

## Artículo de investigación

**Trade Enterprise Competitiveness Estimation Model by Key Success Factor Determination**

Модель оценки конкурентоспособности торгового предприятия по определению ключевых факторов успеха

Modelo de estimación de competitividad de empresas comerciales por determinación de factor de éxito clave

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M.S. Rakhmanova<sup>58</sup>  
V.V. Kryukov<sup>59</sup>**Abstract**

The article describes the methodological provisions for trading enterprise competitiveness estimation by key success factor determination, namely, they proposed the methodical approach for trading enterprise competitiveness estimation, based on the systematic approach to competitiveness evaluation, determination and evaluation of key success factors for trading enterprises. The feature of this approach is that the systematic approach includes the evaluation of product and commercial enterprise competitiveness. This approach allows us to give an objective and comprehensive assessment of trade enterprise competitiveness. The article also presents a comprehensive methodology for trading enterprise competitiveness evaluation, which makes it possible to quantify the competitiveness of trading enterprises. The evaluation of trading enterprise competitiveness is determined using the integral indicator of trading enterprise competitiveness, consisting of two parts: product competitiveness and trading enterprise competitiveness, which, in turn, include the key success factors that shape the competitiveness of trading enterprises. The developed model for trading enterprise competitiveness evaluation by key success factor determination, based on the use of qualitative and quantitative methods for enterprise competitiveness evaluation, allows a detailed assessment of the factors affecting the level of trading enterprise competitiveness.

**Аннотация**

В статье описаны методические положения оценки конкурентоспособности торгового предприятия по определению ключевых факторов успеха, а именно предложен методический подход к оценке конкурентоспособности торгового предприятия, основанный на системном подходе к оценке конкурентоспособности, определению и оценке ключевых факторов успеха для торговых предприятий. Особенностью этого подхода является то, что системный подход включает оценку конкурентоспособности продукта и коммерческого предприятия. Такой подход позволяет нам дать объективную и всестороннюю оценку конкурентоспособности торгового предприятия. В статье также представлена комплексная методология оценки конкурентоспособности торговых предприятий, которая позволяет количественно оценить конкурентоспособность торговых предприятий. Оценка конкурентоспособности торгового предприятия определяется с использованием интегрального показателя конкурентоспособности торгового предприятия, состоящего из двух частей: конкурентоспособности продукции и конкурентоспособности торгового предприятия, которые, в свою очередь, включают в себя ключевые факторы успеха, формирующие конкурентоспособность

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**Key Words:** Trading enterprise competitiveness, competitiveness model, competitiveness assessment method, trading enterprises, key success factors.

торговых предприятий. Разработанная модель оценки конкурентоспособности торгового предприятия путем определения ключевых факторов успеха, основанная на использовании качественных и количественных методов оценки конкурентоспособности предприятия, позволяет детально оценить факторы, влияющие на уровень конкурентоспособности торгового предприятия.

**Ключевые слова:** конкурентоспособность торгового предприятия, модель конкурентоспособности, метод оценки конкурентоспособности, торговые предприятия, ключевые факторы успеха.

## Resumen

El artículo describe las disposiciones metodológicas para la estimación de la competitividad de la empresa comercial mediante la determinación del factor clave de éxito, es decir, propusieron el enfoque metódico para la estimación de la competitividad de la empresa comercial, basado en el enfoque sistemático de la evaluación de la competitividad, la determinación y la evaluación de los factores clave de éxito para las empresas comerciales. La característica de este enfoque es que el enfoque sistemático incluye la evaluación de la competitividad de los productos y las empresas comerciales. Este enfoque nos permite realizar una evaluación objetiva y completa de la competitividad de la empresa comercial. El artículo también presenta una metodología integral para la evaluación de la competitividad de las empresas comerciales, que permite cuantificar la competitividad de las empresas comerciales. La evaluación de la competitividad de la empresa comercial se determina utilizando el indicador integral de la competitividad de la empresa comercial, que consta de dos partes: la competitividad del producto y la competitividad de la empresa comercial, que, a su vez, incluyen los factores clave de éxito que dan forma a la competitividad de las empresas comerciales. El modelo desarrollado para la evaluación de la competitividad de la empresa comercial mediante la determinación del factor clave de éxito, basado en el uso de métodos cualitativos y cuantitativos para la evaluación de la competitividad empresarial, permite una evaluación detallada de los factores que afectan el nivel de competitividad de la empresa comercial.

**Palabras clave:** Competitividad de la empresa comercial, modelo de competitividad, método de evaluación de la competitividad, empresas comerciales, factores clave de éxito.

## Introduction

In the modern world, which is saturated with goods of different price categories, the main place in the work of trade enterprises belongs to competitiveness level identification. The main goal of trade enterprises is to capture the lion's share in the market of free competition and attract a number of buyers. During the competition, taking into account the urgency and dynamism of the situation, the winner is the one who analyzes all the possibilities and fights for certain positions. In order to survive in the competitive struggle, trade enterprises are obliged to set a number of tasks: the growth of a

certain product category competitiveness, and the whole enterprise competitiveness.

In a developing market, traditional methods for trade enterprise competitiveness evaluation need an additional tool containing not only economic but also social aspects.

The financial or competitive success of a particular commercial enterprise in any industry is determined by key success factors. Obviously, in order to develop commercial enterprise effectively, the increase of competitiveness level is required, which, in turn, is impossible without taking into account key success factors.

The main task of strategic business is to determine correctly the key factors that are most important for success achievement in a difficult competitive struggle, and thus are decisive during the evaluation of any enterprise competitiveness level.

According to the mentioned above, a very urgent task is to develop a model for trading enterprise competitiveness evaluation, taking into account key success factors.

### Review of Literature

The scientific aspects of the study were developed on the basis of studying, rethinking and clarifying the theoretical, methodological, practical developments of domestic and foreign scientists on the problems of trading enterprise competitiveness, the factors of trading enterprise competitiveness, and key success factors.

The study of scientific works showed that the theoretical aspects of the concept "competitiveness" consideration have a serious scientific basis.

The issues of enterprise competition and competitiveness have been developed in the works of the following domestic scholars: G.L. Azoev, A.I. Akimova, L.A. Bragin, V.Ya. Gorfinkel, T.P. Danko, A.N. Romanova, K.A. Raitsky, R.A. Fatkhutdinov and others (Abramov, 2013; Fatkhutdinov, 2000; Shashlo et al, 2018; Porter, 2008; Dominguez et al, 2018).

A significant contribution to the theoretical substantiation of the conceptual apparatus on this issue was also made by the following foreign authors: D. Angel, R. Blackwell, Arthur A. Thompson Jr., A.J. Stickland, E. Kotler, D. Stone, K. Hitching, R. Kaplan, and others (Zabelin & Moiseeva, 2015; Knysh, 2013; Lambin, 2014; Mindlin et al, 2017; Bakhshandeh et al, 2015; Rubiales & Barbuzza, 2018).

The models and the methods for enterprise competitiveness evaluation are considered in the works of foreign and domestic authors, such as: M. Porter, J. Grayson, B. Gold, T. Konno, I.M. Lifshits, V. Pareto, L.I. Kravchenko, T.I. Nikolaev and others (Popov et al, 2015; Kuzubov et al, 2018; Mendes & Silva, 2018).

The works of the abovementioned economists have many controversial and debatable points. As the analysis showed, there is no complete unity concerning the choice of tools and methods for competitiveness estimation. The authors did

not consider the assessment of trading enterprise competitiveness, taking into account the key facts of success.

The issues of key success factor essence for enterprises, their identification and classification are presented in the works by V.V. Saliy, N.Z. Safiullin, A.M. Alekseeva, A.M. Ozina, P.A. Krotkov, A.V. Ivanchenko, B. Scott, J. Lodge, J. Bower, M. Porter and T. Danko (Kuzubov et al, 2018; Fukolova 2013).

However, despite the significant contribution to the methodology for enterprise competitiveness evaluation, it can be concluded that, on the one hand, there is an urgent need to control the competitiveness of some trading enterprises in a dynamically changing market, on the other hand, there is no effective method for trading enterprise competitiveness estimation by the determination of success key factors.

However, despite the large number of works devoted to various aspects of trading enterprise competitiveness evaluation and management, we have to admit that this problem is not well understood and requires further work.

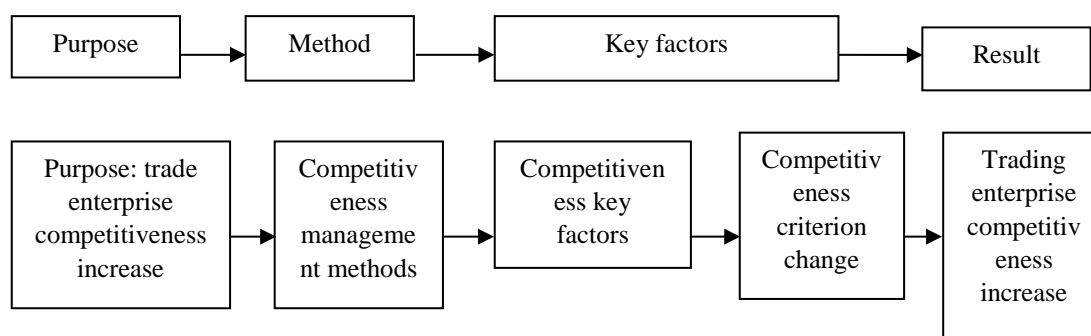
### Methodology

According to the analysis of domestic and foreign author works concerning the interpretations of "commercial enterprise competitiveness" term and "commercial enterprise key success factors" (hereinafter referred to as KSF), the competitiveness of a commercial enterprise is the ability of a commercial enterprise to form and use stable market position in the long-term perspective in comparison with other trading enterprises (Khodarinova, 2013; Pichugin, 2013). The factors of competitiveness determine the means and the methods of some commercial enterprise reserve use. But the presence of the factors is not enough to ensure competitiveness. Factor based increase of trade enterprise competitiveness depends on their effective use in trade enterprise activities. The "key success factors of trading enterprises" is the combination of factors determined by the competitive advantages of trading enterprises, which they must take into account in order to increase the competitiveness of trading enterprises in comparison with competitors (Voronin et al, 2013; Lapshina et al, 2013; Bespalko, 2013; Patton & Sawicki, 1993; Moiseeva, 2013; Pavlova, 2014; Lehmann, 2014).

Key success factors are the foundation of any business strategy, since an enterprise can achieve substantial success in competitive struggle through the concentration of its efforts on one or several factors of its activity. In this regard, there is no doubt that the identification of key success factors is one of the main tasks for an enterprise strategic planning. KSFs are also considered not only as an element of strategic planning, but also as a set of actions for strategy implementation, as competitive opportunities, the activity results that every enterprise must provide (or strive for it) to be competitive and succeed. The key factors for an enterprise success should not be viewed as

something permanent, they change over time within the same field of activity during the change of nature driving forces, the conditions of competition in it, consumer preferences, and other factors (Fatkhutdinov, 2000; Andrianov, 2013; Zobova & Orlova, 2012; Butskaya, 2014; Osipov, 2015).

The level of trade enterprise competitiveness is determined at a specific point in time by the combined effect of a number of factors. Figure 1 demonstrates the interrelation scheme of key factors, methods and trading enterprise competitiveness management results.



**Figure 1.** Interrelation model for trade enterprise key factors, methods and competitiveness management results

The competitiveness of trade enterprises includes the competitiveness of products and the competitiveness of enterprise. The competitiveness of product and commercial enterprise competitiveness are interrelated concepts. However, commercial enterprises are the indirect carriers of competitiveness through their products and services. However, the competitiveness of trading enterprises is determined by the characteristics that are different from those used to determine product competitiveness. The presence of a unique product at trade enterprise does not guarantee its success in the target market.

The product competitiveness makes a significant impact on the commercial enterprise competitiveness, but this effect is not always the dominant one. The product competitiveness and the competitiveness of the commercial enterprise are related to each other as the part and the whole.

The proposed methodological approach of trading enterprise competitiveness evaluation is based on a systematic approach to competitiveness evaluation and on the identification and evaluation of key success

factors for trading enterprises. The feature of this approach is that the systematic approach includes the product competitiveness and commercial enterprise competitiveness evaluation. The product competitiveness and the enterprise competitiveness are related to each other as the part and the whole. This approach allows to give an objective and comprehensive assessment of a commercial enterprise competitiveness.

The use of this approach allows us to improve the methodology and the technology of trading enterprise competitiveness evaluation by key success factor determination.

## Results and discussion

The methodological approach to trading enterprise competitiveness evaluation by key success factor identification includes the modified approach to key factor identification and an improved integrated methodology for trading enterprise competitiveness evaluation, taking into account key success factors.

Key success factors are the competitive advantages of commercial enterprises. The level

of trade enterprise competitiveness depends on the number of competitive advantages. The level of competitive advantage is manifested through the qualitative interconnection of all commercial enterprise elements. Thus, the key success factors are developed from two components - the

product competitiveness and the commercial enterprise competitiveness.

According to focus group results, they determined the commercial enterprise competitiveness factors, depending on product and enterprise competitiveness (Table 1).

**Table 1.** Commercial enterprise competitiveness factors

Enterprise competitiveness factors	Product competitiveness factors
Commercial enterprise turnover	Quality of goods
Return on sales	Product novelty factor
Handling costs	Product operation term factor
Financial independence of a commercial enterprise	Pricing factor
Solvency	Product design
Return on assets and liabilities	Product package
Assortment stability	Loyalty programs
Service quality	
Price level	
Enterprise market position	

The selection and the analysis of key factors allows you to develop the measures to improve the competitiveness of commercial enterprises. Each demand development factor can act on demand both positively and negatively, depending on economic and social conditions.

The comprehensive methodology for trading enterprise competitiveness evaluation allows one to quantify the competitiveness of trading enterprises. The assessment of trading enterprise competitiveness is determined using the integral indicator of trading enterprise competitiveness, consisting of two parts: product competitiveness and trading enterprise competitiveness, which, in turn, include the key success factors that shape the competitiveness of trading enterprises.

The advantage is the possibility of trading enterprise key success factor consideration during competitiveness evaluation, which allows us to obtain a more objective assessment of trading enterprise competitive advantages and weaknesses. In order to obtain a systematic assessment of a commercial enterprise competitiveness, the most important aspect is the integral indicator calculation, since this indicator makes it possible to track the way of commercial enterprise competitiveness dynamic change.

Based on the identified key success factors of a commercial enterprise and their expert evaluation, an integral indicator of the commercial enterprise competitiveness is calculated using the formula 1:

$$K_{\Pi T} = W_{\Pi} K_{\Pi} + W_T K_T, \quad (1)$$

where  $K_{\Pi T}$  - the integral indicator of the commercial enterprise competitiveness;

$W_{\Pi}$  - the coefficient of enterprise competitiveness significance;

$K_{\Pi}$  - the coefficient of enterprise competitiveness;

$W_T$  - the coefficient of product competitiveness significance;

$K_T$  - the coefficient of product competitiveness provided by an enterprise.

In formula 1, the significance coefficients  $W_{\Pi}$  and  $W_T$  are determined by the expert method, and the sum of these coefficients is equal to one.

In order to calculate the competitiveness coefficient of the commercial enterprise, they developed the comprehensive system of indicators. The system of indicators is based on the identified key success factors of trading enterprise competitiveness.

All indicators of trade enterprise competitiveness reflect enterprise competitiveness factors, selected by the focus – group method. All obtained indicators were grouped into blocks, which allow to evaluate the local potentials of trade enterprises during the further calculation of enterprise competitiveness coefficient.

Thus, they determined four blocks of indicators. Considering each block as a relatively separate system, we obtain the system of analytical

indicators, from which the synthetic indicators are developed.

The first block characterizes the efficiency of commercial enterprise economic potential.

The second block describes the financial potential of a commercial enterprise.

The third block of indicators characterizes the level of trade customer service, i.e. its organizational capacity.

The indicators of the fourth block assess the position of the company relative to the most important competitors, i.e. evaluate its management potential.

The calculation of trade enterprise competitiveness coefficient is carried out according to the formula 2:

$$K_{\text{ТП}} = W_1 \mathcal{E}_{\text{КП}} + W_2 \mathcal{E}_{\Phi} + W_3 \mathcal{E}_{\text{КОП}} + W_4 \mathcal{E}_{\text{КРП}}, \quad (2)$$

where  $\mathcal{E}_{\text{КП}}$  - the coefficient of commercial enterprise sales process efficiency;

$\mathcal{E}_{\Phi}$  - commercial enterprise financial stability coefficient;

$\mathcal{E}_{\text{КОП}}$  - service quality ratio;

$\mathcal{E}_{\text{КРП}}$  - enterprise market position ratio;

$W_1, W_2, W_3, W_4$  - the significance coefficients of each ratio block, which are determined by expert assessment method.

Table 2-5 shows the list of indicators included in each block of coefficients, reflecting the competitiveness of trading enterprises.

**Table 2.** Indicators of trade enterprise sale effectiveness

Sales Performance Indicators	Indicator role in evaluation
Growth ratio of trade enterprise turnover	Shows enterprise turnover development (or decline) trend
Return on sales ratio	Describes the degree of product sale profitability
Expense ratio	Reflects the dynamics of product sale cost-effectiveness
The rate of capital productivity change	Describes the efficiency and the dynamics of fixed asset use

**Table 3.** Indicators of trade enterprise financial position effectiveness

Financial status indicators	Indicator role for evaluation
Autonomy ratio	Shows the amount of asset use generated by equity
Absolute solvency ratio	Shows the extent the urgent financial circumstances are secured by the available ready means of payment
Return on assets	Shows the level of net income generated by all assets.

**Table 4.** Indicators of customer service effectiveness at trade enterprises

Indicators of customer service quality at trade enterprises	Indicator role in evaluation
Assortment stability factor	Characterizes the stability of enterprise assortment for a certain period of time.
Consumer cost ratio	Reflects the ratio of time spent by the buyer to purchase goods and the standard service time.
Purchase completion rate	Percentage of buyers who made purchases to the total number of buyers interested in the product

**Table 5.** Indicators of market position effectiveness for commercial enterprise

Customer service quality indicators	Indicator role in evaluation
The indicators estimating enterprise market position	Reflects the degree of commercial enterprise price deviation from market prices
Service Ratio	The number of service types provided to customers, and their compliance with service standards
The ratio of enterprise area to the total area of competing enterprises	It shows the share of the studied subject in the total area of trade entities in a certain market segment

The product competitiveness is calculated by the formula 3:

$$K_T = \sum_{i=1}^t R_i, \quad (3)$$

where  $K_T$  – product competitiveness;

$R_i$  - the rank factor value of product competitiveness;

$t$  - the number of key factors for product competitiveness.

The rank of the product competitiveness factor is calculated by the formula 4 and allows you to determine the rank of competitiveness key factors for trade enterprises:

$$R_i = W_i P_i, \quad (4)$$

where  $R_i$  - the rank of  $i$ -th factor of product competitiveness;

$W_i$  - the weight of the  $i$ -th factor of product competitiveness;

$P_i$  - the assessment of the  $i$ -th factor of product competitiveness

The weight of product competitiveness factor is determined by experts in the range from 0 to 1, while the sum of the weighting factors should be equal to one.

The questionnaire is used to determine the assessment of product competitiveness  $i$ -th factor, in which it is necessary to rank the presented list of factors in the range from 1 to 10, where 1 is the least significant factor and 10 is the most significant factor of product competitiveness. The assessment of product competitiveness factor allows us to estimate how strongly each factor affects the product competitiveness.

This methodology of trading enterprise competitiveness evaluation on the basis of key success factors makes it possible to identify the

competitive advantages of trading enterprises and their competitive weaknesses, i.e. to evaluate the competitiveness of enterprise local potentials. The obtaining of private indicators for each block makes it possible to identify reserves or achievements in the sphere of commercial enterprise most important activities, and, thus, to confirm, adjust or fundamentally change management strategies for each activity. The calculation of the integral indicator allows you to get enterprise market position quickly and objectively.

#### Trade Enterprise Competitiveness Estimation Model Based on Key Success Factors

The main purpose of commercial enterprise competitiveness evaluation is to ensure the successful functioning of enterprises in a highly competitive environment. The evaluation of trading enterprise competitiveness by the identification of key success factors is the system of principles and analysis methods, assessing a trading enterprise and product competitiveness.

The model of trading enterprise competitiveness evaluation by key success factor determination is presented on Figure 2.

The first step of trade enterprise competitiveness evaluation is trade enterprise market situation analysis. This analysis allows:

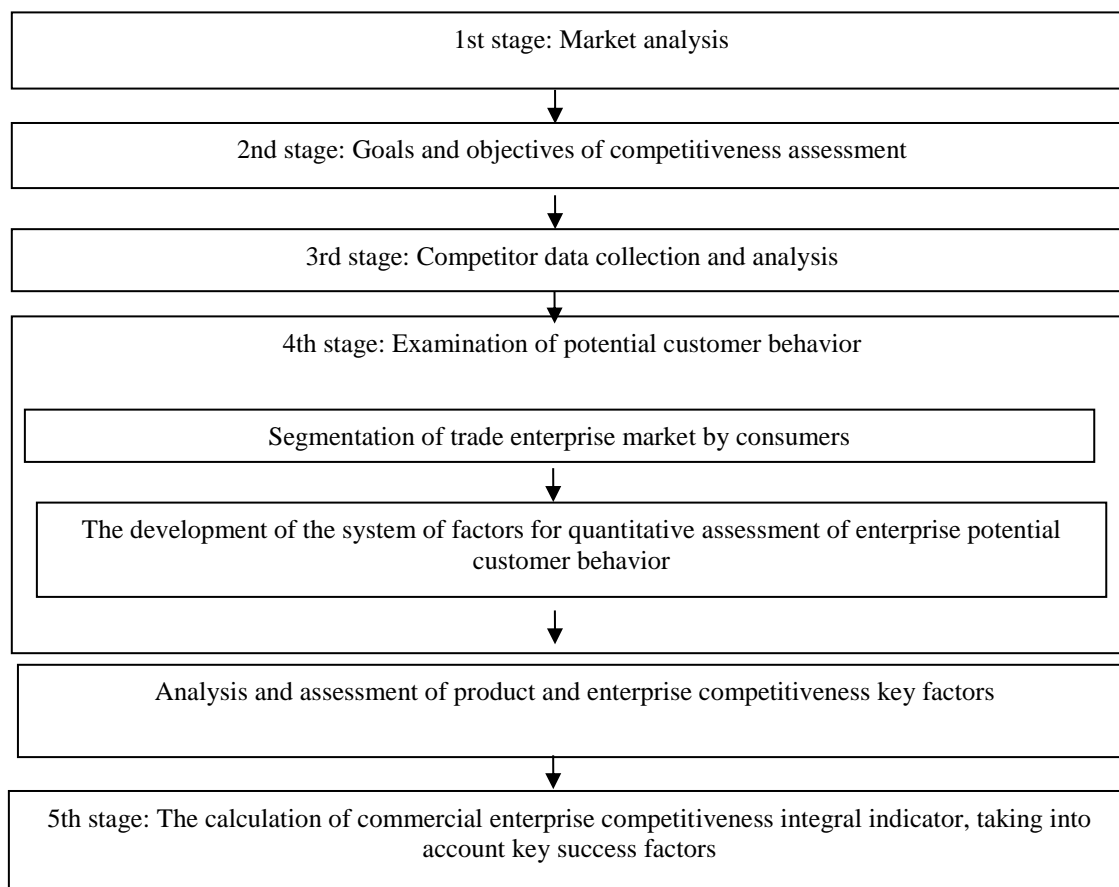
- to identify the market position of a company;
- to determine industry competitors;
- to study consumer needs and demands for a product or service.

The second stage of a commercial enterprise competitiveness evaluation is the definition of goals and objectives for commercial enterprise competitiveness evaluation. The purpose of commercial enterprise competitiveness evaluation is to develop a competitive strategy for a commercial enterprise.

The objectives of commercial enterprise competitiveness evaluation:

1) to determine product and enterprise competitiveness as compared with other trading enterprises;

2) to study the behavior of potential consumers;  
3) the development of strategies to improve commercial enterprise competitiveness.



**Figure 2.** Trading enterprise competitiveness evaluation model based on key success factors

The third stage of commercial enterprise competitiveness evaluation includes the collection and the analysis of data on competitors.

The fourth stage of trading enterprise competitiveness evaluation is to study the behavior of potential customers, including:

- the segmentation of trade enterprise market by consumers;
- the development of factor system for the quantitative assessment of enterprise potential customer behavior and key success factor determination;
- analysis and identification of product and enterprise competitiveness key factors in comparison with its main competitors.

The final stage of trading enterprise competitiveness evaluation includes the calculation of trading enterprise competitiveness integral indicator, taking into account the key success factors.

The developed model of trading enterprise competitiveness evaluation, based on key success factor determination, allows you to:

- conduct a comprehensive market assessment of enterprise and product competitiveness;
- quantify the competitiveness of an enterprise as a whole and a separate block of indicators in particular;
- make informed management decisions to improve the competitiveness of some



commercial enterprise according to a targeted impact on key factors causing competitiveness decrease.

A distinctive feature of this model is the consistent use of modified qualitative and quantitative methods to evaluate the competitiveness of trading enterprises, which leads to objective information obtaining about product and enterprise competitiveness, as well as about some possible ways of competitiveness improvement.

### Conclusion

Based on the analysis of existing methodological approaches to the evaluation of trading enterprise competitiveness, they offered the methodical approach to trading enterprise competitiveness evaluation, based on the systematic approach to competitiveness estimation, based on the identification and evaluation of key success factors for trading enterprises.

The feature of the approach to trading enterprise competitiveness evaluation is that the system approach includes the assessment of product and trading enterprise competitiveness. This approach allows us to give an objective and comprehensive assessment of trade enterprise competitiveness.

The developed model for trading enterprise competitiveness evaluation by key success factor identification is based on the use of qualitative and quantitative methods for trading enterprise competitiveness evaluation, allows a detailed assessment of the factors influencing the competitiveness level of trading enterprises.

A distinctive feature of the model for trading enterprise competitiveness evaluation is the identification of trading enterprise competitiveness key factors, which in turn leads to obtaining some objective information about trading enterprise competitiveness and the possible ways for its improvement.

### Conflict of Interest

The authors confirm that the presented data does not contain a conflict of interest.

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