IMPROVING THE SYSTEM OF INDICATORS FOR ECONOMIC AND STATISTICAL DETERMINATION OF ENTERPRISE EFFICIENCY WITH REGARD TO LEGAL ASPECTS OF MANAGEMENT

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The object of the research is the peculiarities of the formation, use and improvement of the system of indicators for economic and statistical determination of enterprise efficiency with regard to legal aspects of management. It is determined that the enterprise efficiency is the ability of enterprise to provide the efficiency (effect) of process, project, activities, etc., which can be calculated as the ratio of the effect (achieved result in a certain form of manifestation – monetary, material, social, ecological, etc.) to the costs that ensured this result in the system of determining the result of economic activity «information – resource – time – conditions (risk factor, opportunity) – responsibility.» It is identified that in practice there are problems related to the formation and use of the system of indicators for economic and statistical determination of enterprise efficiency, taking into consideration the legal responsibility of business. It is determined that under the legal responsibility of business should be understood the following: 1) duty of managers to respect the legality of actions in achieving the economic goals of the enterprise; 2) five main groups of legal responsibilities of managers: to the owners (board of directors), to the staff (subordinates), to customers, to suppliers, and to competitors of the enterprise. The results of the research improve the system of indicators for economic and statistical determination of enterprise efficiency, taking into account: financial and economic efficiency; production efficiency; commercial efficiency; legal efficiency – depending on the level of compliance with the legality of the actions of managers in achieving the economic goals of the enterprise in the financial, economic, industrial and commercial spheres. All this should be taken into account when improving the system of integrated diagnostics of the enterprise’s competitiveness to form and support the process of making and implementing managerial decisions, including checking up effectiveness of these decisions in the management system.

Keywords: enterprise, enterprise efficiency, legal responsibility of business, managerial decisions, economic goals, profit, effect (result), costs (resources).

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Fig.: 1. Formulae; 2. Bibl.: 32.

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Bibl.:
Совершенствование системы показателей для экономико-статистического определения эффективности деятельности предприятия

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Объектом исследования являются особенности формирования, использования и совершенствования системы показателей для экономико-статистического определения эффективности деятельности предприятия. Установлено, что под юридической ответственностью бизнеса следует понимать: 1) обязанность менеджеров соблюдать законность действий при достижении экономических целей предприятия; 2) пять основных групп юридических обязанностей менеджеров: перед владельцами (советом директоров), перед персоналом, перед конкурентами предприятия; 3) признаки эффективности деятельности предприятия; 4) зависимость эффективности деятельности предприятия от уровня соблюдения законности действий менеджерами при достижении экономических целей предприятия; 5) методика использования показателей для оценки эффективности деятельности предприятия. Установлено, что под юридической ответственностью бизнеса следует понимать: 1) обязанность менеджеров соблюдать законность действий при достижении экономических целей предприятия; 2) пять основных групп юридических обязанностей менеджеров: перед владельцами (советом директоров), перед персоналом, перед конкурентами предприятия; 3) признаки эффективности деятельности предприятия; 4) зависимость эффективности деятельности предприятия от уровня соблюдения законности действий менеджерами при достижении экономических целей предприятия; 5) методика использования показателей для оценки эффективности деятельности предприятия.

Ключевые слова: юридическая ответственность, менеджмент, эффективность, бизнес, предприятия

УДК 65.01

Під час виконання дослідження встановлено, що ефективність діяльності підприємства, юридична відповідальність бізнесу, управленческі рішення, економічні цілі, агрегація, асоціація, інфраструктура, екологія, соціальна сфера, міжнародна активність підприємства нерозкішно залежать один від одного.

Висновок: ефективність діяльності підприємства залишається ключовою усією підприємницькою діяльністю, а її оцінка додатково може бути здійснена за допомогою системи показателей для економико-статистичного опінії є важливим для дослідження відповідно до поставленої мети.

Актуальність: в інтересах економіки бізнесу, наукових досліджень, викладачів та студентів, наукових інтересів.

Висновки:

1. Є варіанти використання показників для оцінки ефективності діяльності підприємства.

2. Управлінські рішення, юридична відповідальність бізнесу, економічні цілі, агрегація, асоціація, інфраструктура, екологія, соціальна сфера, міжнародна активність підприємства нерозкішно залежать один від одного.

3. Ефективність діяльності підприємства залишається ключовою усією підприємницькою діяльністю, а її оцінка додатково може бути здійснена за допомогою системи показателей для економико-статистичного опінії.

4. Висновки:

4.1. Ефективність економічної діяльності підприємства залежить від єї юридичної відповідальності, умов і змін у діяльності підприємства.

4.2. Управлінські рішення, юридична відповідальність бізнесу, економічні цілі, агрегація, асоціація, інфраструктура, екологія, соціальна сфера, міжнародна активність підприємства нерозкішно залежать один від одного.

4.3. Ефективність діяльності підприємства залишається ключовою усією підприємницькою діяльністю, а її оцінка додатково може бути здійснена за допомогою системи показателей для економико-статистичного опінії.

Бібл.: 7–9
Hence, based on the understanding of the essence of the economic category “efficiency” [3; 11; 12] and taking into account the opinion of top managers of enterprises, it is obvious that the studied indicator (level of enterprise efficiency) is a multi-facet integrated concept, which includes both financial and non-financial business indicators (quantitative and qualitative indicators with corresponding criteria values); characterizes separate (defined) areas, specific operations, various types of enterprise activities (financial, industrial, investment, innovative, marketing, etc.); reflects quality of the management system, including, in particular, legal aspects of management.

Here, in the opinion of top executives (managers), of particular importance are methods of expert evaluation; diagnosis (targeted assessment) of a particular object, phenomenon, or process (based on a system of indicators) [12]; economic and mathematical modeling of a problem. In [3], it is pointed out that diagnosing an enterprise is not a one-time event but a systematic permanent activity, which involves studying (targeted economic assessment) of its condition and trends, identifying threats and development prospects in order to make informed rational managerial decisions aimed at eliminating problem issues (threats) and weaknesses of the enterprise or taking advantages of the operating conditions (opportunities) and strengths of the enterprise for ensuring a qualitatively new level of its efficiency, development and forming prospects [3, 12–14]. At the same time, in the course of scientific research on the problem [3–6; 14; 15], it is found that diagnosing competitiveness of an enterprise (within the system of complex assessment of an enterprise’s development and formation of its prospects) includes evaluating its performance by corresponding components.

In this context, it is established that today there are significant disagreements among economists, lawyers, and practitioners regarding assessment of enterprise efficiency based on economic, statistical and legal information. In particular, the object of discussion is a complex of unresolved issues related to forming (constructing) and using a system of indicators for economic and statistical determination of enterprise efficiency with regard to legal information (legal aspects of doing business). All this has justified the relevance, appropriateness, and importance of conducting research in this direction and determined the object of the study – features of the formation, use and improvement of the system of indicators for economic and statistical determination of enterprise efficiency with regard to legal aspects of management.

Therefore, the aim of the study is to formulate theoretical principles and develop practical recommendations to improve the system of indicators for economic and statistical determination of enterprise efficiency (based on economic and mathematical modeling, with consideration for the specifics of practical solving of economic problems in managing economic systems and business processes) with regard to legal aspects of management. To achieve the research goal – finding and justifying new solutions for managing enterprises in view of the studied problem, there used the following general scientific and special methods [16–18]:

1) the methods of systems analysis, data systematization, generalization and concretization, the graphical method, and the method of argumentation – to clarify the essence of the categories “enterprise performance efficiency”, “enterprise costs” and “legal responsibility of a business”;

2) theoretical and analytical methods, applied methods of economic and mathematical modeling with consideration for peculiarities of economic observations and measurements – to form (build) a system of indicators for economic and statistical determination of enterprise efficiency with regard to legal aspects of management.

Researches [3; 8; 11; 19–21] conclude that efficiency of an enterprise – the ability of the enterprise to ensure the result (outcome) of the process, project, measures, etc., which is calculated as the ratio of the outcome (the result achieved in a certain form of expression – monetary, material, social, environmental, etc.) to the costs that provided this result in the system for determining result of economic activity “information – resource – time – conditions (risk factor, opportunity) – responsibility.”

Given this, it is obvious that costs of an enterprise are 1) the monetary expression of the total enterprise’s resources (financial, labor, material, energy, etc. [10]) used for particular purposes under certain conditions; 2) an indicator of performance efficiency of the enterprise, characterizing the amount of expenses (fixed, variable) incurred in the process of economic activity [11].

Based on studying operations [17], results of the analysis of systems for enterprise diagnosis [3; 12; 18; 22], economic, managerial and legal aspects of management [5; 21; 23–25], it can be pointed out that here special attention should be paid to problems of making managerial decisions (under constantly changing external influences) with regard to legal liability.

As concerns legal aspects of modern management, legal liability of a business should be understood as [5; 21; 23, 25]

1) obligations of managers to observe the legality of their actions in achieving economic goals (taking into account the level of risk (Fig. 1), the time factor, and the relationship between the cost of additional information (economic, statistical, scientific, technical, sociological, legal, etc.) and profitability of its use). Here, profitability, as practice shows, should be considered as a composite financial indicator, reflecting the amount of income received, profit, production volume, sales volume, etc. [5; 18];

2) five main groups of managers’ legal obligations to owners (board of directors), staff (subordinates), customers, suppliers and competitors of the enterprise.

This legal aspect (regarding the legal responsibility of a business) is of extreme importance and priority in
the VUCA world, especially given the circumstances that indicate the commission of administrative offenses in the financial sector [26–28].

Thus, given the formulation of the economic problem, its analysis and specific processes for constructing mathematical models (relevant, accurate, productive and economic) and their application to a real economic object under conditions and in the reality of the VUCA world [1; 16–18], we recommend to present the improved system of indicators for the economic and statistical determination of enterprise efficiency (with regard to the legal aspects of management) in the form of economic and mathematical model (1) [3; 5; 21; 29–32]:

\[
\begin{align*}
I_b & \geq I_o \geq I_e; \\
T_p & > T_o > T_a > 100\%; \\
E_E & = \frac{E_R}{C_R}; \\
E_E & = \{F, P, C, L\}; \\
F & = \{f_1, f_2, f_3, f_4\}; \\
P & = \{P_1, P_2, P_3, P_4\}; \\
C & = \{c_1, c_2, c_3\}; \\
L & = \{l_1, l_2, l_3\},
\end{align*}
\]

where \(I_b\) is business performance index (an increase in the enterprise’s value as the result of the enterprise for the owners, creditors and other stakeholders); \(I_o\) – owner performance index (increase in the enterprise’s own capital as the result of the enterprise for the owner (owners)); \(I_e\) – economic performance index (the enterprise’s profit as the result of the enterprise for top managers); \(T_p\) – profit growth rate; \(T_o\) – sales growth rate; \(T_a\) – asset growth rate; \(E_E\) – enterprise efficiency; \(E_R\) – outcome (result); \(C_R\) – costs (resources); \(F\) – financial and economic efficiency; \(P\) – production efficiency; \(C\) – commercial efficiency; \(L\) – legal efficiency; \(f_1\) – return on equity (assets); \(f_2\) – overall liquidity ratio; \(f_3\) – equity to total assets ratio; \(f_4\) – financial leverage ratio; \(P_1\) – capital-output ratio; \(P_3\) – material productivity; \(P_4\) – capital-labor ratio; \(c_1\) – return on sales; \(c_2\) – days payable outstanding; \(c_3\) – days sales outstanding; \(l_1\) – level of legality of managers’ actions in achieving economic goals in the financial and economic sphere; \(l_2\) – level of legality of managers’ actions in achieving economic goals in the commercial sphere.

Taking into account the foregoing, it is advisable to note that in some cases, as business practice shows, the amount of profit (as the main summarizing indicator (result) of the enterprise’s production and business activities for top managers) does not always adequately reflect the level of an enterprise’s performance efficiency (outcome); cannot be the basis for making important managerial decisions. Therefore, the main task is not only to calculate
the enterprise's efficiency (outcome) but also to perform a further in-depth analysis of other (additional) performance efficiency parameters, taking into account factors affecting the enterprise's management system and business processes. For example, we recommend, using correlation and regression analysis, to assess the influence of external factors and internal variables on the overall efficiency of an enterprise and identify reserves (internal, external) for its increase, especially under conditions of limited resources, information restrictions, etc.

The presented results should be taken into account when improving the system for comprehensive diagnosis of an enterprise's competitiveness in order to form (prepare, optimize) and support the process of making and implementing managerial decisions including checking the effectiveness of these decisions in the management system.

**CONCLUSIONS**

According to the results of the study, it is found that performance efficiency of an enterprise is the ability of the enterprise to ensure the result (outcome) of the process, project, activities, etc., which is calculated as the ratio of the outcome (the result achieved in a certain form of expression – monetary, material, social, environmental, etc.) to the costs that provided this result in the system for determining the result of economic activity "information – resource – time – conditions (risk factor, opportunity) – responsibility". As practice shows, for the economic and statistical determination of enterprise performance efficiency, problems related to making managerial decisions (that are constantly changing under external influences) with regard to legal liability are of importance. Here, the legal liability of a business should be understood as:

1) obligations of managers to observe the legality of actions in achieving the economic goals of the enterprise;
2) five main groups of managers’ legal obligations to owners (board of directors), staff (subordinates), customers, suppliers, and competitors of the enterprise.

The scientific novelty of the study is in improving the system of indicators for economic and statistical determination of enterprise efficiency. The presented system, unlike the existing ones, reflects not only the integral level of financial, economic, industrial and commercial efficiency but also takes into account legal aspects of management, namely, legal efficiency, depending on the level of legality of managers’ actions in achieving the economic goals of the enterprise in the financial, economic, industrial and commercial spheres.

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