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Special Aspects in Controlling Innovation Activities of Enterprise

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Abstract. This article considers the state and prospects of the construction industry development in the current economic situation. A special attention is paid to the issues of the innovation implementation in the construction industry, which will allow one to ensure search for working methods of harmonious development of the Russian economy.

Issues in development of the innovation activities in construction are a complex system of measures, aimed at creation, development, mastering, production and commercial application of innovative products. Innovative activity in construction has some industry-wide specifics, which shall be taken into account. The construction industry undergoes cycles of development in connection with development trends of both national and global economy. Currently, there is a reduction in the number of orders for design, installation and surveying works. The financial situation of many enterprises specializing in construction works has become very complex. The construction industry is multi-faceted. Besides erection of buildings and structures, it includes creation of new high-tech materials, technologies, scientific developments in design, training of personnel for operation with innovative products. To a large extent, complex solution and improvement of these processes are simplified if organized management with governmental participation is involved.

Thus, implementation of innovation activities in the construction industry is currently impeded due to prolonged market reforms and negative effects caused by the global financial and economic crisis. It is manifested in using obsolete production assets, insufficient volume of investments for development of production assets, lack of qualified personnel, gaps in the regulatory and legislative framework, etc.

The paper uses one of the regions of Russia to consider principal development trends of innovation in construction, to analyze main factors impeding activation of the construction industry, to determine prospects for development of innovation in the Russian Federation, which are also being studied and discussed by many other specialists and practitioners.

1. Introduction

In the global competition environment, innovative orientation of construction industry is a focal area, which mainstreams a search for working mechanisms of harmonious development of the Russian economy.

It should be noted, that in the current context there is still an imbalance between the current engineering and technological systems and documentation packages provided for by legislation.



Thus, the problem of development of the innovative activities in the Russian Federation, analysis of its state and further assessment become a center point of research and discussions among many specialists and practitioners.

2. Main part

Under modern conditions of economic instability and with crisis downturn in the economy of the Russian Federation, as well as sanctions limitations, currency of innovation activity development keeps growing.

According to the terminological definition, innovation is the final result of innovative activity, which is obtained in the form of a new or improved process which is used in practice, and as a result of the new marketed product. So, let us first consider what innovation is, what one understands by the term that is used in each and every field of knowledge nowadays. Innovations are new developments leading to creation of a new, improved product.

Innovation is a complex economic function, resulting from interactions of numerous different agents. Among the main requirements are science, entrepreneurship, openness to new ideas on behalf of management, intellectual capital, intangible assets, venture capital. Innovation is subject to specific issues, which are there in each type of the economic activity; also they may be influenced by different combinations of competition types.

Currently, development of and support for innovations are among the timely issues in development of the national economy. Modern high-tech innovation infrastructure is a guarantee of achievement of a high level of productivity as economically as possible, and of improved quality of production meeting all the environmental requirements.

Having studied proven record of the developed countries, one may conclude that innovative activity is a guarantee of further achievement of economic security and lowering dependence of national economies on the situation in the global market.

Then, having studied the international rating, one may note that the Russian Federation, falling behind the global leaders, is continuing currently and that the leaders hold strong positions in the global innovation space.

Orientation onto innovation activity is an important requirement in all fields of human activity not only today, but also in the near future.

Innovative entrepreneurship is a specific pioneering entrepreneurial process to create a new economic management process, whose nature lies in a constant search for new possibilities and orientation towards innovation.

Innovations may be viewed as special tools to stimulate and motivate the entrepreneurship, which are aimed at searching for new developments and entrepreneurship and industry being constantly aimed at them.

Within the framework of innovation activity of any enterprise, an important place is taken by application of new methods of work connected to implementation of innovative technologies.

Thus, in this situation, the only method to improve the status of innovation activities in Belgorod Oblast is to apply new methods of operation linked to implementation of innovative technologies.

The innovation process is hindered by a necessity to divert significant resources to support existing production facilities and technologies.

To resolve numerous issues of innovation growth, the economic strategy of the government shall be based on the principles of improvement of the economic situation, which serves as a base for innovation climate.

The government shall also set the rules of competition, for example, protecting the intellectual property and strengthening its anti-trust legislation in such a way that economic success is defined by productivity and innovation.

Variability of policies defines a variety of directions and forms of governmental support rendered to innovative projects, including:

- direct financial support of specific products;

- ensuring enforcement of administrative procedures;
- provision of knowledge and other infrastructural components;
- lowering taxation of R&D and innovative expenses;
- lowering taxes for other expenses, not connected to R&D or innovations, as well as provision of interaction networks for universities, administration and companies.

A review of regulatory and legislative documents, which regulate innovation activities in the territory of Belgorod Oblast, has shown that maximum of favorable conditions for innovation development is created there. The construction sector plays an important role in the Russian economy.

The construction industry undergoes cycles of development in connection with development trends of both national and global economy. Currently there is a reduction in the number of orders for design, installation and surveying works. The financial situation of many enterprises specializing in construction works has become very complex. The construction industry is multi-faceted. Besides erection of buildings and structures, it includes creation of new high-tech materials, technologies, scientific developments in design, training of personnel for operation with innovative products. To a large extent, complex solution and improvement of these processes are simplified if organized management with governmental participation is involved.

Currently, activity of domestic enterprises designated as large and mid-sized business with respect to application of modern and highly efficient innovative technologies in production is at a low level, compared to that in the developed nations. Most probably, the main cause of this extremely negative phenomenon is a relatively slow payback from application of modern technologies, which in the context of insufficient stability of Russian and global economics makes such investments quite risky.

Considering this situation, it seems quite possible that stabilization of the domestic economy may seriously increase interest of Russian entrepreneurs in innovative technologies investment.

A significant positive effect onto the current negative trend that has formed in Russia with respect to application of innovative technologies in this country may be made by various methods of governmental assistance rendered to business representatives. It is necessary to conduct free workshops for first-time entrepreneurs, where advantages gained from applying innovative technologies in business shall be covered. Despite this, the measure may be quite expensive for the government; in the long run, this approach will lead to quite high gains by increasing the number of taxpaying entrepreneurs who become successful due to such workshops. Besides, this will casually improve the situation with practical application of innovative technologies.

A governmental support is also necessary for those enterprises that apply actively the newest scientific developments in their practice.

While conducting innovation activity, an enterprise needs a structure and an attitude so that control in the organization promotes an environment that is advantageous to the entrepreneurial spirit that understands the new as an advantageous possibility. At the same time, it is necessary to take into account that to implement any new developments, the organization needs a team of innovators consisting of the most competent employees. But, as a person cannot keep production going and combine their direct responsibilities with activities to create innovations, in most cases it ends up as a failure due to lack of time and the new development remains just an idea. Of course, innovative entrepreneurship is not required to be conducted continually, and it is straight away impossible for small-scale enterprises.

That is why the authors hold that introduction of a position for innovation activity at the enterprise will facilitate attaining high performance in the field of innovation activities. Within the purview of such position, innovation measures will be timely developed and organized, that is, one will identify and replace obsolete equipment and technologies, analyze the enterprise's business activity.

It should be noted that changes and improvements in the organizational structure are in themselves a kind of innovation, aimed at improvement of an efficiency level of the enterprise's activities.

Currently, entrepreneurship requires consolidation of gains obtained by the market reforms, as well as provides the country with a rightful place in the global economy and its population with a dignified life.

The main subject of innovation activity is an enterprise, which ensures implementation and distribution of innovations, and an executive of any innovation is always an entrepreneur, who took risk to make sure of its necessity, prospects and commercial gains. That is why, progress having been attained by Russia is due to business and even more so due to innovative entrepreneurship. However, there are many problems impeding formation of an innovative type of development in Russia, and such problems shall be resolved by developing a relevant innovation infrastructure.

Thus, having selected the accelerated development route, the Russian Federation shall participate in innovation activities; being oriented towards innovation will help to come out of recession with fewer losses as well. Innovations start from small things, but their results shall be large-scale.

Generalizing the above-mentioned facts, it should be noted that the current state of construction enterprises of the Russian Federation goes downhill; the analysis has revealed that 79.8 million square meters of housing were commissioned in 2016, which is 6% less than in 2015; a similar situation is evident in the housing market as a whole.

It should be noted, that currently this line of activity is subject to special attention on the part of the government. In accordance with the programs aimed at provision of young families with housing, the government directs its efforts to stimulate the housing market and to support banks and the construction sector by subsidizing mortgage interest rates.

Besides, the results of the analysis show that surveys allow noting that the number of co-investment agreements in housing construction increased by more than 3.4% and reached 701,000 in 2016. Currently, the government pays special attention to the mortgage market, for after a significant reduction in 2015, there was a growth of the mortgage market in 2016: from 1.162 billion rubles to 1.473 billion rubles.

A stable growth in the volume of issued mortgages was observed throughout the whole 2016 and continues until now [4].

At the same time, it is necessary to note that speaking from the results of 2016, commissioning of non-housing buildings has grown up by 3%; at that a share of agricultural and industrial buildings is growing (26.5% and 14.3% respectively), which is driven by international sanctions having created conditions for growth of domestic production.

The research shows that the share of commercial real estate has lowered to 32.7%, there is also a reduction in construction of social facilities due to budgetary cuts.

Let us note that a significant scale of development among the construction companies is confirmed by the fact that there are more than 146,116 organizations operating in the sector. According to the authors' research, the gross amount of works performed in 2016 reached 6.18 trillion rubles, which is 4.3% lower than the same indicator for 2015. More than 3,183 construction companies had gone bankrupt during that period [4].

Having studied the volume of government purchases in the construction sphere, it should be noted that in 2016 they amounted to 5.8 trillion rubles – 0.7 trillion rubles lower than for the previous period, which is largely due to a significant reduction in volumes in the 4th quarter of 2016.

The volume of loan provision to the organizations involved in the construction industry has been shrinking for the last two years and currently reaches only 1.8 trillion rubles. Overdue loans are still high at 20%, but there is a downward trend with respect to previous periods as for the beginning of the year.

It should be noted that according to the results of 2016, the number of personnel employed in organizations involved in construction is 5,608 thousand people, or 8.2% of the total number of workforce in the economy.

At the same time, there is a reduction in production of the main types of construction materials: bricks by 24%, roofing slate by 1.5%, cement by 20%, commercial concrete by 16%.

Construction industry is one of priorities in development of the Russian Federation. In 2015-2015, it is seen that about 41% of all capital investments were aimed at development of the construction industry.

Results of this research allow us to note the positive dynamics in volume of construction in Belgorod Oblast. So, in 2016 the total volume of complete construction works amounted to 54.6 billion rubles. This indicators make the region fifth in the Central Federal District and the second - in the Black Soil region.

A positive trend in the development of the construction industry is the fact that annually more than 1.35 million square meters of total housing space is commissioned in Belgorod Oblast, of which more than 80% is individual housing. It should be noted that by the amount of housing commissioned per one thousand of population, Belgorod Oblast is ahead of the Russia's average, taking the fifth place among the Russian regions (870,08 square meters), which is more than one square meter per person per year.

Several governmental programs operate in Belgorod Oblast: *Provision of affordable and comfortable housing and utilities to the residents of Belgorod Oblast in 2014-2020* and *Improvement and development of transportation system and road network of Belgorod Oblast in 2014-2020*, approved by the decree of the Administration of Belgorod Oblast no.441-pp dated 28.10.13 [6, 8].

It is supported by the fact that since 2014, there have been long-terms dedicated programs running in the region: moving citizens from substandard housing, complex development of utilities infrastructure of settlements and urban districts of the oblast, energy saving and improvement of energy efficiency of apartment complexes, etc. In the microdistricts of mass construction for individual housing, utilities and facilities are constructed: water supply and water removal systems, external lighting systems.

So, implementation of the housing development program is beneficial for development of efficient mechanisms in the region. The program extends the possibilities of targeted financing on behalf of the government and also includes financial support for infrastructural projects of the construction organizations.

The housing development strategy for Belgorod Oblast assumes:

- increase in volume of individual housing construction;
- introduction of new technologies in construction of high comfort housing;
- creation of necessary (comfortable) conditions for living, recreation and labor;
- increase in the number of jobs by construction of research parks;
- attracting private investment to the construction industry.

At the same time, the authors hold that improving the mechanisms of strategic development of the construction industry is an important factor for implementation of the stated developmental directions.

Implementation of these directions is impeded due to lasting market transformation and negative phenomena provoked by the global financial and economic crisis, which appears as use of old production assets, insufficient volume of investments to develop the production assets, lack of qualified personnel, gaps in regulatory and technological foundations and other factors. [10,12].

That is why it is necessary to conclude that the factors listed above have a negative influence over the quality of production (both works and services), to determine low productivity of labor, insufficient development of mechanization and automation of labor in the construction industry, an increase in cost of one square meter during the construction period.

A successful solution of these problems shall be preceded with serious complex measures, implemented by all levels of authority and subjects of the construction industry, including organizations that provide design and construction works, as well as development of efficient modes of interaction between the institutions of higher education throughout the career trajectory of a student, improved quality of education in this field.

Innovation activities shall be considered as a "goal-oriented system of measures to create, develop, master, produce, distribute and commercialize a number of new developments" [11].

Innovative activity in construction has some industry-wide specifics, which shall be taken into account. When talking about the construction industry, the following types of innovation are distinguished:

- complex innovative approach to design and planning of construction facilities;

- application of technological innovations facilitating a reduction in a construction period and lowering the costs for maintenance of machinery and equipment;
- use of the latest construction technologies, construction of experimental facilities using modern insulating materials characterized by a combination of high quality with improved characteristics;
- orientation to using modern high-quality materials in finishing;
- extending the range of domestic production of innovative construction materials, as well as using new organizational forms of construction works.

From the above-mentioned information, one may conclude that the innovations considered shall be implemented in interaction.

Among factors limiting broad distribution of innovation in construction, one may name the following [1, 13]:

- insufficient level of innovation research financing;
- commissioning of construction facilities is accompanied by high costs;
- non-optimal structure of construction market where small business prevails while having insufficient financial, technological and scientific potential;
- low level of construction sector integration, which directly depends on subcontractors;
- insufficient development of the certification system of innovative materials and technologies, and insufficient development of innovation activities in the construction sector.

The highest level of influence of these factors is observed in housing construction, where innovations are implemented with a significant delay.

Taking into account features of the construction industry, an increase of innovation potential of organization in the industry shall proceed in the following directions:

The first direction assumes extension of scientific research and inquiry in the field of construction equipment and technology.

The second direction includes a complex of works for practical implementation of innovative projects to improve efficiency of the sector and increase its profitability.

Thus, a number of measures will facilitate successful implementation of these directions; among them, the main ones are [1]:

- developing and rebuilding of the scientific potential of educational and scientific centers, institutes, organization of their close cooperation with enterprises in practical implementation of the latest technological developments;
- improvement of regulatory and legislative framework, technical regulations and standards, taking into account the requirements of innovative economy and international experience with the aim to improve competitiveness in conditions of an import replacement strategy;
- retaining the priority in performance of state purchases for domestic innovative products;
- mandatory application of modern innovative construction materials and technologies when financing construction from the relevant budgetary funds;
- support for small and mid-sized business performing innovation activities in construction;
- simplification of lending to innovative projects;
- extension of government assistance rendered to businesses by allocating finances in the form of grants to implement innovation in construction;
- development of recommendations and activation of relevant measures in fiscal expansion of innovation activities of businesses involved in construction for calculation of corporate income tax.

Development of efficient interaction between state and businesses at every stage of innovation in construction is facilitated by the *Strategy for development of construction material production for the period of up to 2020 with further prospects up to 2030*, approved by the decree of the Government of the Russian Federation on May 10, 2016, no. 868-r [9].

The program allows regional authorities to develop innovation development policy in construction at the regional level. This is supported by the fact that the Administration of Belgorod Oblast conducts activities aimed at development and activation of scientific and innovation activities, as well as extended involvement of private enterprises into the process of technological development [5, 7].

In 2016, within the framework of forming a system of fiscal stimuli for development of innovation activities, regional law of Belgorod Oblast was adopted, providing lengthening to 8 years for the concessionary estate tax rate for companies implementing projects to create hi-tech production facilities in cooperation with institutions of higher education [2,3].

Mobilizing budgetary and extrabudgetary sources of financing allowed one to divert 127.3 million rubles to scientific, technical and innovation activities in 2016. Within the framework of agreement between the Administration of the oblast and the Russian Foundation for Basic Research (RFBR), 39 projects in fundamental research have found support and were conducted by research collectives of the region, amounting to 64 million rubles of financing.

R&D of young researchers and development of small innovative enterprises in the region attracted financing from the Foundation for Assistance rendered to Small Innovative Enterprises in Science and Technology amounting to 63.3 million rubles.

Besides, development of measures to facilitate import replacement plans continues in Belgorod Oblast.

So far, the list of projects facilitating implementation of this plan includes 87 prospective projects for the total sum of over 159 billion rubles, covering the following fields:

- construction of dairy farms, greenhouses, processing industry facilities;
- production of construction materials, paints and lacquers;
- development of new modern pharmaceutical production facilities.

Thus, Belgorod Oblast takes leading positions in many economic and social directions of growth, both in Russia as a whole and among the regions of the Central Federal District, which is an important supposition for development of efficient innovation activity.

3. Conclusion

The issue of construction industry development in the Russian Federation has both scholarly and practical interest, determined, on the one hand, by its importance, and on the other hand, by complexity of its solution, which is timely in the context of bringing the structure of personnel training closer to real market demand under conditions of innovative development of the economy at a current stage.

Thus, importance of implementing innovations in the construction sector grows for such innovations will allow some economic subjects and regions to obtain competitive advantages, provide stable economic growth, create new jobs, increase living standards of the population.

Currently, state regulation of innovation activity in the Russian Federation is performed by both direct and indirect methods.

The direct methods are financing as defined by the relevant legislation; contractual financing by means of dedicated state programs; governmental contract for purchase of innovations; joining universities with industry.

The indirect methods are tax concession and credit facilities; shared financing of innovative projects; creation of consortiums, engineering centers, research parks.

It should be noted that the most efficient methods of control are the indirect methods, aimed at stimulation of the innovation processes, creation of favorable economic conditions and social and political climate. Results of these methods are successful if they facilitate formation of social, and not just individual conditions for business activities.

Thus, it is necessary to increase the R&D potential, to develop programs for support of brainpower, which will facilitate growth of competitiveness of domestic products.

The authors hold that to resolve the existing issues and to bring the Russian innovation field to the whole new level of development, it is necessary to expand and to improve the methods of state regulation of innovation activity.

For its development, it is necessary, first of all, to increase the efficiency of governmental expenses for scientific and innovative research, for currently the financing is allocated without due accounting of results.

Thus, from the analysis of development factors of innovation activity in Belgorod Oblast it may be concluded that a competent implementation of the *Strategy for Innovation Development in the Russian Federation up to 2020* will allow provision of necessary conditions for development of personnel, technologies and innovations. In this day and age, orientation of the construction industry to the implementation of innovation activity is a priority, so timeliness of this study is out of question.

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