Target focusing of innovation activity in building construction

M V Matveeva
Department of Real Estate Expertise and Management, Irkutsk national research technical University, 83, Lermontov str., Irkutsk 664074, Russia

E-mail: expertiza@istu.edu

Abstract. In case of modernizing a building construction complex in overall structure of the national economy, searching and analysis of the problems of a current state of building construction business and determination of innovative development perspectives for that economy sector are important scientific and practical issues. At the same time, designing and including innovations in the building construction area is currently one of the actively developing directions of the scientific and technological activity. The author consider the features characterizing the building construction area as an important factor of innovation technologies introduction. The main cause of lack of innovation is the market structure of the building and construction trade. Companies see no need to initiate innovation programmes; the market structure is not conducive to innovation. Today target focusing of innovation activity in building construction allows the companies to get competitive benefits. Based on this, it’s important to determine the features of project portfolio of an investment and construction sphere for providing proper cooperation with an outside area, supporting a stable growth and ability of restructuring, developing and diversification of business. It will be paramount for construction companies to learn, master and harness these technologies and techniques so that their construction businesses can remain competitive and relevant in the face of an ever-increasing list of demands from clients.

1. Introduction
Economic growth of national economy’s areas and entities explains the importance of modernization of bundle of innovation policy’s tools and development of recommendation of priorities of technological improvement. Target focusing of innovation and investment activity in building construction allows to synchronize different activity types according to their methodological nature. The institutional environment of civil engineering firm can be considered as external object of target focusing. More over institutional environment can be a factor of braking or acceleration of investment and construction processes. The institutionalization of national economy in all its aspects more than five years is already epicenter of attention of legislative and executive branches of the power, the President and the Government of the Russian Federation. The most essential institutional calls and their comparative characteristic in group of developing countries are shown in fig. 1.
Thus, following the theoretical assumptions the formation of the concept of the target focus of investment and construction activities, we note the fundamental role of objective, not dependent on the activities of economic entities, is focus objects which cannot be considered without account the composition and structure of the portfolio project, works and services.

2. Research methods
Object of target delivery not depended on business entities’ activity must be considered in their entirety with structure and composition of portfolio of projects, works and services, that’s project portfolio. The proof of that is a set of correlative factors, shown in the next table (table 1).

3. Statement of research problem
Project portfolio analysis is difficult due to the fact that there are no major targets as a system and they contain in no one of conceptual and strategic documents. Accordingly, project parameters of systemic long-term policy of development of project portfolio targets must be determine.

In first, there must be maintained target focusing on infrastructure maintenance of innovative model of economic growth, that’s directed at construction of large objects, e.g. gas and oil pipelines’ projects (project BTS, BTC-2, « Nord Stream », ESPO-1, ESPO-2 etc.); construction of high-speed main railway lines; spaceport construction [1]. Key features of that target focusing are novelty, magnitude and societal value. This allows the implementation of the following complex inter-industry projects:

1. projects that promote harmony with nature;
2. a set of projects that provide a healthy lifestyle;
3. projects focused on economic prosperity and the use of modern technologies;
4. social adaptation projects for persons with disabilities - “a world without barriers”;

Figure 1. The most significant institutional constraints for economic growth.
5. projects to support cultural traditions;
6. projects protecting national values.

Table 1. Factors of impact of project portfolio on national economy.

| Factor                                | Description                                                                                                                                                                                                 |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System characteristics of Investment and construction | They determine by both qualities and quantitative characteristics of portfolio of projects, works and services. In fact, their structure determine level of specialization; territory localization; types of partner and organizational/economic relations; legal forms of activities; requirements to staff; requirements to technical maintenance; level of technical and budgetary independence of business subjects of investment and construction |
| Determination of capital formatting elements of resource torrents. | A unique feature of modern model of development is organizational and technical innovations, management technology, “know-how”. In combination they are the most vulnerable to determine quality and dynamics of project portfolio |
| Determination of the most significant institutional restrictions of economic growth. | Institutional environment is considered as object of target focusing and performs as a factor inhibiting or accelerating of investment and construction. There is combination of mechanisms which guarantee the observance of regulation process, formalization and standardization of economic agents’ activity in institutional environment. The most common of them are institutional restrictions to get an access on construction and investor protection. |
| Evaluation on external factors | Evaluation of changes in external environment has huge impact on management system, methods of evaluation of flexibility and adaptivity of activity and expanding of market conditions. |
| Evaluation of internal factors | Accounting of inner system components, which are labour administration, level of improvement of competence in tasks of different complexity, level of business activity and psychosocial aspects needs for full description of subject area. |

Second, there must be maintained realization of projects directed at increasing of Russia’s image as one of leading countries in the world. The strengthening of country’s status as a full-fledged participant of world economy development is possible through realization of projects with high economy efficiency and impact of a whole country.

Third, there must be maintained increasing quantity of projects, implemented by representatives of high-technological business community, who implement innovation projects [2]. Complex implementation of an infrastructural innovative industrial housing and communal and commercial projects must be also maintained.

At the last, there must be calculated financial opportunities of native business and commercial innovative investment and construction projects, assuming the fast payback and income fixation, must be developed.

4. Discussion
After analysis of main factors and targets of development we need to consider the integral features of the project portfolio. Considering the frontal innovative model of development researched in several works [3], the project portfolio of national economy has some characteristics that can be seen in Figure 2.
Most of characteristics have a high share of science researches, however some of them aren’t well-developed in science community. Under the project form of modern model of the national economy growth there will be useful to consider in detail equifinality feature that correlates with capacities of industrial and economic system.

Several features are researched enough in science community. For example, versatility [4, 5], competitiveness, inclusiveness [6], equal access to resources and parity of business law and responsibility, expanding of equifinality and supporting of level of economic safety and stability. About equifinality it’s not researched enough, but it’s mentioned generally only as a formal feature of process and phenomena researches. Under the project form of modern model of the national economy growth, it’s not just declared but it’s also consistently implemented, however, growth and development have limits capacities of industrial and economic system. Accounting for equifinality in the modern understanding of the political, scientific and business environment should be carried out in:

- creating an adequate institutional environment;
- comprehensive modernization of the economy;
- implementation of mechanisms to stimulate and support economic growth;
- localization of developmental processes over time (definition and fixation of a sequence of actions);
- correct assessment and correction of the processes of achieving goals.

Each system limited by its capacities and potential can reach its maximum determined only by parameters of system that doesn’t depend on external environment and opportunistic expectations. Distinctive characteristic of it is aim of system to increase its equifinality and to accelerate its growth limits. Meanwhile, equifinality is different for each subject of economic relations. There is equifinality of business subject during evaluation of potential depending on the production capacity. Equifinality

| Versatility |
|----------------------------------|
| formatting and evaluation of projects which are different by an affiliation, targets and forms within the common requirements. |

| Competitiveness |
|----------------------------------|
| capacity to save leading positions or a shift on an accelerating development based on implementing of complementary creative ideas. |

| Inclusiveness |
|----------------------------------|
| unnecessary of consistent improvement of all territories, industries and areas of national economy. |

| Orientation on innovations |
|----------------------------------|
| implementation of large-scale projects in regimes of consolidated cooperation and the formation of brand new technological platforms of economic growth |

| Resource availability |
|----------------------------------|
| equal availability of development resources and a participation in projects and programs. |

| Usefulness and efficiency |
|----------------------------------|
| internal synergy performed as a foundation of economies of scale with simultaneous implementation of projects combination. |

| Equifinality extension |
|----------------------------------|
| target scaling and increase of limits of admissible threats |

**Figure 2.** Characteristics of a project portfolio.
of region depends on resource capacity and the level of development of productive forces. Equifinality of country, in turn, is determined by development of overall economy of country in combination of productive forces and productive relations, that’s achieved by level of business activity and education of citizens. Obviously, equifinality of system will be increased in development. At this phase, it’s very important to understand that each system has its own scope of action, which must not expand or narrow. Based on this, each system has its own level of equifinality determined by the widest possible ratio of “effects-payments” [6]. For this considering feature of equifinality there must be comprehensive modernization of economy in combination with implementing of mechanisms of stimulating and supporting of innovative development. For increasing of efficiency in the initial phase, there must be localization and correction of process, that allows to create a supportive institutional framework.

5. Detailed consideration of problem
Let’s consider connection between structure and features of project portfolio of innovative activity in national economy. Based on connections equifinality is restriction for implementation of other features. With overcoming of restrictions there begins the opportunity of advantages improvement, in other words there is started process of implementation of method of target focusing of innovation activity in building construction [7]. In turn, there are objective restriction of project portfolio due to resource, organizational in the other types of institutional restrictions of national economy. In addition, there is significant impact of external filters of implementation of current potential of development of participants of innovative and investment construction.

For expanding of implementation limits of project potential it would be useful to apply mechanisms, that’s the best to handle the equifinality problem in a globalization of the world economy. These are image and information methods of activity supporting, financial engineering technologies and the mechanisms of public-private partnership. Most of economic innovations don’t suit for implementation in investment and construction activity of Russia due to traditional practices, social value and priorities of investment and construction processes of Russia.

However, it was financial engineering technologies and public-private partnership which had been reflected their characteristics in investment and construction area of Russia and even restored equity construction and mortgage which was improved so far extremely rapidly [8]. Accordingly, analyzed successfully implemented construction projects there is arguably overcoming of equifinality of project portfolio by mechanisms of public-private partnership and by implementing of innovations of financial management.

Today private-public partnership (PPP), whose feature is mixed ownership, becomes one of the most common forms of implementing of complex and large-scale development projects.

Financial models of combined investment regarding construction and its innovative development are also directed on overcoming of equifinality of activity of participants of investment and construction.

6. Conclusion
Thus, overcoming of equifinality methods must be considered in terms of expanding of current capacities of resources replacement for development and improvement of requirements applied to activity of business subject. Based on this, conception of target focusing of innovation activity in building construction is using of the most effective and developed methods of overcoming of restrictions of equifinality of business subjects.

For implementation of this methods, business subjects must have necessary competences of proper interaction with external environment, supporting of consistent growth, ability to restructure, improvement and diversification.

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