Development of small and medium-sized businesses in the construction industry through the use of business networks

V Y Burov¹, G I Khokhlova² and N V Ketrova²

¹ Transbaikalsk State University, 30 Alexandro-Zavodskaya str., Chita, 672039, Russia
² Irkutsk National Research Technical University, 83 Lermontov str., Irkutsk, 664074, Russia

E-mail: vip.kretova@inbox.ru

Abstract. Practice shows that in all sectors of the economy there are network educations of entrepreneurs that contribute to improving the competitiveness of small businesses in various sectors of the economy. The network model of business organization is focused on a stable set of independent economic entities involved in the creation of goods and services based on contracts that facilitate the coordination of activities. The purpose of the work is to study the activities of small businesses in the construction industry and identify state mechanisms for its support through the functioning of business networks. The authors prove that the development of the construction industry is one of the most effective ways of economic growth, and identify the main advantages of using business networks for small business development: providing resources, increasing labor productivity, and increasing opportunities for innovation. At the same time, the problems of functioning of business structures in the construction industry and the consequences of their activities in the shadow sector of the economy are shown. The scientific article reveals the role of small business in the construction industry as a driver of growth in the socio-economic development of the region, presents the stages of formation of business networks small business, identifies the main elements of the system of state support for small business within the organization of business networks.

1. Introduction

In modern conditions of increased instability and aggressiveness of the external environment, which is predetermined by economic sanctions from the European economic union and the United States of America, the problem of ensuring the sustainable development of small businesses as a factor of growth in regional economies, which is directly related to its competitiveness, becomes especially urgent [1], [2], [3].

Any branch of the economy is a complex socio-economic system that has certain specifics of management and innovative development, special functions of small and medium-sized businesses [4], [5]. In modern conditions, the specifics of business management in the investment and construction sector are significantly complicated by such risks as fluctuations in prices for basic types of materials, structures, an increase in accounts receivable, debt, the presence of informal business relationships, etc. [6], [7].

At the same time, the innovative development of the construction industry should be aimed at improving the technical and economic indicators of building products, in particular, reducing the cost and reducing the standard construction time, improving the quality of objects [8], [9], [10].
The innovative potential of the construction industry at the present stage is characterized by such main indicators and trends as [11]:

- the share of organizations that implemented technological innovations in the total number of organizations that had research and design divisions - 4.5%;
- volume of innovative goods, works, and services – 48.7 million rubles.;
- expenditures on technological innovations – 49.8 million rubles, including research and development - 32.8 million rubles, purchase of machinery and equipment - 10.6 million rubles, purchase of software - 6.4 million rubles.

The experience of many countries shows that the development of the construction industry is one of the most effective ways to boost the economy, which is also associated with a multiplier effect – the development of related industries. An important role in the construction industry is played by the efficiency of small and medium-sized construction businesses, which is reflected in the implementation of such basic economic functions as providing:

- individual consumer demand, a significant amount of specialized construction and installation work;
- market competition for construction services;
- mobilization of material, financial and natural resources in the region, including local raw materials and industrial waste, in which large construction companies are often not interested;
- economic and social development of the regions [12].

In these conditions, there is a need to study the features of small business activities in the construction sector.

2. Materials and methods
High risks, the ability to make non-standard decisions, and an innovative approach have always been distinctive features of business activity. The impact of risks on economic entities was considered in the works of F. Knight, where the analysis of the formation of entrepreneurial profit taking into account risk and uncertainty is carried out [13].

Josef Schumpeter defined that the peculiarity of an entrepreneur is the identification and use of a “new combination of factors of production”, i.e. the implementation of innovations [14]. In modern economic conditions in the sectors of the economy, the functioning of entrepreneurship is associated with the formation of business networks.

In this paper, the business network is understood as a network model of business organization, which includes any firms involved in the creation of contract goods and services on the terms of coordination and protection of transactions and preserving the ability to adapt to unforeseen environmental circumstances.

It should also be emphasized that enterprises operating as independent business entities or as part of business networks carry out narrow specialized work, each of them has its own place and significance at the regional level. It should be noted that business networks can function both in the legal economy and in the informal economy.

“The borderline position of the shadow economy determines its dualism in the projection of criminal and non-criminal behavior. Therefore, the shadow economy, on the one hand, is the object of close attention and suppression by law enforcement agencies, and on the other hand, it causes public concern and professional interest among representatives of economic, legal, sociological and other Sciences who study the nature of this phenomenon, its epistemology, properties, causes and consequences, and the environment in which economic crimes, characterized by their prevalence, secrecy and organization, are fed” [15].

3. Results
The construction industry is one of much riskier sectors of the national economy, depending on many factors. The occurrence of certain types of risk during the investment construction cycle is associated
both with circumstances that do not depend on the economic entity, and with the direct or indirect impact of the “shadow” economy on the organization's activities [16].

As noted by the heads of construction companies, the most significant risk factors in the construction sector are: high level of taxes (38%); high cost of materials and structures (28%); insolvency of customers (26%); insufficient funding (22%); weather conditions (12%), etc. [17].

According to research conducted in 2018-2019, the bank of Russia assessed the shadow Russian business based on cash flow analysis, as shown in figure 1.

![Figure 1. Share of leading sectors in Russia's shadow economy](image)

According to research by the bank of Russia, in 2018-2019, more than 80% of the Russian shadow sector accounted for construction, services and trade. Thus, in 2018, trade (32%), construction (29%), and services (22%) accounted for the largest share of the shadow economy. In 2019, construction accounted for 37%, services - 25%, and trade - 24%.

If small businesses are involved in the business networks of the shadow economy, they use “informal” connections and “unofficial” labor in their activities.

At the same time, construction and manufacturing, which together account for 41% of the shadow economy, raise concerns, since the large turnover of “shadow” cash means that there is a significant demand for them. In practice, this indicates not only tax evasion, but also the lack of proper control in the construction sector [20].

Among the main advantages of participants in business networks in the construction industry are: expanding the resource base, access to up-to-date information, complementarity, incentives to increase productivity, and the desire for innovation.

4. Findings

The process of forming entrepreneurial networks of small and medium-sized businesses includes the following participants:

- the core of the business network, which includes founding firms that have a narrow specialization, are geographically close to each other, and already have interaction between them, as well as strong links in foreign markets;

- supporting firms (raw material suppliers, service providers, maintenance companies).

The main stages of the algorithm for forming small business networks in the construction industry include: monitoring and evaluating the level of development of the small business sector at the
regional level; motivating potential participants; developing a common strategy, pilot and strategic projects.

5. Discussion
An important aspect of the formation of small business networks in the construction industry is the system for organizing the monitoring process on the state of the small business sector in the region, which may presumably consist of the following main blocks of its implementation:

- design of the monitoring process (selection of sources and methods for obtaining data, forms of their storage, methods for analyzing and evaluating the situation and dynamics of development; determination of performance indicators and control points, monitoring subjects; description of interfaces and approval of the monitoring process regulations);
- organization and implementation of the monitoring process (collection of information about the current state of the small business sector, its development dynamics, trends and patterns; information processing);
- generating a report based on analyzing and evaluating the dynamics of changes in indicators over time; deviations of the actual values of indicators from the target values; identifying the causes of deviations;
- evaluation of the effectiveness of monitoring and development of ways to improve it [21], [22].

At the same time, there is a need to pay special attention to the analysis of factors and risks that determine the state of the small business construction sector in the region, which is aimed at assessing:

- organizational and managerial level, human resources, production and technical, financial and economic levels of development of the enterprise and its scientific and technological capabilities [23], [24], [25].
- economic, market, communication, and innovation risks [26].

6. Conclusion
Summing up, we can assume that the system of state support for the construction sector of small businesses within the organization of business networks should focus on a strategy that includes the following sections: the main goal and main tasks of state support for the creation of business networks, analytical tools, monitoring the state and place of small businesses in the construction sector of the region, specific tasks of regional management; priorities of regional economic systems; forecast indicators and strategic plans; interaction of subjects of economic relations in the implementation of state support for the creation of business networks in the construction industry.

In order to improve the regional program of state support for small and medium-sized businesses using the tool for creating and developing an entrepreneurial network, its main activities can be aimed at:

- monitoring and assessment of the level of development of small and medium-sized businesses in the construction sector of the region, including its scale and causes of shadow economic activity;
- modernization of the existing regulatory and legal system for ensuring the activities of the construction sector in terms of reducing state intervention and transaction costs;
- legislative protection of legitimately acquired property and attracted investments by small businesses by the state;
- formation of a model for the development of the small business sector in the construction industry in the system of state support for the development of business networks and state counteraction to shadow economic activity, taking into account the balance between the interests of business entities and the state.
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