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CLARIFICATION OF THE THEORETICAL FOUNDATIONS OF MODELING THE ASSESSMENT OF ENTERPRISE ACTIVITY USING A BALANCED SCORECARD

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Introduction. Modern trends in the economy of Ukraine are characterized by the presence of crisis phenomena, a high level of instability, which negatively affects the performance of enterprises. In such conditions, enterprise management faces tasks related to the development of new management tools and methods, such as balanced scorecard and the use of modern economic and mathematical methods and models. The developed managerial decisions regarding the management of enterprise activities will be effective if they are based on an objective assessment. In this regard, modeling the assessment of enterprise activity based on balanced scorecard is an urgent scientific problem.

Analysis of recent research and publications. Many works of both domestic and foreign scientists, such as V.M. Hrynyova, M.S. Doronina, M.O. Kyzim, A.A. Pylypenko, and L.M. Malyarets [4], Robert S. Kaplan, David P. Norton, Andy Niles, Chris Adams, Mike Kennerly, Bob Phelps, and others are devoted to the problems of modeling the enterprise's activity. However, many issues remain unresolved.

Objectives of the article. Modeling as a process of knowledge of objects involves the implementation of a sequence of stages, during the implementation of which it is necessary to adhere to well-known methodological principles, namely adequacy, dynamism, substitution and heuristics. To use these principles in modeling the assessment of the enterprise's activity with a balanced system of indicators, their content should be specified specifically for this process. At the same time, specifying the methodological principles of modeling, it is necessary to justify the methodological provisions that organize and conceptualize the process of developing models.

The main material of the study. An economic-mathematical model is a conditional, approximate image of an object, expressed with the help of mathematical symbols and ratios, which describe the characteristics of the state of the object, its parameters of functioning and development [1]. Thus, real objects are expressed and described thanks to their characteristics, more precisely, signs that are measured using quantities and are elementary and complex. Objects in the economy are determined by economic indicators. Economic indicators are presented in natural, value forms and have appropriate units of measurement, but they can also be coefficients. For economic analysis, it is important to distinguish between extensive values and intensive values. The principle of dynamism involves the reflection in the model of the influence of the time variable, which can be done explicitly or implicitly. Practically all types of analysis in the economy, both economic, financial, and strategic, involve the description of objects using indicators, the values of which are observed dynamically, that is, during a certain period of time. The term during which the research is conducted is established by the person making the decision. Depending on the purpose and tasks of modeling, it is possible to use their increments (absolute, relative), indices (based on the basis of comparison: basic, chain) along with the value of the indicators. It is the implementation of the principle of dynamism in modeling that makes it possible to determine cause-and-effect relationships and mechanisms, which is important in modeling a balanced system of indicators. Adherence to the principle of dynamism allows you to objectively develop both descriptive and prescriptive models.

In economic-mathematical modeling, the two most common types of dynamic econometric models are distinguished, namely: autoregression models and models with a distributed lag, in which the value of a variable for past periods of time (lag variables) is directly included in the model, and models that take into account dynamic information in an implicit form. The models of the second type include variables characterizing the expected or desired level of the result or one of the factors at the moment of time. It is the ability to predict the values of the indicators that allows you to analytically substantiate the planned values and desired values in a balanced scorecard when forming corporate, functional strategies at the enterprise. To find the desired or optimal state of activity of an industrial enterprise, it is advisable to develop and calculate normative models. In strategic management at an industrial enterprise, it is often necessary to simultaneously implement several functional strategies, each of which has its own strategic goals and objectives. This is a multi-criteria enterprise activity. It is appropriate to consider the following criteria as separate functions of efficiency: the use of financial resources at the enterprise, relations with consumers, organization of business processes, use of people capital and enterprise development. According to the principles of multi-criteria optimization regarding the contradiction of optimality criteria, that is, the impossibility of ensuring the optimal value according to all criteria at the same time, it is necessary to determine optimally compromising plans on some interval, which have the property: no solution can be improved according to any criterion without worsening other criteria. Thus, we have a set of admissible plans – a set of Pareto plans where none of them can be improved. Since the set of these plans is the result of mutually replaceable scalar criteria that allow to increase some components at the expense of reducing others, each such plan creates opportunities for optimizing the efficiency of the enterprise.

In the activity of an industrial enterprise, production activity is the main one, since it produces products that are then sold on domestic and foreign markets. It is on the efficiency of internal production processes that the fulfillment of the mission, goals, strategies, and value creation at the industrial enterprise depends.

Production activities include inventory management, equipment repair and replacement planning, design and implementation of the most productive and resource-saving technologies, regulation of the quality and quantity of products produced, calendar planning of the production process, and more. It is the production subsystem in the activity of an industrial enterprise that is provided by other subsystems: financial, marketing, personnel and innovation-investment. The purpose of financial activity is to ensure the circulation of financial resources of the enterprise for its normal life activities, the implementation of all financial transactions and obtaining profit for the growth of the total value of the enterprise. The financial activity of the enterprise involves payment of funds, management of financial relations with other business entities, and sale of products. At industrial enterprises, marketing activity consists of two main directions: analysis of the external environment and analysis of the product life cycle. In the context of these directions, the study of the consumer and the motivation of his market behavior, the analysis of the enterprise market, the analysis of sales channels, the study of activities in the field of advertising, the analysis of sales volumes, the study of competitors, the study of manufactured products, the study of the most effective methods of promoting goods to the market, the analysis of opportunities are carried out market, development of marketing strategies, formation of the production program, coordination and control of this activity. However, the main goal of the enterprise's marketing activity remains the reflection and strengthening of the tendency to improve the production of goods and services to increase the efficiency of the entire economic activity of the industrial enterprise.

At the enterprise, all types of its activities depend on the level of quality of human resources and their management, which is the subject and object of personnel activities. This activity is aimed at developing and adjusting the strategy for the formation and use of labor potential in accordance with changes in management, recruitment and formation of the necessary personnel services, their preparation for the relevant activities, their evaluation, motivation for maintaining the proper regime of labor activity and a high level of labor productivity at the enterprise, monitoring labor safety , ensuring the social security of the company's personnel, contact relations between the management and representatives of the labor collectives. Specialists in personnel management problems claim that the efficiency of management at the enterprise depends entirely on the quality of the current personnel management system.

The development of an industrial enterprise depends entirely on the state of its innovative activity, which is aimed at using the results of scientific research and research and development for profit on the basis of expanding and updating the range of products produced at the enterprise, improving its quality, improving technology and organizing its production. Investment activity is aimed at substantiating and implementing the most effective forms of capital investment aimed at supporting and developing the enterprise's production

activity and its economic potential. Therefore, investment and innovation activity ensures the efficiency of the enterprise's life activity in the long term and high rates of its development and increase of competitiveness on foreign and domestic markets.

The content of the methodological principles in the modeling of the balanced scorecardfor evaluating the enterprise's activity made it possible to clarify the relevant methodological provisions [6].

1. Content essence, structural and functional model of the enterprise. The activity of industrial enterprises consists of the main types of activity, namely financial, production, marketing, personnel, innovation and investment. All of them reflect economic-production, organizational-economic and intra-economic relations of a modern domestic industrial enterprise.

According to the Economic Code of Ukraine, economic activity is defined as the activity of economic entities in the sphere of public production, aimed at the manufacture and sale of products, the performance of works or the provision of services of a valuable nature, which have a price determination [2]. Therefore, for an objective assessment of activity based on the balanced scorecard model, it should generally be presented as follows:

$$AIE = \langle F, P_1, M, P_2, II \rangle,$$

where AIE is the activity of an industrial enterprise; F – financial activity, P_1 – production activity, M – marketing activity, P_2 – personnel activity, II – innovation and investment activity.

2. Categorical basis for modeling a balanced scorecard for evaluating enterprise activity. A balanced system of indicators in modern economic conditions of enterprise activity is a system of indicators that adequately reflects the activity of the enterprise, which determines the objectivity of its assessment. It is also a method of management that aligns the interests of the enterprise and its employees. And balanced scorecard is a tool of strategic management, in which the mission, vision, strategies, strategic map are specified and on the basis of which controlling, monitoring, diagnostics, and motivation are carried out.

3. Hierarchical structure of the balanced system of indicators for evaluating the company's activities. Complexity, comprehensiveness and adequacy of the evaluation of the activity of an industrial enterprise is provided by a hierarchical system of indicators, which contains partial and integral indicators that determine elementary and complex signs of activity.

It is known that the carrier of information in the economy is an indicator. The purpose of the indicator in the economy is decisive and is explained by the essence of this quantity. According to the economic-mathematical dictionary, an indicator is a numerically expressed characteristic of some property of an economic object, process or decision [3, p. 396]. Economic indicators include absolute, relative, value, labor indicators. Most often, absolute indicators reflect the physical properties of objects.

Relative quantities obtained as a ratio of two homogeneous quantities have zero dimension, that is, they are dimensionless. Dimensionless units are often called coefficients. In the economy, there are many indicators presented in the form of coefficients. Let's note one more feature of relative indicators – most often they are performance indicators or efficiency indicators, that is, they are built as a ratio of the values of activity results to the values of costs.

To determine the complex characteristics of phenomena and processes in the economy, indicator systems are used that describe them holistically. Regarding the composition of the system of partial indicators, which determine the activity of the enterprise taking into account its types, there is no unequivocal opinion among leading scientists and well-known practitioners in the problems of management and analysis of enterprise activity. It is appropriate to include indicators in the system of indicators that do not duplicate each other functionally, but quantitatively reflect different characteristics of the activity. In other words, indicators in the system should be formed in such a way that their values are not functionally decomposed into the same components. This approach ensures the accuracy of the information that the indicators have, characterizing the properties of the activity.

A hierarchical system of indicators always contains summarizing or integral indicators. It is known that in economics it is possible to construct an integral indicator using various analytical methods [1]. The simplest and most common are the methods of aggregation of numerical information in the form of a sum, a weighted average, and researchers use additive and multiplicative convolution of partial indicators. More complex methods of obtaining integral indicators are the use of mathematical methods, among which such methods as a taxonomic indicator of development and an indicator of quality stand out for their obvious advantages. The main advantage of these methods is the possibility of meaningful interpretation of computational stages from

the point of view of economics. Thanks to the system of partial indicators, it is possible to determine in detail the elementary characteristics of the enterprise's activity, and the level of its condition and development is determined on the basis of the value of the integral indicator.

Taking into account the conditions for obtaining values in the economy, one should take into account the uncertainty and inaccuracy of data, which are due to various reasons, namely: Uncertainty, which leads to significant difficulties in modeling decision-making tasks, is caused by the following factors: incompleteness, contradiction, low accuracy of information used for decision-making decision; the presence of objective random phenomena and processes with an unknown distribution function; variability, vagueness, ambiguity and multiplicity of optimality criteria; the need to take into account a large number of indicators when evaluating and rationally choosing alternatives; vague parameters of future events, phenomena, projects, factors; the dependence of goals and criteria on the subjective behavior of market objects; uncertainty of actions of market participants; instability of the external and internal environment of the enterprise's functioning; imperfection of forecasting methods; the difficulty of obtaining the initial data necessary to solve the problem; the complexity of socio-economic phenomena under investigation; by the influence of natural conditions; the possibility of a change in the degree of availability of resources [1].

4. Characteristic space, indicators and criteria in the modeling of balanced scorecard for evaluating the enterprise's activities. The built model has high statistical quality only if it was formed in a qualitative feature space. This was substantiated and proven both theoretically and practically by a large number of leading specialists in economic and mathematical modeling both in Ukraine and abroad. An elementary feature of an enterprise's activity is its characteristic property, which is structurally determined by no more than two features that are not elementary determined by others. A complex feature of the enterprise's activity is structurally determined by elementary or other complex features, that is, it is multidimensional and is subject to the combined influence of other features. Elementary features are measured in metric and non-metric scales.

In the modeling of balanced scorecard for evaluating the enterprise's activity, it is important to single out indicators as special indicators. According to the economic and mathematical encyclopedic dictionary, indicators of sustainable development are a system of indicators that characterize the state, dynamics and trends of the economy, environment, population, social sphere of the country, regions and the world as a whole [1]. The differences between indicators and indicators are that the latter are also indicators, but special because they reflect changes in dynamics or deviations from normative values. With the help of indicators, the enterprise monitors and diagnoses the current state of activity. As a rule, indicators are either performance indicators, or relative indicators, activity performance indices. Not all performance indicators of the enterprise can be indicators. Often, indicators of the company's activity act as criteria. A criterion is defined as a sign on the basis of which an assessment of the quality of an object or process is formed and is a measure of the assessment itself. The criterion provides a basis, a rule for making a decision on evaluating the object for compliance with the stated requirements. A criterion in qualimetry is a condition that is put forward for an indicator of the property of the research object.

5. Multicriteria in the evaluation of the enterprise's activity. The objectivity of assessing the activity of an industrial enterprise is determined by taking into account several of its criteria. In the management of all types of activities, enterprises most often make management decisions taking into account several criteria at the same time. It is known that balanced scorecard classically consists of four components: financial, customer, internal business processes and training and development. Sometimes, in addition to the components of the SSP, others are added, firstly, to emphasize the importance of assessing the relevant characteristics of the enterprise's activity and, secondly, to take into account the specifics of the activity of a particular enterprise. Therefore, as partial criteria, it is advisable to consider the functions of efficiency, namely the efficiency of financial activity, marketing, internal business processes, and personnel training and development. The maximum efficiency of the entire activity of the enterprise is achieved taking into account partial efficiency criteria. When solving a multi-criteria optimization problem, optimal values of partial indicators of the enterprise's activity are obtained [4].

There are several methods of solving multi-criteria optimization problems: 1) optimization of one recognized as the most important criterion. At the same time, the remaining criteria play the role of additional restrictions; 2) arrangement of a given set of criteria and successive optimization according to each of them; 3) reduction of many criteria to one by introducing expert weighting coefficients for each of the criteria in such a way that the most important criterion receives more weight; 4) improvement of some indicators on the condition that other indicators do not deteriorate, i.e. finding a set of admissible solutions for which it is impos-

sible to simultaneously improve all partial performance indicators – areas of compromises. Then the solutions belonging to this area will be Pareto optimal.

6. Comparative analysis in the evaluation of the company's activity. The assessment of the enterprise's activity on the basis of balanced scorecard is based on the comparison of values in statics and in dynamics in different periods of time. The comparison procedure involves a quantitative and qualitative comparison of various properties that are manifested in similarities, differences, advantages, disadvantages on two or more objects or in dynamics on one object.

Comparing the levels of indicator values in the economic analysis is one of the mandatory procedures, because in the process of comparison, the best results are determined and reserves are revealed, which are necessary for the successful implementation of the economic strategy at the enterprise. It is the timely comparison of the levels of values in statics and dynamics that allows timely monitoring and diagnosis of negative deviations in the levels of indicator values.

The comparison of the values of the signs is carried out by volume, form, level and periodicity. According to the scope of the comparison, general and partial indicators are distinguished, which is due to the existence of general performance indicators that characterize the overall results of the enterprise's activity and partial indicators that determine various individual characteristics of both the entire activity of the enterprise and each individual type of activity and their individual characteristics. The comparison of the values of the signs by form involves a comparison with the planned or desired values of the indicators in the company's strategies. Comparison of the level of indicator values is carried out statically in the aggregate of the same type of enterprises and dynamically to identify the trend of activity development. The practice of economic analysis shows the expediency of conducting combined comparisons – in statics and dynamics, which provides the opportunity to deeply reveal the trends of the enterprise's development and correctly take into account the influence of random factors on indicators. Comparisons by levels of indicator values are carried out in homogeneous aggregates of enterprises, average values of indicators – in different aggregates of enterprises, average values – in the industry, in Ukraine, in the world. Comparison of values of characteristics of enterprise activity can be carried out periodically and non-periodically. The periodicity of the comparison of the values of the signs is connected with the periodicity of accounting and financial reporting, constant monitoring, diagnosis and controlling of the enterprise's activities. Non-periodic comparisons are carried out with various types of analysis at the request caused by the situational needs in the management of the enterprise.

7. Specification of the model of the balanced system of indicators for evaluating the activity of the enterprise. An important condition for modeling is the choice of mathematical methods for building models and the composition of the indicator system. The composition and content of mathematical tools in modeling depends on the goals of the research and the features of the conceptual model of the object. When forming the specification of the model, the goal of modeling should be taken into account, namely the assessment of the enterprise's activity using a balanced system of indicators. Therefore, it should provide a description of the state of the characteristics, processes of the enterprise, and therefore, the mathematical tools should include the tools of descriptive statistics under conditions of certainty and uncertainty.

Thanks to the application of descriptive statistics tools, the following tasks are solved: planning of data collection for the analysis of the characteristics of the enterprise as an object; study of the quality of collected data for analysis; verification of statistical hypotheses in the analysis of company characteristics, assessment of their uncertainty; a visual representation of the existing trends of changes in the characteristics of enterprises, which reinforces the conclusions made thanks to the analysis of the results of analytical calculations; identification of regularities, trends in changes in the values of indicators characterizing the enterprise, in particular, development as a whole; verification of the hypothesis of the existence of types of enterprises according to certain characteristics; modern decision-making support in management. The use of cluster analysis makes it possible to solve the following tasks in the management of enterprise activities: determination of types of enterprises according to the criterion of a set of their quantitative characteristics, types of development of enterprises in the region and in the country according to the established complex criterion; definition of groups of homogeneous, typical enterprises in the aggregate according to the given characteristics, which describe the reference state of the enterprise and which are united by the values of economic indicators in accordance with the given standards or benchmarks in the region and in the country according to their levels of development; determination of the characteristics of complex phenomena, processes in the economy of enterprises, in the region and the country. Factor analysis allows solving such tasks as determining internal implicit complex

factors of enterprise development, internal implicit complex factors of enterprise development in the region, internal implicit complex factors of development of objects and subjects of the economy in the country; to diagnose the degree of informativeness of the indicators that determine the factors of the development of enterprises and to evaluate the degree of informativeness of the system of the main indicators of enterprise activity; to scientifically substantiate the identified factors of enterprise development; determine the types of development of enterprises according to the criteria of the system of factors that shape this development; determine and evaluate the hierarchical structure of factors determining the development of enterprises, the region, the country; conduct a comprehensive economic analysis taking into account different levels of management. Thanks to the multifactorial regression analysis, it is also possible to solve some problems in the management of the enterprise's activities, namely: determining the cause-and-effect relationships between the factors that affect the result of the enterprise's functioning, expressed by one indicator; identify the main factors affecting the results of the enterprise; determine the key factors that effectively affect the results of the enterprise; to determine the influence of individual factors when fixing the rest at an average level on performance results; predict various situations in the activities of enterprises and their consequences in the results; predict various changes in the results of the enterprises' activities, based on the existing state of operation and with changes in the main factors of activity. The application of canonical analysis in the evaluation of the enterprise's activity allows to solve the following tasks: to determine the internal implicit complex factors of the enterprise's development in terms of "costs – results" or "cause – effect" and internal implicit complex factors of the economic development of enterprises in the region, internal implicit complex economic factors of the development of entities and subjects of the economy in the country; to diagnose the degree of informativeness of indicators expressing the economic factors of the development of enterprises and to evaluate the degree of informativeness of subsystems of the main indicators of the economic activity of enterprises; determine the types of economic development of enterprises according to the criterion of the hierarchical system of factors that shape this development; conduct a comprehensive economic analysis taking into account different levels of management.

Thanks to the development of an integral indicator based on mathematical methods, such as the method of constructing a taxonomic indicator of development or a mathematical method of constructing a quality indicator, the following tasks can be solved: develop a method of generalizing an indicator of the functioning and development of an enterprise; determine a comparative assessment of the functioning, development of enterprises in the region, the country and a comparative assessment of the functioning, development of the enterprise in dynamics, a comparative assessment of the functioning, development of the enterprise in relation to its strategy, a comparative assessment of the functioning, development of enterprises in the region, the country in relation to the conditions of the external environment, a comparative assessment of functioning, development of the enterprise in dynamics relative to the conditions of the external environment; to develop a methodical approach of comprehensive assessment of the functioning and development of the enterprise using a hierarchical system of indicators and comprehensive analysis and management of the functioning and development of the enterprise.

8. Development of strategies based on the results of modeling balanced scorecard for evaluating the enterprise's activities. Often, the balanced scorecard system is considered as a tool that has three directions of implementation, namely: as an evaluation system, as a strategic management system, as information support for management at the enterprise. As an evaluation system, balanced scorecard is able to comprehensively determine the activity of the enterprise by its types: financial, production, marketing, personnel, innovation and investment in terms of components: finances, customers, internal business processes, training and development. As a strategic management system, it is a means of translating the company's strategy into goals, indicators, norms and tasks for each employee, which is implemented in the procedure of cascading the system of indicators and drawing up strategic maps. On the basis of balanced scorecard, two important processes of strategic management are combined: budgeting and strategic planning, as well as improvement of material incentives. As the information support of management at the balanced scorecard enterprise based on the content, namely the hierarchical structure and the values of the indicators, clearly reflects the state of the enterprise as a whole, as well as the contribution of each employee to the overall results. This provides opportunities to improve document flow and the entire information system at the enterprise. The strategic map is an information carrier for the organization of accounting and control of the enterprise's activities.

9. Improving the development of a management solution based on the results of modeling balanced scorecard for evaluating the enterprise's activities. The modeling process is complete if, on the basis of the calcu-

lated mathematical model, it is possible to justify and make an effective management decision. Based on this, the modeling of balanced scorecard for the assessment of activity involves the final stage of the development of a management decision to increase the efficiency of the enterprise and improve its management. It is advisable to use the results of the balanced scorecard modeling at almost all stages of the development of a management decision to improve the efficiency of the enterprise based on its evaluation, namely at the stages of obtaining information about the situation, determining the goal, developing an evaluation system, analyzing the situation, diagnosing the situation, developing a forecast of the situation, generating alternative options for decisions, choosing the main options for management actions, developing scenarios for the development of the situation, expert evaluation of the main options for management actions, collective expert evaluation, decision-making by the decision-maker, development of an action plan, control over the implementation of the plan, analysis of the results of the development of the situation after management actions [5]. All the specified stages of development of a management decision to increase the efficiency of the enterprise's activity based on its evaluation require appropriate information support, the basis of which can be the components and results of modeling of the balanced scorecard.

Conclusions. The considered methodological provisions are the basis of the proposed theoretical-methodical approach to modeling balanced scorecard for assessing the vital activity of the enterprise. The methodological level of balanced scorecard modeling for the assessment of the company's vital activity made it possible to clarify the relevant modeling principles. The conceptual level of the balanced scorecard modeling for assessing the enterprise's vital activity is presented as a set of methodological provisions that form the theoretical basis of modeling, the operational-methodical level is presented as a set of problems, economic-mathematical models and mathematical methods, analytical and cognitive tools. The practical significance of the presented material is that the proposed theoretical and methodological support for modeling balanced scorecard for evaluating the activity of an enterprise can be used to develop methodological recommendations for evaluating the activity of an individual enterprise.

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Olena Martynova, PhD in Economics, Associate Professor of the Department of Higher Mathematics and Economic and Mathematical Methods, Simon Kuznets Kharkiv National University of Economics. **Clarification of the theoretical foundations of modeling the assessment of enterprise activity using a balanced scorecard**

The article presents the results of the research of theoretical foundations and specifies the content of the principles of modeling the assessment of the company's activity using a balanced system of indicators. The methodological provisions for modeling the assessment of the enterprise's activity are substantiated. It is recommended to include the following provisions in the list of methodological provisions: 1) content essence; 2) categorical basis; 3) hierarchical structure; 4) feature space; 5) multicriteria; 6) comparative analysis; 7) specification of models; 8) development of strategies; 9) improving the development of a management decision. The proposed theoretical and methodological support for modeling the assessment of the enterprise's activity based on balanced scorecard allows to assess the state and development of the enterprise's activity, identify factors for increasing its efficiency, and form decisions regarding strategic management in each type of activity at the enterprise.

Key words: modeling of assessment of enterprise activity, balanced scorecard, methodological provisions, theoretical and methodological support, efficiency of enterprise activity.

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В статті викладено результати дослідження теоретичних засад та наведено налаштування загальних принципів моделювання оцінки діяльності підприємства з використанням збалансованої системи показників. Уточнення змісту принципів в моделюванні оцінки діяльності підприємства на основі збалансованої системи показників дозволило сформувати відповідні методичні положення, зміст яких детально розглядається в статті. Обґрунтовано методичні положення моделювання оцінки діяльності підприємства. До переліку методичних положень рекомендовано віднести такі положення як: 1) змістовна сутність, структурно-функціональна модель діяльності підприємства; 2) категоріальний базис моделювання оцінки діяльності підприємства на основі збалансованої системи показників; 3) ієрархічна структура збалансованої системи показників для оцінки діяльності підприємства; 4) ознаковий простір, індикатори та критерії в моделюванні оцінки діяльності підприємства на основі збалансованої системи показників; 5) багатокритеральність в оцінці діяльності підприємства; 6) порівняльний аналіз в оцінці діяльності підприємства; 7) специфікація моделей збалансованої системи показників для оцінки діяльності підприємства; 8) розроблення стратегій на основі результатів моделювання оцінки діяльності підприємства з використанням збалансованої системи показників; 9) удосконалення розробки управлінського рішення на основі результатів моделювання оцінки діяльності підприємства на основі збалансованої системи показників. Під теоретико-методичним забезпечення моделювання оцінки діяльності підприємства з використанням збалансованої системи показників розуміється сукупність методів, методик, способів і інструментів, дозволить оцінити ступінь стану та розвитку діяльності підприємства, виявити фактори підвищення її ефективності, сформувати рішення щодо стратегічного управління в кожному виді діяльності на підприємстві. Запропоноване теоретико-методичне забезпечення моделювання оцінки діяльності підприємства на основі збалансованої системи показників дозволяють оцінити ступінь стану та розвитку діяльності підприємства, виявити фактори підвищення її ефективності, сформувати рішення щодо стратегічного управління в кожному виді діяльності на підприємстві.

Ключові слова: моделювання оцінки діяльності підприємств, збалансована система показників, методичні положення, теоретико-методичне забезпечення, ефективність діяльності підприємства.