

RUSSIAN APPROACH TO THE FORMATION OF THE INFRASTRUCTURE FOR INNOVATIVE AND ENTREPRENEURIAL ACTIVITY DEVELOPMENT IN THE EDUCATIONAL INSTITUTIONS

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In this article the results Resolution of the Government of the Russian Federation No.219 issued on April 10, 2010 "On state support of innovative infrastructure development in the federal educational institutions of higher professional education". Analysis of the given development programs of innovative infrastructure in the educational institutions has shown that it is possible to distinguish five basic approaches to its construction that has caused controversy in designation of infrastructure objects to the sphere of innovative and entrepreneurial activity.

Key words: infrastructure, innovative and entrepreneurial, educational institution, activity.

Implementation of the economic potential of innovative and entrepreneurial activity is largely dependent on the conditions necessary for its formation and development. In this case, the government support, primarily the financial, should change from the declaration one to the stimulating and selective on the most urgent, priority areas of the economy development.

Innovative and entrepreneurial activity (IEA) in the institutions for higher education is a complex, capital-intensive, and therefore unattractive to investors' activity related to scientific capacity-building of the university that is a key factor in the growth of competitiveness of the Russian universities.

The main objective of innovative and entrepreneurial activity in higher education is to transform scientific knowledge, technologies, and individual university studies into new products and services, and through them – into the business income. Poor infrastructure and lack of funding is a pressing problem holding back the economic activity of entrepreneurs-innovators in higher education. Therefore, during the formation of the necessary conditions for the development of innovative and entrepreneurial activity at the Russian universities the specific attention should be given to infrastructure and attraction of investment in this area.

Innovative infrastructure is a set of subsystems that provide access to different resources (assets) and/or provide participants of innovative activity with services [1].

Traditionally, there are the following types of (the subsystem of) innovative infrastructure:

- financial - different types of funds (budget, venture capital, insurance, investment), as well as other financial institutions, such as the stock market;
- engineering and manufacturing - technology parks, innovative and technological centers, business incubators, technology transfer centers, etc.;
- informational - actual databases and knowledge bases, access points, as well as analytical, statistical, informational and other centers;
- personnel - educational institutions for training and retraining of personnel in the field of scientific and innovative management, technological audit, marketing, etc.;
- expert consulting - organizations involved in the provision of services on intellectual property issues, standardization, certification, as well as consulting centers, both general and specialized in specific areas.

Resolution of the Government of the Russian Federation No.219 issued on April 10, 2010 "On state support of innovative infrastructure development in the federal educational institutions of higher professional education" budgetary appropriations were allocated for the state support of innovative infrastructure development in educational institutions: in 2010 - 3 billion rubles, in 2011 - 2 billion rubles, in 2012 rubles -3 billion rubles.

Competitive selection of development programs was based on the analysis of scientific, educational and innovative capacity of educational institutions for the past 3 years and the presented development programs of innovative infrastructure. The winners of the competition were the representatives of all eight federal districts of the Russian Federation, namely 56 and 22 universities in 2010 and 2011, respectively [2]. Structure of the distribution of the winning universities according to the federal districts is given in the table.

Thus, the government finances the development programs of innovative infrastructure in less than 12% of educational institutions of the Russian Federation. It should be noted that the translation of the best experience is a necessary condition for the development of the entire system of national education.

Table - Structure of the distribution of the winning universities of the competitive selection of development programs of innovative infrastructure according to the federal districts

| Name of the district | Number of educational institutions participants of the program | Number of state educational institutions in the district | Percent of the participated educational institutions in the general amount of program winners | Percent of the participated educational institutions in the district |
|----------------------|--|--|---|--|
| Central | 25 | 209 | 32,05% | 11,96% |
| Siberian | 13 | 83 | 16,67% | 15,66% |
| Volga | 11 | 118 | 14,10% | 9,32% |
| North-West | 11 | 78 | 14,10% | 14,10% |
| Far East | 5 | 37 | 6,41% | 13,51% |
| Ural | 5 | 51 | 6,41% | 9,80% |
| South | 5 | 47 | 6,41% | 10,64% |
| North-Caucasian | 3 | 30 | 3,85% | 10,00% |
| Total | 78 | 653 | 11,94% | |

Analysis of the given development programs of innovative infrastructure in the educational institutions has shown that it is possible to distinguish five basic approaches to its construction (Fig. 1) that has caused controversy in designation of infrastructure objects to the sphere of innovative and entrepreneurial activity.

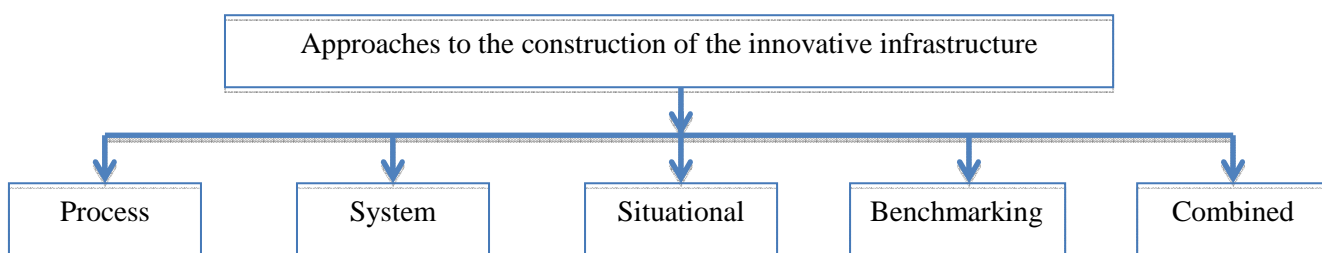


Fig. 1 – Approaches to the construction of the innovative infrastructure (compiled by the author)

Process approach is the construction of infrastructure through the presentation of innovation production process as a continuous series of interrelated functions.

In this approach innovative infrastructure is understood as a set of organizations (institutions) facilitating the implementation of innovative activity, that is, the complex of organizations with a subordinate and auxiliary character, serving innovative activity and providing the conditions for the normal course of the innovative process.

With this approach at every stage of the establishment of innovative enterprise (hereinafter referred to as the IE) there is an infrastructure support of the

IE activity. In addition, there are infrastructure objects (Department of International Cooperation, Department of Marketing and Advertising, Technology Park) that provide across support at all stages of the enterprise development.

In the systemic approach to the construction of innovative infrastructure, the infrastructure is considered as a set of interrelated elements, oriented to the achievement of different objectives in conditions of changing environment. This approach recognizes that the innovative infrastructure is a set of interrelated and mutually complementary sub-systems operating at the university level and ensuring the implementation of innovative and entrepreneurial activity in the educational institution, including the following: the system of informational support of innovative activity, the system of examination of innovative programs, projects, proposals and applications, the system of investment support of innovative activity, the system of engineering and manufacturing support; the system of certification of high technology products, the system of promotion of research and technological projects and high-tech products to the market; the system of coordination and management of innovative activity development, etc [3].

Situational approach to the construction of the infrastructure of innovative and entrepreneurial activity is based on understanding that the most effective method is the approach or method that suits the current situation more (external and internal situation in relation to the educational institution)[4].

In this approach, during the process of establishment and development of the infrastructure of innovative and entrepreneurial activity on the base of educational institution of higher professional education, first of all, it is necessary to take into account the system of constraints from the external and internal environment. Based on the situational approach, the established infrastructure should be flexible and easily adaptable to the changing environment and the emerging new challenges that should be solved by the organization. The main objective of the innovative infrastructure is to provide adequate support of innovative processes, the implementation of the objectives of innovative and entrepreneurial activity in the educational institution.

Benchmarking and focus on successful examples. This approach presupposes the technology and the construction method of innovative infrastructure through the study and implementation of the best experience of its organization. This is the method of objective systematic comparison of own activities with the works of the best educational institutions with successful experience of innovative infrastructure establishment, understanding of the reasons of their effectiveness, organization of appropriate actions in order to improve their own performance and their implementation.

Combined method is the establishment of innovative infrastructure by adjustment and combination of the methods mentioned above in order to get the planned result.

It should be noted that there are no universal methods that would guarantee the establishment of an effective system of infrastructure support of the educational institution's IEA. However, the methods mentioned above may increase the likelihood of effective achievement of the objectives of the educational institution. In spite of the method that has been chosen by the university during the establishment of the infrastructure objects for the IEA support, special attention should be paid to all components of the innovative infrastructure, and one should strive to reduce the barriers on the way to the establishment and development of innovative and entrepreneurial activity in the Russian educational institutions.

Along with the establishment of innovative infrastructure objects one should focus on use of the existing potential of the educational institution in the form of formation of an efficient system of entrepreneurs-innovators training, and then ensure the involvement of funding in the field of innovative entrepreneurship development at the university in various forms.

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