UDC 005.921:334.716

DOI: https://doi.org/10.64076/iedc250806.08

Comprehensive assessment of the functional potential of an industrial enterprise

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Abstract. The abstracts present the results of a study on assessing the impact of individual functional areas of an enterprise on its results in a strategic perspective. For this purpose, the category of the functional potential of the enterprise and its components are considered. A methodology for determining an integral indicator of functional potential, which reflects the ability of the enterprise to achieve strategic goals, is proposed.

Keywords: functional potential of the enterprise, integral indicator, strategy, structural components.

The effectiveness of a modern enterprise depends on the level of development of its functional areas, which include: production, marketing, finance, personnel, scientific and technical developments and innovations, and some others. The set of functional components that are decisive for the competitiveness of an enterprise depends on the specifics of its activities.

Functional potential (FP) in this study is considered as an object of strategic management taking into account ensuring the future sustainable development of the enterprise in all areas of activity. In accordance with the concept of a modern enterprise not only as a set of individual business processes, but as a formed portfolio of resources and conditions for their most effective use, it is necessary that a powerful financial function be at the heart of strategic management. The state of the structural components of the enterprise's financial structure directly affects the choice and implementation of each functional strategy, therefore it is important to carry out its objective assessment.

In order to determine the influence of the functional areas of an enterprise's activity on its results and to study the interrelationship of their components, it is necessary to note a number of methodological approaches to the formation of the functional potential (FP) of an enterprise in a strategic context.

The authors of this study considered functional potential as an integral indicator that determines the degree of an enterprise's ability for a certain period to achieve

established strategic goals in a comprehensive assessment of functional areas of activity and taking into account the influence of external environmental factors.

The development of functional potential is based on monitoring each of its components. It is the assessment of the existing functional potential within its components that allows us to analyze the state of the functional areas of the enterprise's activity, identify trends in its development, and develop mechanisms for activating production, taking into account current resources and potential opportunities for their changes.

The proposed methodology for a comprehensive assessment of an enterprise's financial performance involves the following actions:

- 1. Substantiation of the structural components of potentials (production (P_p) , scientific and technical (P_{st}) , personnel (P_{hr}) , organizational and managerial (P_{om}) , financial (P_f) , marketing (P_m)) within the framework of the general functional potential, which would ensure the effectiveness of the implementation of the functional strategies of the enterprise and subsequently the strategic goals in the relevant areas of activity.
- 2. Calculation of quantitative parameters characterizing the structural components of the enterprise's financial statements.
- 3. Determination of group indicators of structural components of the enterprise's financial statements (P_i) by the expression:

$$P_j = (\sum_{i=1}^n K_i)/n, \tag{1}$$

where j is the index of the structural component of the financial statements, i.e. j = 6; K_i is the quantitative indicators characterizing the corresponding structural components of the financial statements of the enterprise; n is the number of indicators characterizing the i-th structural component of the financial statements of the enterprise.

4. To determine the integral indicator of the enterprise's financial performance, it is proposed to calculate weighting factors for each structural component of the financial performance using an expert method, taking into account the characteristics of the enterprise's activities in a given period, the solution of the main problems, and the content of the overall development strategy.

In order to ensure the representativeness of the assessment of functional potential, the indicators of the components of which have different units of measurement, each j-th component of the functional potential (j=1...6) must contain weighting coefficients (ω_j), which are determined by experts using the method of pairwise comparisons. The criterion in this case is the degree of priority of individual components for achieving strategic goals and making management decisions in the process of implementing strategies.

The examination of structural components involves the participation of employees of the enterprise management departments who are responsible for the activities of certain functional areas.

The weightings of each component P_j are determined by the scores, which characterize the degree of priority and development of a separate functional direction. The basis of the criterion-based assessment by the degree of priority is the results of empirical research and expert opinions.

$$\omega_j = \sum W_j / \sum W_{tot}, \tag{2}$$

where W_j , is the weight coefficient of the jth structural component of the enterprise's financial statements;

 W_1 , ... W_6 – groups P_j for which weighting coefficients are determined;

 ΣW_i – sum in one row, j=1, ...6.

The effectiveness of the functional potential of the enterprise is determined by the achievement of planned results of the implementation of functional strategies, and subsequently the overall development strategy.

5. Determination of the integral indicator of the enterprise's functional potential (P_i) . We consider it advisable to use the integral indicator of functional potential, which includes a specified set of indicators of its structural components, taking into account their weight coefficients. The values of the weighting coefficients were adopted based on the average results of practical expertise carried out by specialists for the conditions of leading mining and processing enterprises in Ukraine.

$$P_i = 0.24 P_p + 0.17 P_{st} + 0.24 P_{hr} + 0.09 P_{om} + 0.17 P_f + 0.09 P_m,$$
(3)

where P_p , P_{st} , P_{hr} , P_{om} , P_f , P_m ,- group indicators of the relevant structural components of the FP.

The effectiveness and correct orientation of functional strategies to solve urgent problems and ensure sustainable development of individual areas of activity is determined by the level of quality of both the relevant potentials and the overall functional potential of the enterprise. The need for constant monitoring of the functional potential is becoming an increasingly urgent task, because knowledge of its components and the possibilities of their improvement determines the strategic prospects for the development of production and economic activities and the successful functioning of the enterprise in the future.

The importance of a comprehensive study of the functional potential of an enterprise and its components lies in the need for further improvement of individual areas of its activity, overcoming "weak" areas, and determining strategic prospects for successful functioning as a whole. The choice of options and conditions for implementing strategies in the relevant areas of the enterprise's activity depend on the state of the functional potential.

The specified system of structural components of the financial management in the conditions of an industrial enterprise allows to determine its internal capabilities, advantages and disadvantages in various areas, to analyze the potential in order to increase the efficiency of commercial activities in a strategic perspective.