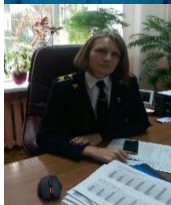




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**APPROACH TO SYSTEMIC PROCESS OF THE ENTREPRENEURSHIP
COMPETITIVENESS MANAGEMENT IN UKRAINE**

**PODEJŚCIE DO SYSTEMOWEGO ZARZĄDZANIA PROCESAMI
KONKURENCYJNOŚCI PRZEDSIĘBIORSTW NA UKRAINIE**

**ПОДХОД К СИСТЕМНОМУ ПРОЦЕССУ УПРАВЛЕНИЯ
КОНКУРЕНТОСПОСОБНОСТЬЮ ПРЕДПРИНИМАТЕЛЬСТВА
В УКРАИНЕ**

Abstracts

In the article, the authors carried out a critical analysis of existing methods for assessing competitiveness, identified the advantages and disadvantages of these methods and proposed a functional approach for the process of assessing this market index. Competitiveness appears only under competitive conditions and as a result of competition. Competitiveness of the enterprise in countries with market economy is a result of plexus factors generated by the objective development of productive forces that reflect outcome of large monopolies policy in the struggle for quality, sales markets and getting profits. In the current conditions of the development of the Ukrainian economy, there is an urgent need to improve the marketing system in domestic industrial enterprises and the existing

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tools for the formation of their competitive advantages in both domestic and foreign markets. Every year, Ukraine is increasingly integrated into world economic processes and becomes their direct participant. Transport plays a particularly significant role in these processes.

Keywords: operating performance, competitiveness, competition, global economy, strategic management, product policy.

Streszczenie

W artykule autorzy przeprowadzili krytyczną analizę istniejących metod oceny konkurencyjności, zostały zidentyfikowane zalety i wady tych metod oraz zaproponowane podejście funkcjonalne do procesu oceny tego wskaźnika rynkowego. Konkurencyjność przejawia się tylko w warunkach konkurencji i przez konkurencję. W krajach z gospodarką rynkową konkurencyjność przedsiębiorstwa wynika z wielości czynników w rezultacie obiektywnego rozwoju sił wytwórczych i odzwierciedla wyniki polityki wielkich monopolii w walce o jakości, rynki i zyski. W obecnych warunkach rozwoju ukraińskiej gospodarki istnieje pilna potrzeba ulepszenia systemu marketingowego w krajowych przedsiębiorstwach przemysłowych oraz istniejących narzędzi do tworzenia ich przewagi konkurencyjnej na rynku krajowym i zagranicznym. Co roku Ukraina coraz bardziej włącza się w światowe procesy gospodarcze i staje się ich bezpośrednim uczestnikiem. Ważną rolę w tym odgrywa transport.

Słowa kluczowe: wydajność produkcji, konkurencyjność, konkurencja, gospodarka globalna, zarządzanie strategiczne, polityka produktów.

Аннотация

В статье авторами был проведен критический анализ существующих методов оценки конкурентоспособности, определены преимущества и недостатки этих методов. И предложен функциональный подход для процесса оценки этого рыночного индекса. Конкурентоспособность проявляется лишь в условиях конкуренции и через конкуренцию. В странах с рыночной экономикой конкурентоспособность предприятия является результатом переплетения факторов, порожденных объективным развитием производительных сил и отражающие результаты политики крупных монополий в борьбе за качество, рынки сбыта и получения прибыли. В современных условиях развития экономики Украины имеет место острая необходимость в совершенствовании маркетинговой системы на отечественных промышленных предприятиях и существующего инструментария формирования их конкурентных преимуществ как на внутренних, так и на внешних рынках сбыта. С каждым годом Украина все больше интегрируется в мировые экономические процессы и становится их непосредственным участником. Значительную роль при этом играет транспорт.

Ключевые слова: эффективность производственной деятельности, конкуренция, конкурентоспособность, глобальная экономика, стратегический менеджмент, политика продуктов.

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Countries with transformation economy, a number of which include Ukraine, are more vulnerable under conditions of global economic crisis. Such vulnerability is largely reflected not only on the internal economy level of the country, but on the level of its competitiveness in the overall global ranking. Besides, unstable political situation in Ukraine makes the process of economic recession more complicate and extended. In Ukraine the risk level highly increases for local economic units in their economic activities and market and control decision-making therefore they exit the local market or cover international markets.

Modern competition is an essential attribute of the global economy and a form of market processes; it is characterized by a non-precedent scale, dynamism and exigencies and this requires a thorough study of the market from the position of each manufacturer to form good knowledge about the economics of a product market. As follows, competitiveness is one of the key strategic indexes of evaluation and management efficiency of modern enterprise functioning. It determines viability of the enterprise and results of its production and sales activity in terms of the market competition. A competition compels enterprises of all ownership to monitor changes

continually in terms of supply and demand, cost of material resources, and to reduce production costs, to improve the quality of products and services sold in the market and to enhance their competitiveness. In general, a main task and the main function of the competition is to capture a market, to beat competitors in a struggle for consumers and to provide stable income.

Competitiveness appears only under competitive conditions and as a results of competition. Competitiveness of the enterprise in countries with market economy is a result of plexus factors generated by the objective development of productive forces that reflect results of large monopolies policy in the struggle for quality, sales markets and earning profits.

Concepts of comparative costs [1], comparative advantages (Eli Heckscher, Bertil Ohlin), a comparison of competitive advantages, factors of management and productivity of resources usage [2], a competitive status of a firm [4] are used for characteristics of the competitiveness.

Analysis of the many definitions of the category "competitiveness" allowed for the classification of this concept by the following characteristics (table 1).

Table 1. Classification of Competitiveness

Characteristics	Competitiveness types
1	2
1. Territorial and geographical sphere	International Intranational Regional
2. Level of competitive objects	Industry branch (complex of industry branches) Enterprise Product
3. Fixing in time	On the determined date in past Current Expected

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Competitiveness level depends on the interaction of five competitive forces: raw material suppliers, new potential competi-

tors, substitute products, buyers of products and a specific of the industry branch (fig. 1).

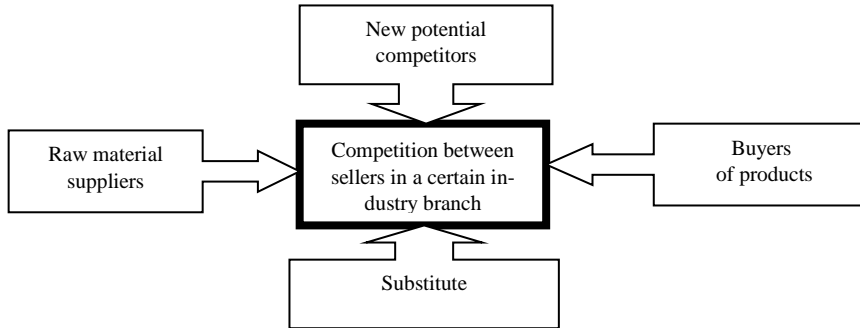


Fig. 1. Porter's five factors model of the competitive forces [3]

Five factors model of the competitive forces facilitates the identification of the strengths and weakness of the enterprise, as well as the analysis of spheres where strategic changes will have the greatest positive effect. It also allows for the identification of spheres where industry branch trends have the greatest impact on potential opportunities of the company or on threats.

Competitiveness is the primary indicator by importance in modern conditions due to the necessity of the choice of a manufactured product that conforms to the existing needs of potential users in the best possible way. Competitiveness is also the optimal correlation between the price and the quality of the analyzed products. Besides, there is no better indicator for characteristics of the manufactured product of industrial purpose than the limit price according to conclusions obtained on the basis of the performed research. Limit price is the best indicator due to the determination of a maximum price level that covers all equipment properties and operational characteristics when its calculation and analysis proceeds.

Besides, this indicator is the threshold of a competitiveness and it is impractical to pass through it if a firm really goes out on the potential market or has already gone out on this market in order to meet the existing needs and sale of goods to ensure the profitability and effectiveness of the production. Thus, the limit price level can be taken as a zero value of competitiveness and this indicator can serve as a standard to compare the prices of the analyzed machine and its related technical characteristics.

Therefore, we can conclude, that the possibility of a new functional approach to the determination of a competitiveness level appears by the ratio of a limit price to the equipment sales price [5-10]. Analytically it can be written as follows:

$$K = \frac{P_{l.r.}}{P_{s.r.}}, \quad (1)$$

where $P_{s.r.}$ – the sales price level for the researched equipment.

Writing down the equation for the limit price we obtain the following (1):

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$$K = \frac{P_A \cdot F_1[F_3(A_{1p}, \dots, A_{np}, \dots, D_{1p}, \dots, D_{np})]}{F_1[F_3(A_{1A}, \dots, A_{nA}, \dots, D_{1A}, \dots, D_{nA})]} \cdot \frac{Q_{exp.r.}}{Q_{exp.A.prod.}}$$

$$P_{s.r.} \tag{2}$$

$$K = \frac{P_A \cdot F_1[F_3(A_{10}, \dots, A_{n0}, \dots, D_{10}, \dots, D_{n0})]}{P_{s.r.} \cdot F_1[F_3(A_{1A}, \dots, A_{nA}, \dots, D_{1A}, \dots, D_{nA})]} \times \frac{Q_{exp.r.}}{Q_{exp.A.prod.}} \tag{3}$$

Formula (3) can be converted into formula (4) because multiplicative form is the most accurate way of expression of any kind functional dependencies of including dependence of sales price from the mass and dependence of the mass from functional and classification indicators of purpose:

$$K = \frac{P_A \cdot K'_M \cdot (K'_M \cdot A_0^{Z_1} \cdot \dots \cdot D_0^{Z_n})^X \cdot Q_{exp.r.}}{P_{s.r.} \cdot K'_M \cdot (K'_M \cdot A_A^{Z_1} \cdot \dots \cdot D_A^{Z_n})^X \cdot Q_{exp.A.prod.}} \tag{4}$$

Formula (4) provides a complete picture of the state of technical and economic level of the investigational product and machine-analogue and also permits to determine differences between these comparable products, and reflects a comparison of their use values. A complex indicator of competitiveness (K) obtained in this method models machine selection in the quantitative expression.

This effect is achieved by replacing the limit price of an analogous operational productivity ($Q_{exp.A}$) on the indicator of analogous operational productivity, summed up to purpose indicators of the investigated machine ($Q_{exp.A.prod.}$). In other words, both units of equipment are summed up to one class of consumers and this is very important for the industrial products, because consumers would have incur additional costs they are not interested in, in the market segment where the defined equipment class dominates in case of the non-correspondence of indicators to the level of

specific needs. Therefore, such correlation is a correction adjustment factor of comparison bases. Indicators of machine reliability have true values inherent to each of them and they can be objectively evaluated in the given formula. Speaking about true values of the purpose indicators of a machine-analogue and investigated equipment, they are compared when substitution into a multiplicative expression.

However, there is no precise grouping of technical and economic indicators of competitiveness in such methodology and this complicates the process of calculation, analysis of results and detection of the product “narrow place”. That is why there is a necessity to present formula (4) in the following way:

$$K = \left[\frac{K'_M \cdot (K'_M \cdot A_0^{Z_1} \cdot \dots \cdot D_0^{Z_n})^X \cdot Q_{exp.r.}}{K'_M \cdot (K'_M \cdot A_A^{Z_1} \cdot \dots \cdot D_A^{Z_n})^X \cdot Q_{exp.A.prod.}} \right] \cdot \left[\frac{P_A}{P_{s.r.}} \right]$$

$$I_{T.P.} \qquad I_{E.P.} \tag{5}$$

Thereby, expression in first brackets describes the technical aspect of a product in formula (5):

$$I_{T.P.} = \frac{K'_M \cdot (K'_M \cdot A_0^{Z_1} \cdot \dots \cdot D_0^{Z_n})^X \cdot Q_{exp.r.}}{K'_M \cdot (K'_M \cdot A_A^{Z_1} \cdot \dots \cdot D_A^{Z_n})^X \cdot Q_{exp.A.prod.}} \tag{6}$$

The complex indicator of competitiveness determined in such way allows to identify and to analyze one of the main problems by technical parameters. This problem consists in the determination of existing problem satisfaction degree by analyzed equipment in comparison with machine-analogue by precise technical parameters. The accuracy of technical characteristics of ma-

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chinery products increases when calculations follow formula (6) due to more complete and thorough analysis of equipment. Accurate parameters are most significant and important when making a purchase decision. Such process occurs due to the possibility to refuse experts for technical parameters evaluation of the researched products of an industrial purpose in the calculation process. This also increases accuracy of calculations because the error results from differences in views of different groups of professionals and the average value determination of their estimates leads to generalization and enlargement of calculations. Therefore, we obtain simpler and faster analysis because of saving time on parameters ranking and search for competent experts.

Besides, there is a strictly functioning mechanism of parameters list formation, which has a significant impact on purchasing decisions when using certain methods of analysis of product consumer properties. Such situation occurs due to the automatic selection process in formula (6), which includes only such machine characteristics, the numerical values of which directly affect the value of operational performance. Potential consumer seeks to maximize the operational performance because there is the direct proportional dependence between this value and a predictable income.

This justification is actual because products of an industrial purpose, purchased for profit from its further use, were analyzed in this case. Besides, all indicators of purpose, which characterize consumer capabilities necessary to achieve the mentioned aims are included into analyzed parameters. Determination of the significance of each purpose indicator is originally programmed in the equation and is expressed as degrees reflecting multiplicative dependence.

Conclusions. There is an acute need in the marketing system to improve the national industrial enterprises and existing tools of formation of their competitive advantages in internal and foreign markets in the modern conditions of Ukraine's economic development. From year to year Ukraine increasingly integrates into global economic processes and becomes their direct participant. Transport in general and especially aviation transport plays a vital role in these processes. "Open sky" policy, which is one signs of the aforementioned trends, creates new opportunities and threats for the national air-companies development.

Modern scientific approaches aimed at operational efficiency improvement and industry formation were identified as a result of performed investigations. An equation of equipment operation, which determines an hourly operational performance taking into account indicators of its reliability is the most efficient in terms of technical side of the research for the evaluation of the quality of certain machine operation in certain conditions and for the formation of the priorities for further improvement.

The way of designing studies for analysing the product limit price is the most effective in the modern science as for the economic concept of researched products, manufactured by the machine producer. This indicator not only displays price and cost characteristics of the machine, but also reveals the appointments indicators impact on limit price level.

The possibility of formation of the functional approach for the determination of the competitiveness level of products for industrial purposes was identified on the basis of these two directions. A limit price value takes as a basic (zero) value of this indicator by the limit price ratio to the sales price taking into account economic and normative indicators.

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