

**EVALUATION OF COMPETITIVE STRENGTH OF BUILDING COMPANIES  
BASED ON ORGANIZATION AND TECHNICAL INDICATORS**

**KATSIARYNA VIARBOVICH, VIACHESLAV YASKEVICH, ALENA. NEKRASOVA**  
**Polotsk State University, Belarus**

*There are different methods of evaluation of competitive ability of building organizations. We analyzed the main approaches to how assess the competitiveness of organizations and found out some flaws of existing approaches. The article deals with a method based on organizational and technical indicators.*

Development of market economy and increased competition among building companies attracted our attention to the problem of competitiveness. Building enterprise competitiveness is largely determined by the amount won in a tender for the construction of buildings and structures. Under the President Decree of 17.11.2008 № 618 "About the government procurement in the Republic of Belarus" the winner of the tender is the participant who offers the best conditions for the execution of the contract. Today the main criterion for determining the best conditions of the contract is the price. In addition to the prices, according to p.p. 4.2. of the Decree № 618 of the same law, the criteria for assessing the applications for participation in the competition can be:

1) functional characteristics (consumer properties) or qualitative characteristics of the product;

1.1) the quality of work and services and (or) the qualifications of the participant who places an order for work and services;

2) the operating costs of the goods;

3) the maintenance cost of the goods;

4) time (periods) of delivery of goods, works and services;

5) the term of the quality assurance of goods, works and services;

6) the amount of quality assurance of goods, works and services;

In practice, it turns out that the only criterion for evaluating the bids is the price of the contract. This leads to the fact that the organization-participants deliberately understate the contract price, hoping to get more financial resources by compiling numerous additional agreements. Moreover, it often happens so that the contest wins an organization, which does not meet any of the required characteristics. As a result customers receive a building with a poor quality construction, numerous defects, and with failed terms of construction period, but the final value of the contract exceeds the original, sometimes in several times. That is why the issue of improving methods for assessing the competitiveness of construction companies is becoming an increasingly relevant.

There is currently no mechanism for collective evaluation of the organization level and development of production technologies in the enterprise, which would allow the organization to determine the winner according to the company's own organizational and technological indicators. This approach is most appropriate in the current market conditions. It is important to note that the development of this mechanism is equally necessary for both of the participants: the client and the contractor.

Nowadays there are various methods of assessing the competitiveness of enterprises and products, but not all of them are useful for assessing the competitiveness of building companies operating in the housing market, as many of the methods do not include the specifics of the construction industry.

1. Analysis of modern methods of assessing the competitiveness of building companies.

The methods of estimation of competitiveness used for construction companies.

Methods for assessing the competitiveness of construction enterprises are divided into two groups: analytical and graphical (Figure 1).

Let us consider the details of the methods used for construction companies.

*Rosenberg's model:* the essence of the model is that the investor estimates whether a particular house meets his needs. This model is based on the assumption that each characteristic is important, and thus, the higher the score, the better.

*Integrated indicator of the goods competitiveness:* the closer the value of the integral indicator to 1, to the greater extent the model corresponds to the house.

*Evaluation of competitiveness of the goods on the basis of price and quality:* the main factor determining the competitiveness of the goods – money.

*A model with a perfect point:* this method differs from the given above by the fact that it introduces an additional component - the ideal characteristics of the price of a product.

*Rating assessment.* Rating assessment is used for a special comparison of the companies in the industry and / or region. According to A.D. Sheremet and E.V. Nenashev, the company's competitiveness is characterized

by its financial condition, so the formation of methodology for assessing the financial condition is the most important task. Despite the fact that the authors suggest to use a methodology of rating assessment for the industrial enterprises, it can be used in the construction industry. This was made possible due to the introduction of a unified financial reporting system [6].

*Assessment method*, which is based on the results of the auction [4]. We can find the methods of estimating the competitiveness of enterprises, based on the results of the auction in the scientific researches of Gumba. He believes that the construction industry in Russia has already possessed the necessary prerequisites for the development and implementation of the competitive relations. Contractors dividing market of construction services are the most effective mechanism for creating a competitive environment.

*Estimation of competitiveness*, which is based on the theory of effective competition [1]. According to this theory, the level of work of all departments and services of the enterprise directly influences its competitiveness. The effectiveness of the units is determined by the level of use of the various resources of the enterprise.

*Estimation of competitiveness on the basis of the norms of consumer cost*. The essence of this method is to estimate marketing, managerial and organizational decisions.

*Boston Consulting Group matrix*. The technique is based on the analysis of competitiveness with the account of the product life. To assess the competitiveness it is necessary to analyze the matrix built in the following way: horizontal – increase / decrease in the number of sales in a linear scale; vertical – the specific weight of commodities in the market.

*Model "The attractiveness of the market - a competitive advantage"*. This model develops the above matrix. The main characteristics of the model are market attractiveness and competitive advantage. Attractiveness of the market is determined by its properties: quality, fundamentals of supply and so on. Competitive advantages are described according to the following indicators: the relative position of the potential product on the market, the research capacity and skills of managers and co-workers [2].

*Matrix Porter*. The basis for the construction of the matrix is the concept of competitive strategy, which means that the company should focus not only on customer satisfaction, but also on the competitive forces of the market.

*Polygon competitiveness [6]*. The essence of this method is to compare your own business with competitors' by plotting the polygon competitiveness. It shows the position of the company and the position of its competitors on the most important areas of activity, which are represented as vectors-axis (Figure 2).

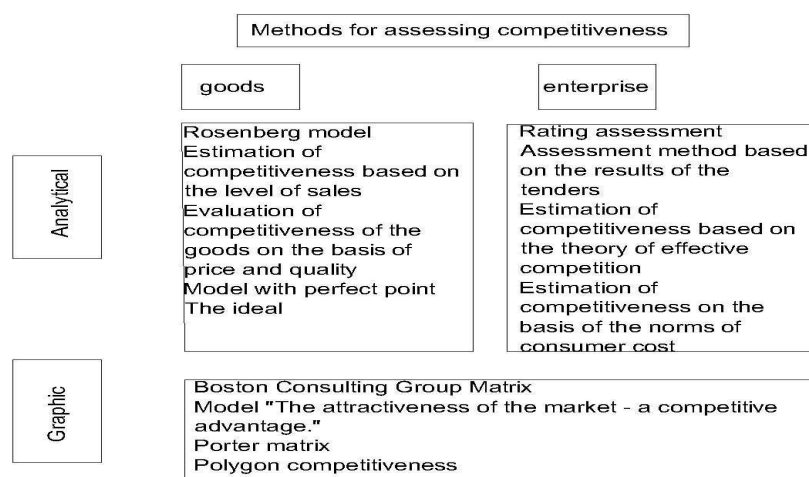


Fig. 1. Classification of methods to assess the competitiveness of goods and enterprises

It should be noted that the analyzed methods encompass not only the different parameters affecting the assessment of competitiveness, but also a variety of approaches to the assessment of the competitiveness of the enterprise as a whole.

Despite this, these methods have several disadvantages. The main disadvantage of all the above methods is their limitations: either the focus is only on one group of factors determining the competitiveness of companies, or the method is too complicated and time-consuming to use it in practice.

All the above methods of assessing competitiveness motionless in time, they estimate the company at some point in time, based on points obtained earlier.

The specificity of construction products is its tightness, stiffness, capital intensity, material consumption, duration of the construction, operation, and so on. These features characterize the relationship between the

Economics

participants of the investment process. The customer chooses the construction company which is able to meet the customer's specific needs. Superiority over competitors in meeting the customer's specific needs is expressed not only in a set of qualitative and cost characteristics of the construction products, but also in the organization level of the production.

In addition, in these disadvantages there were mentioned about the limitations of the methods that were used. It lies in the fact that, as a rule, focuses on the economic, managerial and consumer (price and quality) indicators of competitiveness. Organizational and technical indicators are not considered as the test, or indicated a small part of them. Although they largely determine and justify all the other indicators. This means the close relationship of economic, managerial and consumer with organizational and technical indicators of competitiveness of construction enterprises. And this, in turn, determines the management decisions aimed at achieving the goals in a timely manner with minimal cost of all kinds of resources.

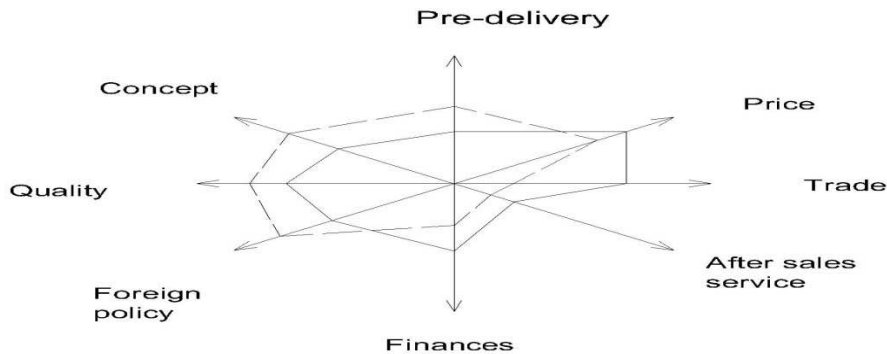


Fig. 2. Polygon competitiveness of the two companies

In order to overcome all these disadvantages it is advisable to assess the impact of organizational and technical performance of the company on its competitiveness.

2. Effect of organizational and technical activity indicators of the company on its competitiveness.

Based on the results of earlier studies on the evaluation of companies [1, 3, 5, 6], there were chosen and divided into groups the most significant indicators of competitiveness (Figure 3).

**Competitiveness**

<p style="text-align: center;">Management indicators</p> <p>1. Quality management (planning, marketing, organization, control).</p>
<p style="text-align: center;">Organizational and technical indicators</p> <p>1. Possession of inventory                  2. Installed power                  3. Level rhythm of works                  4. The level of use of fixed assets                  5. Turnover rate                  6. Continuous use of resources.                  7. The uniformity of the use of resources.</p>
<p style="text-align: center;">Financial performance</p> <p>1. The current liquidity ratio (cover)                  2. The coefficient of availability of internal funds                  3. Autonomy ratio                  4. Turnover ratio                  5. Return on sales                  6. Product profitability</p>
<p style="text-align: center;">Competitive products</p> <p>1. Price                  2. Quality</p>

Fig. 3. Indicators of the competitiveness of the building enterprise

Let us describe each component in detail.

*Performance management (planning, marketing, organization, control). Management quality of the enterprise is defined by the number of management personnel. Management personnel is number of employees with higher or two higher educations, who have work experience in the relevant administrative staff positions while working in the enterprise.*

*Financial performance.* The current liquidity ratio (*cover*) characterizes the overall organization security of working capital for business activities and timely repayment term liabilities.

*The coefficient of availability of internal funds* characterizes the share of working capital in their total amount.

*Autonomy ratio* characterizes the company's independence from the borrowed funds and from the calculated ratio of the company's funds to the total funding sources.

*Turnover ratio* characterizes the efficiency of working capital. Corresponds to the time during which the current assets are held at each stage of production and circulation.

*Return on sales* characterizes the degree of profitability of the enterprise in the market price of the product is properly installed.

*Product profitability* characterizes the degree of profitability of production.

*Indicators of competitiveness.* An average price of the performed unit of work acts as an indicator of the price of goods.

That is, the higher the quality and lower the price of the product, the higher the level of organization of production in the company and its competitiveness.

*Organizational and technical indicators.* Possession of the inventory of workers can be determined by the amount of work performed by the mechanized method, which falls on one of the main production of the average worker.

Possession of the inventory says about the level of work organization, the level of equipment of the enterprise mechanisms. High level of possession of the inventory means the predominance of mechanized labor on hand, which, in turn, causes an increase in the quality of constructed buildings and structures. In addition, companies with high possession of the inventory become more attractive for employment.

*Installed power* of workers is defined as the ratio of the total capacity of all construction machines and mechanisms for the average number of workers employed in the production of work construction and installation.

High power is inherent for building enterprise, which is provided with modern and powerful machines and mechanisms. The consequence is a reduction in terms of erection and commissioning of buildings. This means a reduction in construction costs and increase of the company attractiveness for investors and potential employees.

*The level of the rhythm of work production* is needed to determine the extent to which the actual timing of works corresponds with the scheduled.

Rhythmic work production indicates a high level of organizational and technical discipline, sound planning, competent management and timely delivery of all types of resources.

*The level of fixed production assets* describes the effectiveness of the use of fixed assets and the determined capital productivity index, i.e. the ratio of the number of square meters built in a year to the average annual value of fixed assets.

*Turnover ratio* – the ratio of the number of laid-off employees, retired over a given period to the average number during the same period.

Staff turnover negatively affects the activity of the company. As a result the company has reduction in production figures (deadline, quality products, and so on), as well as inefficiency.

*Continuous use of resources.*

The index defines the duration of a relatively long process without interruption.

*The uniformity of the use of resources.* Uniform resource utilization rate is the ratio of resources used at a constant rate to the entire scope of work.

Continuity and uniformity of the use of resources as well as the level of the rhythm of work show the high level of organizational and technical discipline, sound planning, competent management and timely delivery of all types of resources.

Thus, summing up our analysis of the impact of organizational and technical performance of a construction company, we can conclude about the close relationship and the correlation of these parameters with other (administrative, financial, performance competitiveness). In addition, organizational and technical indicators directly relate to the competitiveness of enterprises. They largely determine the competitive advantages of the company and are an important tool for improving the competitiveness of enterprises in the construction market. The main perspective directions of the development of these prerequisites are the development of a methodology for assessing the competitiveness of the company on the basis of organizational and technical indicators, planning and staging of these indicators of the budget process in the construction company taking into account the increase of the level of organization of production.

## REFERENCES

1. Арасланова, Д.Ф. Совершенствование методов оценки конкурентоспособности предприятий на рынке жилищного строительства: дис. ... канд. экон. наук. 08.00.05 / Д.Ф. Арасланова. – Екатеринбург, 2007. – 125 с.
2. Ахматова, М. Теоретические модели конкурентоспособности / М. Ахматова, Е. Попов // Маркетинг. – 2003. – № 4. – С. 25–38.
3. Васенгин, А.В. Повышение конкурентоспособности строительного предприятия на рынке подрядных работ в современных условиях: дис. ... канд. экон. наук. 08.00.05 / А.В. Васенгин. – Тюмень, 2002. – 141 с.
4. Гумба, Х.М. Экономика строительных организаций / Х.М. Гумба. – М. : Центр экономики и маркетинга, 1998. – 144 с.
5. Лукманова, И.Г. Проблемы обеспечения качества и конкурентоспособности продукции предприятий строительной отрасли: дис. ... канд. экон. наук. 08.00.05 / И.Г. Лукманова. – М., 2001. – 318 с.
6. Шагиахметова, Э.И. Методы оценки конкурентоспособности строительных предприятий: дис. ... канд. экон. наук. 08.00.05 / Э.И. Шагиахметова. – М., 2002. – 166 с.

UDC 332.1 (476)

**ANALYSIS OF THE LABOUR POTENTIAL OF THE REPUBLIC OF BELARUS**

**EKATETRINA VINOGRADOVA, VALENTINA BAHATUAROVA**  
**Polotsk State University, Belarus**

*In the article the analysis of the labour potential of the Republic of Belarus is given. The author presents the statistical data characterizing the potential of the Republic of Belarus, as well as the various authors' approaches to the definition of the labor potential.*

General index of the process of formation and development of the person in the workforce is the labour potential of the society. Potential is a collection of opportunities in any field to achieve certain goals. As an economic category, labour potential reflects the relations of production over reproduction psychophysiological qualification, spiritual and social qualities of the working-age population. With the quantitative side of the labour potential represents the stock of labour, which are determined by the total number of labor resources, their age structure, educational level and possibilities of their use. In General, when determining the essence of the category "labor potential" there are three fundamentally different approaches: resource, factor and potential (Table 1).

Table 1 – Approaches to defining the essence of the category "labor potential"

The Approach	The Authors	Interpretation
Resourceful	A.A. Popov, M.S. Chizhov, G.P. Sergeev, L.E. Kudelski, L.I. Novik, V.G. Kostakov	the set of social resources of society, which has quantitative (gender, age, number) and qualitative (complex scientific and practical knowledge) certainty
Factorial	M.I. Skarzhynska, L.E. Yuferefa, Y.P. Odegov, E.A. Lutochin, R.P. Kolosov, S.I. Pies, T. I. Zaslavskaya	a special form of personal or human factor, as the public's ability to work, "generic (common)set of employment opportunities of the individual, team
Potential	The content is reduced to the potential of the work. Genetic basis of labour potential is associated not with the combined ability to work, and with a total employee	

Source: own elaboration on the basis of special economic literature [1-2].

Recently such a concept as "the index of human development" and "human capital" has been used for the characteristics of the labour potential of the country. Textbook, edited by C. M. Shimova follows that the index of human development (hereafter HDI), or the human development index (hereafter HDI), developed by experts of the United Nations Development Programme to compare individual countries by level of human resources development, namely, how the conditions of life in this country is close to the generally accepted criteria for the well-being of the individual citizen and the nation – the opportunity to live long, get an education and have a decent level of material well-being. The indicator takes into account the importance of both economic and social factors to human life [1, p. 79].

The concept of human development is one of the most famous intellectual products, developed by UNDP. Major programmatic elements of the project are: the concept of human development as such, together with