Methodology for assessing the competitiveness of an enterprise's business activities

Alexander Tsvettsykh1, Igor Polukhin1, Artem Gromov1, Maria Chuvashova2, and Konstantin Bushuev2

1 Reshetnev Siberian State University of Science and Technology, Institute of Engineering Economics, Krasnoyarski rabochii prospekt St., Krasnoyarsk, 660037, Russia
2 Irkutsk State University, Institute of Social Sciences, Irkutsk State University, Karl Marx St., 1, Irkutsk, 664003, Russia

Abstract. It was found that when using the methodology for a comprehensive assessment of the competitiveness of an enterprise's entrepreneurial activity, the systemic nature of the nature of the enterprise's competitiveness and its industry characteristics. Also an effectiveness of this research will increase to find special proposals for increasing the competitiveness of an enterprise of a certain type of activity. Testing of the selected comprehensive methodology for studying the competitiveness of one of the enterprises in the construction industry in the region confirmed its practical significance.

1 Introduction

The relevance of research of the category “competitiveness of entrepreneurial activity” of an enterprise of the construction type of activity is connected with the high practical significance of the conclusions and proposals for increasing the competitiveness of the enterprise to ensure its sustainable activities. The main hypothesis of the study is the need to develop the special tools for assessing the competitiveness of an enterprise, taking into account its industry characteristics.

1.1 Objectives

The purpose of the study is based on improving the economic tools for assessing the competitiveness of enterprise. For achievement the goal the following tasks must be solved:

– to consider the concept and essence of the competitiveness of an enterprise, consider the system for ensuring the competitiveness of an enterprise;

– to determine the features of the main approaches to assessing the competitiveness of an enterprise;

– to test the methodology for assessing the competitiveness of an enterprise, develop proposals for increasing the competitiveness of the enterprise and give them a predictive assessment of their effectiveness.

*Corresponding author: author@email.org
2 Literature review

In the professional economic literature, several approaches to assessing the competitiveness of an enterprise have been proposed. The matrix methods for planning innovative development have received the greatest development in economic literature and practice. The founders of matrix methods for assessing competitiveness are Kembell E. and Sammerce L. [1], Porter M. [2], Prahalad C. and Hamel G. [3], Rumelt R. [4], Ansoff I. [5]. The method of strategic planning coefficients is based on the concept of balanced indicators; its founders were Kaplan R., Norton D. [6]. The tools for matrix analysis of competitiveness from the Boston Consulting Group [7], McKinsey [8], and Arthur D. [9] have received widespread practical use. In practice use, analysis and assessment of competitiveness are based on the life cycle concept [9; 10]. Existing approaches to assessing competitiveness are characterized by a lack of consistency and complexity, and specific industry characteristics are not taken into account.

3 Methodology

3.1 The essence and approaches to assessing the competitiveness of an enterprise

Existing approaches (Table 1) [1-9; 11] are characterized mainly by an absence of consistency and complexity, while specific industry features are not taken into account.

Table 1. Approaches to assessing the competitiveness of business entities.

<table>
<thead>
<tr>
<th>Name of approach</th>
<th>Advantages of the approach</th>
<th>Disadvantages of the approach</th>
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<tbody>
<tr>
<td>The approach based on the theory of competitiveness of manufactured products</td>
<td>1. The most important criterion for the competitiveness of an enterprise is taken into account: the competitiveness of manufactured products and consequently consumer preferences. 2. Availability and minimum set of initial information. 3. Ease of mathematical calculations.</td>
<td>1. The difficulty in collecting information using the “profile method”: using the sociological survey method without using mathematical tools. 2. There is no systematization of the factors of enterprise competitiveness. 3. The result of calculating the competitiveness indicator is not objective, but has more to do with the commodity mass of the enterprise.</td>
</tr>
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<td>Matrix such as: - Competitive market map - SWOT analysis - Matrices BCG (BCG), GE/McKinsey, etc.</td>
<td>1. The ability to identify competitive strategies for the enterprise and its product portfolio. 2. Possibility of a comprehensive description of qualitative factors of competitiveness. 3. Visibility.</td>
<td>1. Limited number of factors taken into account. Inability to use for integral assessment. 2. Subjectivity. 3. There is no quantitative assessment of the results.</td>
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<tr>
<td>Business valuation approach</td>
<td>1. The enterprise is considered as an investment object. 2. Both qualitative and quantitative factors are taken into account.</td>
<td>1. This approach does not allow one to judge the efficiency of the enterprise relative to competitors, because considers only absolute indicators. 2. This approach uses complex mathematical apparatus and specific</td>
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</table>
3. This approach requires the involvement of professionals in the field of business valuation, which is accompanied by significant costs.

4. Basically, assessing the value of a business has slightly different objectives.

<table>
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<th>Complex approach</th>
<th>Ideally takes into account the full range of competitiveness factors</th>
<th>The main difficulty lies in the correct selection of competitiveness factors</th>
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</table>

3.2 Methodology for analyzing and assessing the competitiveness of an enterprise

Comprehensive the competitiveness of an enterprise methodology of studying is presented by Fig. 1. This methodology has all the most important assessments of the economic activity of an enterprise. This technique allows you to quickly and objectively obtain a picture of the company’s position in the market. Consistent implementation of an algorithm for assessing the performance of enterprises of the same type of activity for different periods of time makes it possible to use the presented methodology as a tool for studying the market positions of competing enterprises in several functional areas of management.
The name and number of individual indicators for each area of assessment are determined by the researcher based on the goals set, the volume and quality of the information used. The calculation of the criteria and competitiveness coefficient of an enterprise is carried out using the weighted arithmetic average formula [6]:

\[
IIC = 0.15\ EP + 0.29\ FP + 0.23\ ES + 0.33\ KGS
\]

where
- \(IIC\) – enterprise competitiveness coefficient;
- \(EP\) – the value of the criterion for the efficiency of production activities of the enterprise;
- \(FP\) – the value of the criterion of the financial position of the enterprise;
- \(ES\) – the value of the criterion for the effectiveness of organizing sales and promotion of goods;
- \(KGS\) – the value of the product competitiveness criterion;
- \(0.15; 0.29; 0.23; 0.33\) – criteria weight coefficients.

4 Result

4.1 Testing of the methodology for studying the competitiveness of an enterprise and suggest solutions

The analysis of the enterprise's competitiveness allows defining weaknesses, the neutralization of weaknesses will allow us to strengthen position in a market. The main problematic aspects and proposals for increasing competitiveness are presented in Fig. 2.
Fig. 2. Main problematic aspects and directions for increasing the competitiveness of an enterprise

4.2 Final assessment of the enterprise’s competitiveness before and after the implementation of proposals

It is predicted that when the proposals are implemented, there will be an increase in all indicators characterizing the financial situation. The overall growth of the indicator is almost twofold, both in point and actual assessment. The final assessment of the competitiveness of the research object before and after the implementation of proposals, as well as a comparison with a competitor (the most similar in terms of performance indicators) is presented in Table 2.

Table 2. Comparison of the competitiveness of the enterprise before and after the implementation of proposals and with competitors.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Enterprise as an object of research</th>
<th>Closest competitor</th>
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<td></td>
<td>Before implementing proposals</td>
<td>After implementing the proposals</td>
</tr>
<tr>
<td></td>
<td>Meaning</td>
<td>Meaning</td>
</tr>
<tr>
<td>Operational efficiency</td>
<td>521,31</td>
<td>855,22</td>
</tr>
<tr>
<td>General indicator characterizing the financial position of the enterprise</td>
<td>0,38</td>
<td>0,64</td>
</tr>
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</table>
The competitiveness coefficient (CC) in actual value is determined on the basis of the weighted arithmetic average according to formula 1. Thus, the value of the indicator after the implementation of the proposals will be:

\[
CC = 0.15 \times 855.22 + 0.29 \times 0.64 + 0.23 \times 6.24 + 0.33 \times 0.82 = 130.17
\]

5 Conclusion and future work

The competitiveness assessment of the enterprise allows identifying weaknesses, the neutralization of which will strengthen its position in a market. The data obtained indicate that as a result of improving the efficiency of production activities and the financial position of the enterprise, its competitive position in the construction market can strengthen.

The forecast integral indicator of the competitiveness of the enterprise's entrepreneurial activity before and after the implementation of proposals, as well as comparison with a competitor (most similar in terms of performance indicators) will increase from 80.01 to 130.17 points, which will allow it to bypass the nearest competitor. Thus, the analysis of the main approaches of modern authors to determining the essence of the category “competitiveness of entrepreneurial activity” of an enterprise allowed us to make a choice in favor of a special comprehensive methodology that allows us to substantiate proposals for increasing the competitiveness of an enterprise on a systematic basis. The next stage of the research should be the development of normative indicators for planning and monitoring the competitiveness of business activities of a construction industry enterprise.

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