiatives implementation on the basis of active support by the public authorities.

Practical implementation and incorporation of the coordinated management of social and economic systems' innovative development are possible and essential for the Russian regions in order to involve business sector into innovative activities. The authors have made the following conclusions. The project-based approach provides the actualization of new factors of regional national economy growth and maximization of social and economic effects of the innovative initiatives. In the reindustrialization conditions at the level of the Russian Federation subjects, each having unique specificity and innovative potential, innovative entrepreneurship serves as deep reason for and a factors of innovative transformations of the economy which are initiated by natural market mechanisms and thus increase innovative responsiveness of the region. The scales of innovative transformations are determined by cumulative innovative need of the private sector and the state. As opposed to infrastructural, resource-demanding "completion", the project-based approach provides the main stages of new knowledge implementation at the level of business and authorities, initiating investments into human capital and thus forming the need for innovations of the region. The result of the research is decomposition of levels and stages of the regional innovative responsiveness formation process based on the project-based approach.

The authors confirmed the key role of innovative business in supporting the demand for innovative products of the regional economy and the innovative responsiveness growth respectively. The interrelations between the elements of business and regional systems were defined; the crucial part of the entrepreneurial initiative in securing the growth of demand for innovative products in the innovative areas was elucidated. The project-based approach is a very important methodological basis of the actualization of the human capital, the formation of the necessary conditions and the coordination among infrastructural elements in securing innovative responsiveness of the region. The investments into R&D should be provided by initiative and sources of the business sector. The most effective application of this factor can be achieved only based on the integration of the project-based approach and innovative activity in the region. The results of the research of the project-based approach possibilities for solving the key problem of the Russian economy, i.e. innovation unresponsiveness, have shown the possibilities of the project-based approach and developed theoretical provisions for its application in regional management. The problem of criteria and measurement of the regional systems' transition through the specific stages of regional innovative responsiveness formation has not been examined yet. The further research of the project-based approach in the innovative activity management can be devoted to the determination of the necessary conditions and prerequisites for initiation and realization of innovative projects and programmes.

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