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Article

Integrated Business Analysis as a Modern Tool for a Comprehensive Study of the Company's Activities Based on a Balanced Scorecard

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Abstract: Research background—Effective management of modern business is impossible without the systematic development and implementation of solutions aimed at changing it, due not only to market demands and competitive conditions, but also to the requirements of various social groups. Corporate governance should be focused on ensuring that all stakeholders perform their functions in the best possible way and satisfy their needs while maintaining a balance of interests between them. **Purpose**—This article is devoted to the consideration of the possibility of using the integrated business analysis developed by its author, based on a balanced scorecard, in the process of studying the strategic aspects of a company's activities. **Design/methodology/approach**—The methodological basis of the study was the concept of business analysis as such and the concept of a balanced scorecard by R. Kaplan and D. Norton. **Findings**—It is shown that an integrated business analysis based on a balanced scorecard involves a comparison with the target value, identifying the causes of deviations and predicting the company's strategic rating. It includes a comprehensive analysis of financial performance, customer performance, internal business process performance, and learning and development performance of a company's balanced system. Integrated business analysis based on a balanced scorecard begins with the analysis of the indicators of training and development of the company's personnel and ends with the forecasting of its strategic rating. His methodological tools are expert- score rating, comparison method, graphical and tabular methods, factor analysis techniques and various forecasting methods. Development of an integrated business analysis based on a balanced scorecard is the result of further development of the concepts of business analysis and a balanced scorecard and is aimed at further improving the information support of the strategic management of the company, ensuring its sustainable development in the long term. **Originality/value**—The author comes to the conclusion that integrated business analysis based on a balanced scorecard is a new and quite effective tool for studying the strategic aspects of a company's activities, forming the analytical support for its strategic management in modern conditions. Its results can be used in the development of management decisions not only long-term, but also medium-term and short-term, providing a sufficient degree of stability of the company from the point of view of its main stakeholders.

Keywords: balanced scorecard; integrated analysis; strategic rating; management; company

JEL codes: L29; M10; M41; O12; C60

1. Introduction

Effective management of modern business is impossible without the systematic development and implementation of solutions aimed at changing it, due not only to market demands and competitive conditions, but also to the requirements of various social groups.

The sustainable development of a company (firm, enterprise) is largely due to the maximum consideration of the interests of all stakeholders associated with it (owners, employees, buyers,

suppliers, government, etc.) in the long term, leading to the formation of the long-term value of this company (Dunphy, Griffiths & Suzanne, 2007; Freeman, 2010; Friedman & Miles, 2006).

However, it is difficult to imagine that the interests and requirements of such diverse stakeholders coincide in everything. Satisfying the requirements of some stakeholders most often forces us to infringe on the interests of others. Therefore, the problems identified in the company's activities often do not allow them to be solved all at once.

In such cases, it is necessary to focus on the key factors of the business, on those most significant factors that currently determine the operation of the entire company as a system.

Ideally, a company should strive for a balanced satisfaction of the interests of various stakeholders, but the inconsistency of these interests makes the task difficult to accomplish by purely analytical methods. The complexity of the tasks associated with this is manifested within each specific company, and the entire corporate governance system should be oriented towards their solution.

Corporate governance should be focused on ensuring that all stakeholders perform their functions in the best possible way and satisfy their needs while maintaining a balance of interests between them.

The management system of the company should justify management decisions and directions for its development, ensuring balanced compliance with the requirements of the most important stakeholders of this company.

The sustainable development of the company implies the possibility of long-term continuation of its effective activities, which is determined by the availability and level of efficiency of the use of appropriate resources and, in the opinion of the author of the article, lies, first of all, in the stability of the growth in production and sales of products (works, services), in the sustainability of investment activity, the sustainability of innovative activity and the sustainability of the well-being of employees and owners of a given company.

The problem of sustainable development of companies cannot be solved without the formation of appropriate information support. To this end, research is being carried out at the international level aimed at developing recommendations for compiling an integrated report on the sustainable development of a company, among which the GRI standards (Global Reporting Initiative), focused on the principle of "triple outcome" (Triple bottom Line): company economics, company production ecology and company social policy (Global Reporting Initiative (GRI), 2013).

At the same time, the key indicators of the economic performance of companies in the long term can include indicators included in their balanced system, which is one of the most important tools of the company's strategic management system, which, in fact, forms its information support within the framework of strategic management accounting.

That is why the balanced scorecard (BSC), being a means description and mechanism for the implementation of the company's overall economic strategy, should be aimed at successful achievement of the previously formulated goal of sustainable business development.

The urgency of the above problem leads to the need to improve the analytical support of the company's strategic management, since its activity is a rather lengthy process.

In this regard, the author of this article considers it appropriate to consider the possibility of using the integrated business analysis developed by him based on a balanced scorecard in the process of forming the analytical support for the company's strategic management, which ensures its sustainable development.

In fairness, it should be noted that the balanced scorecard is not only one of the most important tools of the company's strategic management system, but also acts as one of the rather important techniques (methods) of business analysis (International Institute of Business Analysis, 2015). However, a methodological approach to the implementation of integrated business analysis based on it and the technique for its implementation have not yet been developed.

2. Previous Research

There is no integrated business analysis based on a balanced scorecard as a component of business analysis in its classical sense, however, before touching on the author's contribution to

solving the problem considered in this article, we will briefly reveal its current state, which is reflected in the opinions of a number of the most well-known and authoritative, as the author of this article believes, scientists and specialists in the field of analysis of the company's activities, divided into the following two groups:

- 1) considering integrated business analysis as such, regardless of its balanced scorecard;
- 2) considering integrated business analysis in relation to its balanced scorecard.

Among the researchers who make up the first group and traditionally consider integrated business analysis as a comprehensive economic analysis of the economic activity of an enterprise, primarily an industrial one, numerous representatives of the scientific school of economic analysis of an enterprise's activity, which arose back in the Soviet Union and was further developed in the Russian Federation and a number of other post-Soviet states.

The most famous of them are one of the founders of the above-mentioned scientific school A.D. Sheremet (Sheremet, 2005, 2008), as well as V.I. Barilenko (Barilenko, 2016), G.V. Savitskaya (Savitskaya, 2013), S.A. Boronenkova and M.V. Melnik (Boronenkova & Melnik, 2016), N.P. Lyubushin (Lyubushin, 2006).

It is worth noting that, in general, there are no significant conceptual differences in the interpretations of integrated business analysis (comprehensive economic analysis of the economic activity of an enterprise) by the researchers listed above.

As they believe, integrated business analysis (comprehensive economic analysis) is not only a comprehensive analysis of the economic side of production, but also its technical side, as well as social and natural conditions and their relationship with production. It is usually carried out at the end of the reporting year.

At the same time, the main thing in integrated business analysis (comprehensive economic analysis) is consistency, linking its individual sections to each other, analysis of the relationship and mutual conditionality of these sections and the output of the results of each section to generalizing performance indicators.

Usually, it includes an analysis of the organizational and technical level of production, an analysis of fixed assets, an analysis of material resources, an analysis of labor resources, an analysis in the marketing system, an analysis of the volume of production and sales of products, an analysis of the cost of production, a marginal analysis, an analysis of foreign economic relations, an analysis of investment activity, analysis of innovative activity, analysis of social conditions of production, analysis of natural conditions of production, analysis of financial results, analysis of the financial condition and a comprehensive (generalizing) assessment of the economic activity of the enterprise.

A comprehensive (generalizing) assessment is a systematic analytical study, during which, on the basis of previously separately studied aspects of the enterprise's activities, a generalized description of its activities is given. The purpose of a comprehensive (generalizing) assessment is to obtain research results that adequately reflect the real position of the enterprise in the market. Its necessity is due to the fact that the conclusions arising from an autonomous analysis of the results of an enterprise's activities often conflict with each other.

There are the following methods of complex (generalizing) assessment of economic activity: without calculation of a single integral indicator (heuristic methods) and calculation of a single integral indicator.

Examples of heuristic evaluation methods are dynamic comparisons (horizontal analysis) of indicators, structural comparisons (vertical analysis), spatial comparisons, groupings of indicators by features, etc.

The assessment is possible mainly according to the type of "better" or "worse" the enterprise worked in comparison with the base (for example, the plan, the previous period, the normative value, another enterprise). The rates of growth and growth of indicators speak volumes, but a general quantitative assessment is not achieved by these methods.

Methods for calculating a single integral indicator of the efficiency of economic activity are very diverse. There is a "natural" integral indicator of efficiency given by the market economy itself in the

form of an indicator of return on assets, but since it is influenced by many diverse factors, a deep factor analysis is required.

For a comprehensive assessment of all economic activity or its individual aspects, various statistical and economic-mathematical methods are used:

- sum method, when, for example, the growth rates of selected indicators are summed up;
- weighted arithmetic average, for example, based on the same growth rates, but taking into account the weight of each indicator for some attribute;
- the method of the sum of places, when the places achieved by enterprises according to various selected indicators are summed up: the smallest sum of places means the first place in the ranking of enterprises, etc.;
- the scoring method, when each indicator has its own weight score, and the scores evaluate the increments of indicators on a certain scale;
- the method of increasing the total resource by 1% of the increase in sales of products;
- method for determining the share of the influence of intensification on the increment of production, taken as 100%;
- the method of the sum of relative savings on production and financial resources;
- "distance method" for rating evaluation of objects of analysis, etc.

The theoretical basis for a comprehensive (generalizing) assessment of the results of economic activity can be the relationship of factors, indicators and final results of the intensification and efficiency of the business in which the enterprise under study is engaged.

The second group of researchers who consider integrated business analysis in relation to the company's balanced scorecard is extremely rare. An example of such an explorer is M.G. Brown, whose point of view can be associated to some extent with this approach.

According to M.G. Brown integrated business analysis consists in the calculation and subsequent study of the values of analytical indicators of the company's BSC, which are a kind of "sensors" on its control panel and tell managers how effective their activities are (Brown, 2007). Analytical indicators differ from those included in the balanced scorecards of most companies, focus on a certain component of the BSC and are made up of sub-indicators that reflect a separate line of business of the company. At the same time, indicators of lower levels are considered as sub-indicators, which are different variables and quite often have different units of measurement. Each sub-indicator included in the analytical indicator is assigned a weight value depending on the degree of its significance for assessing effectiveness, reliability and probability. A system based on analytical indicators, according to M.G. Brown, makes it possible to more fully evaluate the effectiveness of the company's activities in comparison with a system based on separate, single-measured indicators. Measurement of analytical indicators is usually carried out on a 100-point scale, where 100 points is the best characteristic. In the process of integrated business analysis, based on the results of the calculation of analytical indicators, the reasons that determined their level or trend of efficiency are identified. Particular attention is paid to the root cause that caused problems or reduced performance. It is also necessary to determine the factors of good performance or trends towards its improvement. The result of an integrated business analysis is an action plan, the implementation of which is necessary to improve efficiency or maintain it at the achieved level. Usually it consists of specific tasks, a list of persons responsible for their implementation and deadlines. Obviously, such action plans should be based on relevant analytical information. At the same time, as a rule, the manager who is responsible for the deteriorating indicator is obliged to develop an action plan.

Summarizing in brief the above opinions of researchers who do not assume or assume the use of a balanced scorecard in the process of conducting integrated business analysis and are included in the two corresponding groups, we highlight a number of the following main points:

- by researchers of the first group who do not intend to use a balanced indicator system when performing integrated business analysis, integrated business analysis is generally well developed in theoretical, methodological, methodological and practical terms, however, it focuses on the annual performance of the company and does not allow studying the degree of implementation her strategies;

- by the researcher of the second group, who assumes the use of a balanced scorecard when performing integrated business analysis, integrated business analysis is not well developed in theoretical, methodological, methodological and practical terms, however, it focuses on the performance of the company's BSC and allows, to a certain extent, to analyze the implementation of its strategy.

3. Methodological Basis of the Research

The methodological basis of the study, the results of which are presented in this article, were the following two concepts:

- 1) the concept of business analysis;
- 2) the concept of a balanced scorecard.

Let's take a brief look at them.

The concept of business analysis as a scientific and practical discipline dedicated to identifying business needs and finding solutions to business problems arose in the 1980s. The reasons for the emergence of business analysis were the changes in the system as a whole that took place in IT projects and the emergence of the Internet.

Many scientists and specialists have contributed to the development of business analysis, in particular (Bartlett, 2013; Cadle, Paul & Turner, 2010; Carkenord, 2010; Ericsonn, 2006; Isson & Harriott, 2013; Schniederjans, Schniederjans & Starkey, 2014; Stubbs, 2011).

Solutions developed as part of business analysis often include a systems development component, but may also consist of process improvements, organizational changes, or strategic planning and policy development. At the same time, business processes, business units and business models of companies, as well as their performance indicators in comparison with the requirements of their key stakeholders, are taken as objects of study.

Business analysis is a combination of internal (process) analysis and external (environment analysis), which, based on multi-criteria assessments in accordance with the requirements of various stakeholders, allows timely adjustments to the company's business model and strategy, ensuring its sustainable development.

The sustainable development strategy affects the investment attractiveness of the company: when making decisions on the purchase of a block of shares in a particular company, a portfolio investor evaluates the entire range of risks, including non-financial ones. A company may be attractive in terms of current profitability, but extremely unsustainable from an environmental and social point of view. Therefore, for a strategic investor, the value of a company is directly related to its environmental and other reputational risks.

The main task of such an analysis is to identify business problems as gaps between the requirements of stakeholders and the corresponding actual performance of companies, as well as to develop recommendations for resolving these problems through the implementation of various kinds of innovations. In other words, business analysis is used as a tool to motivate innovation and analytically substantiate the ways of innovative development of companies (Chesbrough, 2006).

In the course of business analysis, not only economic, but also social and environmental requirements of various stakeholders, which include even future generations of people, should be taken into account. In this sense, business analysis is an effective means of implementing the principles of social responsibility of business and ensuring the conditions for sustainable development of both individual companies and society as a whole.

Business analysis is closely related to requirements research, but aims to determine the changes for the company that are required in order for the company to achieve strategic goals. These changes include changes in strategy, structure, policies, processes, and information systems (Teece, 2010; Wheelen, Hunger, Hoffman & Bamford, 2018).

Being the analysis of changes in business requirements, business analysis includes the study of business ideas (i.e. the rationale for the change), business concepts (i.e. the ideal state where the business should be), business goals (i.e. criteria values that will confirm that the concepts are implemented), business component (i.e. which components will change the criteria values within the

specified goals), business requirements (i.e. business needs that are possible) and business rules (i.e. rules to be implemented as part of the requirements).

Business analysis involves the use of numerous techniques (methods), the most important of which are PEST, MOST, SWOT, CATWOE, De Bono's 6 Hats, 5 Whys, MoSCoW, Porter's five forces analysis, Blue Ocean strategy, The Toyota A3 Report, Feenes Business Technology BI, and Balanced Scorecard (BSC).

A person who does business analysis is called a business analyst.

A business analyst is a specialist who is designed to help a company develop sustainably by creating new or improving existing business areas, main and auxiliary business processes in accordance with its strategic goals and stakeholder requests.

Based on a comprehensive analysis of the company's activities and an assessment of its external market environment, a business analyst should identify problem areas of the business and the inconsistency of its parameters with the demands of the market and stakeholders, participate in the development of goals, concepts, strategies and specific development projects.

At the same time, in the end, business analysis is not aimed at improving individual business processes, but at forming the current business model of the company as a whole (Baden - Fuller & Morgan, 2010; Debelak, 2006; Johnson, Christensen & Kagerman, 2008; Watson, 2005).

When modeling a business, a business analyst must justify the overall architecture and specific parameters of a control system capable of implementing the intended projects and strategies. It is expected from him analytically sound recommendations on the formation of the organizational and management structure of the company, the policy of its operating, investment and financial activities.

The main purpose of business modeling is to build a model of the company's activities, on the basis of which it is possible to conduct an appropriate analysis, evaluate the characteristics of interest, regulate part of the work and make the necessary changes: optimization of activities, reengineering, elimination of bottlenecks, etc.

Business analysts must analyze business problems to be able to find the right solutions by subdividing the problem and making logical connections like links in a chain. To be validated, they must follow some rationale from the definition of the problem and/or opportunity (the first link in the business analysis chain) to the precise definition of the requirements that are attributed to the problem/opportunity (the last link in the business analysis chain).

Ultimately, business analysts want to reduce costs, find solutions to problems, complete projects on time, improve efficiency, and document the right requirements.

Business Intelligence (BI) is defined as a management decision support method using IT systems based on monitoring and forecasting the state of information about the conditions and results of the company's activities. That is, BI is a unity of technical support for the formation of useful information from market and business data, and knowledge from information. In turn, knowledge can be the basis of a business process model and procedures related to the adoption and implementation of management decisions based on forecasting and assessing the expected consequences of their implementation (Negash, 2004).

One of the urgent tasks of business analysis at the operational level is the optimization of business processes, which is solved using tools for describing and modeling business processes. Among the main reasons that encourage the company to optimize business processes are the need to control the duration and conditions for the implementation of the operational and financial cycles, increase the cost efficiency of processes and their successive chains, assess the impact of external disturbances on the results of their implementation, as well as identify and resolve contradictions that arise in the process of reengineering of various processes.

In the practice of business analysis, various business process modeling tools are used. The IDEF0 methodology is recognized as one of the most effective modeling methodologies. Its practical application makes it possible to provide a graphical and verbal reflection of the most significant relationships in a business model.

The recognized center coordinating the development of scientific research and the synthesis of best practices in the field of business analysis is the International Institute of Business Analysis (IIBA),

which has developed a Guide to Business Analysis Body of Knowledge (BABOK), exploring six areas of knowledge (International Institute of business Analysis, 2015):

- 1) business analysis planning and monitoring, which describes the tasks used to organize and coordinate business analysis efforts;
- 2) collection and collaboration that describe the tasks used to prepare and conduct activities to identify and validate results;
- 3) requirements lifecycle management, which describes the tasks used to manage and maintain requirements and develop information from start to finish;
- 4) strategy analysis, which describes the tasks used to identify business needs, meet those needs, and agree on a change strategy within the enterprise;
- 5) requirements analysis and design definition, which describe the tasks used to organize requirements, define and model requirements and designs, verify and validate information, identify solution options, and evaluate the potential value that can be realized;
- 6) solution analysis, which describes the tasks used to evaluate the performance and value of the solution, as well as recommendations for improving the increase in values.

At the same time, it should be especially noted that in the IIBA official documents there is a call for continuous improvement of BABOK by analysts through the use of new innovative approaches and ideas, as well as effective developments in their activities.

The concept of a balanced scorecard as an analytical tool for strategic management, which was developed by American scientists R. Kaplan and D. Norton in the early 90s of the twentieth century (1992). Later, it was developed in the works of both these (Kaplan & Norton, 1996a, 1996b, 2001, 2003, 2004, 2005, 2006, 2008; Kaplan, Norton & Rugelsjoen, 2010), and a number of other economic scientists (Brown, 2007; Friedag & Schmidt, 2002; Horvath & Partners, 2004; Maisel, 1992; Niven, 2014; Olve, Roy & Wetter, 2000; Rampersad, 2003) and has also been repeatedly successfully tested in practice. In modern conditions, the BSC is considered as one of the most important and quite effective means of strategic management of the company.

Overall balanced scorecard (BSC) can be characterized as a set of parameters that comprehensively characterize the company's activities in a modern market economy.

The name of the system - balanced - reflects the balance that is maintained between short-term and long-term goals, financial and non-financial indicators, main and auxiliary parameters, as well as external and internal factors of activity.

The indicators of the balanced system are formed depending on the worldview and strategic goals of each particular company and therefore are individual for it. They represent a balance between external reporting data for owners (shareholders) and customers and internal characteristics of the most significant business processes, innovation, learning and growth. It is a balance between past performance and future growth. The system itself is a combination of objective, easily quantifiable results and subjective, to some extent, arbitrary parameters of future growth.

The development of the BSC concept was due to the following main reasons:

- the need for a real implementation of the developed strategy in the economic activity of the company;
- the dissatisfaction of company management with classical scorecards based on the use of exclusively financial data;
- the dissatisfaction of the management of many companies with the system of intra-company reporting, which is often too extensive, unreadable and not tied to a specific management decision;
- the need to improve the system of external reporting provided to the founders and potential investors of the company by including non-financial indicators in it to confirm financial stability;
- the need to simplify and speed up the planning process;
- the need to further improve the process of coordinating the goals of the company as a whole, its individual structural divisions and individual employees;
- the need to improve the effectiveness of early recognition and risk management.

In other words, the contradiction that has arisen between the irresistible force aimed at creating broad competitive opportunities and the clumsy model of accounting (financial) reporting has led to the creation of a kind of synthesized phenomenon - a balanced scorecard.

The main goal (key idea) of the balanced scorecard - transformation of the company's strategy into specific, quite tangible goals, indicators and, ultimately, actions (events).

In other words, the BSC, describing the strategy of the company, plays the role of a mechanism for implementing this strategy, and not its formulation. A balanced scorecard is not just a tactical or operational scoring system. It does not replace the system for assessing everyday parameters. The indicators for the BSC are chosen so that the attention of managers and employees of the organization is focused on those factors that can lead to major achievements in competition in the market. For innovative companies, the BSC serves as a means of strategic management on a long-term basis, and its evaluation component is used to solve the fundamental tasks of the management process.

A balanced system retains traditional financial parameters that reflect the historical aspect of past events. This is no doubt important for industrial age companies, where investment in long-term capabilities and customer relationships was not critical to success. However, such financial criteria are not suitable for managing and evaluating the activities of companies in the information age, which is aimed at creating value through investment in customers, suppliers, employees, production, technology and innovative projects.

A balanced scorecard pushes the horizon of each company's goals far beyond financial performance. This gives the manager the opportunity to determine how the company is working to create value for today's and future customers, on the one hand, and what should be done in order to expand internal capabilities and increase investment in people, business systems and procedures in order to improve its activities in future, on the other. The BSC combines the performance of experienced and committed participants in the value creation process with the financial prospects of both short-term projects and successful long-term activity in the conditions of the most severe competition.

At the same time, the BSC should be available in terms of information for employees of the company at all levels. Frontline employees need to understand the financial implications of their decisions and actions. Top managers must be fully aware of what will lead the company to long-term financial success.

The organizational unit (business unit) that is optimal for implementing a balanced scorecard is a company whose activities cover the entire value chain: innovation, operations, marketing, distribution, sales and service. Such a company conducts its business within the same industry, has its own products and customers, marketing and distribution channels, as well as production, and, most importantly, a clearly articulated strategy.

If a company (for example, a diversified corporation) includes several, to a certain extent, independent business units, then each of them, as a rule, has its own separate BSC. However, the development of a balanced scorecard at the corporate level is beginning. Such a system establishes a general framework, as well as a blueprint for the overall vision of the goals and strategy of the corporation, which should be reflected in the respective systems of each individual business unit. The corporate scorecard also defines how an organization obtains synergies, that is, value added over and above that created by business units operating independently.

As soon as the BSC for a business unit is developed, it becomes the basis for the formation of balanced scorecards for its individual structural divisions, which is commonly called cascading. The purpose and strategy of each is defined within the BSC of the business unit. Heads of structural subdivisions (for example, departments) develop their own balanced scorecards that are fully consistent with the goals and strategy of the entire business unit (company).

Cascading a balanced scorecard has its own types (directions), methods and stages (steps) (Horvath & Partners, 2004).

There are two types of cascading:

- 1) horizontal cascading of the BSC, involving the involvement of other departments of the organization at the same level;

2) vertical cascading of the BSC, involving other levels of management.

There are cascading methods used either alone or in combination, depending on the specific situation:

- independent formulation of strategy and goals (taking into account the strategic framework of activities and specific tasks on the part of the higher unit);
- direct definition of goals based on the top level;
- use of a standard BSC with adaptation of targets and (or) strategic measures;
- combination of standard and individual goals;
- direct definition of strategic activities;
- open communication (information events, round tables, printed publications, etc.).

There are the following stages of cascading:

1. Defining the cascading structure.
2. Determination of the cascading method for each structural unit.
3. Performing cascading.
4. Coordination of cascading results between departments.
5. Ensuring the quality of the results, documenting the results and, if necessary, coordinating the scorecard with the higher unit.
6. Integrating the results into the system of agreeing goals with the performers and into the system of remuneration.
7. Integrating results into strategic action controlling, planning and reporting systems.

Thus, the balanced scorecard of the business unit is projected onto all local responsibility centers within it, which allows them to work in accordance with the overall strategy. At the same time, each structural unit of a business unit needs to have its own BSC only if the structural unit has its own goal, strategy, customers (internal or external), as well as an internal business process that allows you to achieve this goal and put the strategy into practice.

Three fundamental principles underlie the construction of a balanced scorecard:

- 1) causal relationships;
- 2) factors for achieving results;
- 3) relationship with financial performance.

Let us reveal the essence of these principles in a rather concise form.

Causal relationships. A company's strategy can be viewed as a set of hypotheses about cause and effect. Causal relationships can be expressed by a sequence of "if...then" statements.

A well-designed scorecard should represent the company's strategy through a similar sequence of cause-and-effect relationships. The performance evaluation system is built in such a way that the links (hypotheses) between the goals (and indicators) of various components, as well as between the indicators and factors of activity aimed at achieving results, become clear and pronounced. Each parameter included in the balanced system should be an element in the chain of cause and effect relationships through which the company receives information about the strategy of the business unit.

Factors for achieving results. All balanced systems include common indicators. They are key performance indicators that are common to many companies and industries, are considered as baseline parameters (e.g., profitability, market share, customer satisfaction, customer retention, staff competencies) and serve as a deferred measure. Performance drivers are unique to each specific business unit indicators of the lead evaluation that reflect its strategy (for example, financial factors of profitability, market segments in which this business unit competes, specific objectives of internal business processes components and training and development of personnel).

A properly drawn up scorecard should be a set of performance indicators and performance factors. Without the latter, it is impossible to understand how the former were achieved. In addition, it is impossible to assess at an early stage how successfully a company's strategy is being implemented using indicators alone. Conversely, performance factors (e.g., lead time or scrap rate (defects per million items)) without appropriate metrics may only contribute to short-term

improvements in the manufacturing process, but do not reflect their impact on the state of the customer base and, therefore, financial results.

So, a well-designed BSC should have a balanced set of results (indicators of what has already been done and delayed characteristics) and factors for achieving future results (leading indicators), which is an integral part of the overall strategy of the business unit.

Relationship with financial performance. Since, outside of the strategic goals of the financial component, the successful implementation of the overall corporate strategy is extremely problematic, it is necessary to constantly correlate production improvements and economic results.

A balanced scorecard should focus on financial performance (e.g., return on assets (total capital), return on investment, economic value added). If programs (for example, quality-based management, cycle time reduction, reengineering or delegation of authority) cannot be linked to indicators that directly affect customer relationships, and therefore financial performance, then the return from such programs is almost imperceptible. Therefore, all indicators of the BSC through the chain of cause-and-effect relationships must be consistent with strategic financial goals.

The balanced scorecard includes four main interrelated components:

- financial component;
- client component;
- component of internal business processes;
- component of personnel training and development.

Let us briefly characterize each of the components of the balanced scorecard.

Financial component. Financial indicators are retained in the BSC as they assess the economic impact of the actions taken and are indicators of the company's strategy and its implementation against the overall improvement plan for the company as a whole. As a rule, financial strategic goals relate to profitability and are measured, for example, by operating income (operating income), economic value added, return on assets (total capital) or return on investment. Alternative financial strategic goals could be rapid sales growth or cash flow generation.

The customer component in relation to the BSC is usually considered as the consumer base and market segment in which the company competes, as well as indicators of its performance in the target market segment. As a rule, this component includes several main, or basic, indicators of the results of the successful implementation of a well-formulated and well-executed strategy. This includes meeting customer needs, maintaining the customer base, attracting new customers, profitability, and target market size and share. However, the client component should also include specific indicators of the value of offers received by the consumer of the target segment from this organization. These are the factors that are most important for the consumer in terms of maintaining loyalty. For example, the factors of timely delivery or delivery in a short time are extremely important to him; a constant stream of new types of products or services; the ability of the supplier not only to anticipate new customer needs, but also the ability to meet them. The customer component allows you to formulate a strategy focused on the consumer and the target market segment in such a way that it will provide exceptional profitability in the future.

The component of internal business processes defines those main internal business processes that need to be brought to perfection. This will allow the company to develop such business proposals to consumers that will help create and maintain a customer base in the target market segment, as well as meet the expectations of owners (shareholders) regarding high financial returns.

The indicators of this component are focused on the assessment of internal processes, on which the satisfaction of customer needs and the achievement of financial strategic goals in general depend to a large extent. At the same time, the internal business processes include the innovation process, the operational process and the after-sales service.

The innovation process consists in the study by the company of emerging or latent needs of customers and the subsequent development of such products and services that would satisfy these needs. As indicators of its assessment, the percentage of sales of a new product from the total sales volume, the introduction of a new product as opposed to a competing or planned product, the

possibilities of the production process, the duration of the development of a new generation product, etc. can be considered.

The operational process includes the production and delivery of goods and services to the customer. A highly efficient operational process and cost reduction in the production and supply of goods and services remain important goals for almost any company. The main indicators for evaluating the operational process are the duration of the production cycle, cost, quality indicators (for example, the number of defects per million items, product yield, waste, returns), order lead times, and others.

After-sales service is customer service after the sale and delivery of a product or service. As a rule, it includes warranty and repair service, modernization, replacement of low-quality goods, invoicing and collection of invoices, including repayment by buyers of commercial credit provided to them. The following indicators are used to evaluate the after-sales service process: expenses associated with the provision of after-sales services, quality of service, time cycle - the time from the moment the application is received to the complete elimination of the breakdown, the speed of invoicing, the time for paying off accounts payable by customers, and others.

The learning and development component of the balanced scorecard defines the infrastructure that needs to be put in place to ensure long-term growth and improvement. The strategic goals of this component of the BSC are factors in the implementation of the plans set by the first three.

Organizational learning and staff development, including career development, has three main sources: people, information systems (IT systems) and organizational procedures. The first three components of a balanced system, as a rule, reveal a large gap between the existing capabilities of people, information systems and organizational procedures and those required for a breakthrough in activity. In order to close this gap, the company must invest in retraining staff, improving information technology and systems, creating a relationship between organizational procedures and daily operations. These goals are formulated by the considered component of the BSC.

Indicators of the personnel training and development component are a set of general parameters (staff job satisfaction, staff turnover, training, advanced training) and specific factors, such as a detailed set of skills and abilities specific to this activity and skills needed in a new competitive environment. An indicator of the capabilities of information systems is the availability of timely, accurate assessment information about the client and about internal business processes that are important for those employees who are authorized to make decisions. With the help of organizational procedures, it is possible to analyze how the motivation of each employee of the company is consistent with the overall system of factors aimed at achieving success.

It should be noted that each of the BSC components includes, as a rule, from four to seven different parameters, and their total number in the system is about 25.

So, a balanced scorecard linked by the principle of "cause - effect" allows us to describe the company's strategy: how investments in personnel retraining, information technology, innovative products and services contribute to a radical improvement in its financial results and financial condition.

A balanced scorecard provides a manager with a tool to get the desired results in a difficult competitive environment - the conditions in which almost all companies operate today. That is why a clear understanding of the goals, as well as methods for achieving them, is vital. The BSC considers the goals and strategy of the company through the prism of a certain comprehensive system of its activities, providing a certain methodology for creating a system of strategic criteria and a management system. The main emphasis in the BSC is still on the assessment of the achievement of financial results, which is complemented by the financial performance of direct executors. The BSC evaluates the company's performance on the basis of four groups of balanced parameters: finance, customer relationships, internal business processes, and staff training and development. With the help of the BSC, you can not only analyze financial results, but at the same time participate in the creation of new opportunities and regulate the acquisition of intangible assets for further growth.

Summing up this rather brief consideration of the balanced scorecard, it should be noted that despite the fact that the BSC concept has reached its maturity, having proven itself well in a wide variety of organizations, it is not completely finished either theoretically or practically.

In addition, increasing the effectiveness of strategic management in the difficult conditions of the modern market economy requires the improvement of its information and analytical support, predetermining the need for further development of the theory, methodology and methodology for analyzing the strategic aspects of the company's activities as a whole to the level of, at a minimum, financial analysis, which is a fairly effective tool. studies of the financial aspects of its activities based on financial indicators and described in many literary sources (for example, (Bernstein, 1993; Helfert, 2001; Penman, 2004)).

In fairness, it should be noted that, developing the concept of a balanced scorecard, earlier the author of this article developed an applied strategic analysis that involves a comprehensive study of the strategic aspects of an organization's activities based on a balanced scorecard (in particular, (Krylov, 2010, 2014a)), and also identified a number of its types:

- applied strategic innovation analysis, which involves a comprehensive study of the strategic aspects of a company's innovation activity based on the innovation component of its BSC (in particular, (Krylov, 2014b));
- applied strategic financial analysis aimed at a comprehensive study of the strategic aspects of the company's financial activities based on the financial component of its BSC (in particular, (Krylov, 2015));
- applied strategic client analysis, which allows you to comprehensively explore the strategic aspects of the company's sales activities based on the client component of its BSC (in particular, (Krylov, 2016));
- applied strategic operational analysis, which allows a comprehensive study of the strategic aspects of the company's operating activities based on the operational component of its BSC (in particular, (Krylov, 2017));
- applied strategic analysis of after-sales service, which allows to comprehensively explore the strategic aspects of the after-sales service provided by the company, based on the after-sales service component of its BSC (in particular, (Krylov, 2019));
- applied strategic analysis of personnel training and development, which consists in a comprehensive study of the strategic aspects of training and development of the company's personnel on the basis of the personnel training and development component of its BSC (in particular, (Krylov, 2022)).

Their significant drawback is the lack of an integral assessment, which reduces the importance as a source of information support for the company's strategic management.

To eliminate this shortcoming, the author of this article has developed an integrated business analysis based on the company's balanced scorecard, the essence of which is disclosed below.

4. RESULTS

4.1. Conceptual framework for integrated business analysis based on a balanced scorecard

Integrated business analysis based on a balanced scorecard (IBABSC) is a discipline aimed at a comprehensive (integrated) identification of business problems that affect the overall sustainability of the company in the long term, and finding their solution in the interests of all the main (key) stakeholders of the company in equally based on its balanced scorecard.

The main idea of IBABSC is to identify business problems as discrepancies between the balanced requirements of all the main stakeholders, specified in the target and/or required values of the most important general indicators of the company's BSC, and the corresponding actual values of these indicators, as well as developing recommendations for resolving these problems in order to improving the overall long-term sustainability of the company.

Integrated business analysis based on a balanced scorecard can be considered as a type of business analysis, as well as a supporting function of strategic management.

The subject of IBABSC are BSC indicators that are equally significant for all major stakeholders, and its object is the strategic aspects of the company's activities.

The IBABSC information base is a balanced scorecard as a set of parameters that comprehensively characterize the company's activities in a modern market economy: individual components, key problems, strategic goals, indicators and their values, as well as strategic measures (Table 1), and taking into account interests of all its main stakeholders.

The purpose of integrated business analysis based on a balanced scorecard is the formation of analytical support for making strategic management decisions that support the sustainable development of the company under study.

Table 1. Balanced scorecard of company development.

BSC component	Key problem	Strategic goal	Index	Target meaning	Strategic event
Financial	What goals should be set based on financial expectations owners and investors?				
Client	What structure and customer requirements goals need to be set to ensure financial goals are met?				
Internal business processes	What business process goals need to be set for ensuring the achievement of financial and client goals?				
Staff training and development	What training and development goals should be set to ensure the achievement of financial and client goals, as well as the goals of internal business processes?				

Source: compiled by the author of the article.

To achieve the goal of IBABSC, it is advisable to single out three most important tasks in its process that need to be solved:

1. Formation of a balanced scorecard as a basis for analysis.
2. Development of a regulatory framework for relative deviations of the actual values of BSC indicators from their target values.
3. Development of a rating assessment algorithm according to a balanced scorecard.

The formation of a balanced scorecard as the basis for conducting IBABSC involves the formulation of strategic goals and the selection of indicators corresponding to them, equally the most significant indicators from the standpoint of all the main stakeholders of the company.

The development of a regulatory framework for the relative deviations of the actual values of the BSC indicators from their target values consists in establishing several reliability classes (the first is the best, the last is the worst) depending on the qualitative assessment of the degree of these deviations for the worse.

The development of a rating algorithm for a balanced scorecard is associated with the use of an expert scoring method. Each reliability class is assigned a certain number of points (the first - the highest, the last - the lowest) and a regulatory framework is formed according to the rating number, i.e. rating groups, each of which corresponds to a certain range in terms of the number of points. The rating is determined by a simple summation of points, based on the approximate equivalence of BSC indicators for all major stakeholders of the company. The higher the rating, the greater the stability of the company in the long term.

Aspects of integrated business analysis based on a balanced scorecard include proper strategic aspect, tactical aspect and operational aspect.

As part of the strategic aspect of IBABSC, the BSC rating and the degree of stability of the company from the point of view of its main stakeholders at the end of the strategy period are determined.

As part of the tactical aspect of IBABSC, the BSC rating and the degree of stability of the company are determined from the point of view of its main stakeholders at the end of each year.

As part of the operational aspect of IBABSC, the BSC rating and the degree of stability of the company are determined from the point of view of its main stakeholders at the end of each month.

At the same time, all the above aspects of IBABSC are interconnected and coordinated with each other: the operational rating according to the BSC and the degree of stability of the company affect the tactical rating according to the BSC and the degree of stability of the company, and the tactical rating according to the BSC and the degree of stability of the company affect the strategic rating according to the BSC and the degree of stability. companies.

The methodological toolkit of integrated business analysis based on a balanced scorecard includes a set of methods (techniques, methods) that ensure the solution of the most important tasks of conducting an analysis and, accordingly, achieving its goal. The main methodological methods of IBABSC include methods of absolute, relative and average values, comparison, grouping, graphical and tabular methods, expert scoring method, and factor analysis.

Having completed the consideration of the conceptual foundations of integrated business analysis based on a balanced scorecard, let's turn to its methodology.

4.2. Integrated business analysis methodology based on a balanced scorecard

Developed in accordance with the conceptual framework discussed above, the methodology of integrated business analysis based on a balanced scorecard for the convenience of its understanding will be presented as a set of individual stages (Table 2).

Table 2. Stages of integrated business analysis based on a balanced scorecard.

Stage number	Stage content
1	Selection from the balanced system of indicators of the development of the company, which reflects the interests of all major stakeholders equally, target and actual values of indicators.
2	Comparison of target and actual values of indicators and determination of relative deviations of actual values of indicators from target values of indicators.
3	Comparison of the obtained relative deviations with the normative base on the relative values of the indicators (in points) and determination of the actual scores of the relative deviations of the indicators.
4	A simple summation of the received scores (points) and the determination of the actual value of the rating according to the BSC.
5	Comparison of the actual value of the BSC rating with the regulatory base of the BSC rating and determination of a rating group that reflects the level of the company's overall long-term stability from the position of the main stakeholders equally.
6	Comparison of the obtained level of the overall long-term stability of the company from the perspective of the main stakeholders in equal measure with the required level of the overall long-term stability of the company from the perspective of the main stakeholders equally and determination of the absolute deviation of the actual value of the BSC rating from the required value of the BSC rating.
7	Determination of absolute deviations of the actual scoring of the BSC indicators from the required scoring of the BSC indicators.
8	Identification of excesses of permissible relative deviations of the actual values of BSC indicators from their required values.
9	Carrying out a factor analysis of the identified excesses of permissible relative deviations and determining the causes (factors) that caused these excesses of permissible relative deviations.
10	Development of recommendations to eliminate excesses of permissible relative deviations and their causes (if possible), as well as to increase the level of the overall long-term sustainability of the company from the perspective of the main stakeholders equally.

Source: compiled by the author of the article.

Despite the above-mentioned specificity and individuality of strategic goals for each company in specific conditions of place and time, we single out a number of strategic goals that are largely universal for all types of companies and, in the author's opinion, take into account the interests of the main stakeholders equally, taking into account the presence as part of the balanced scorecard, as noted earlier, there are four components: financial, client, internal business processes, as well as staff training and development.

Strategic goals of the financial component of the BSC of the company:

- income growth and expansion of the structure of activities;
- cost reduction and productivity increase;
- optimization of the use of assets and investments;
- effective financial risk management.

Strategic goals of the client component of the company's BSC:

ensuring customer satisfaction;

- maintaining the existing customer base;
- the expansion of the customer base;
- capture a certain market share;
- ensuring maximum customer profitability.

Strategic goals of the company's BSC component of internal business processes:

After sales service:

- implementation of a quick replacement of low-quality products (in case of delivery);
- providing fast and high-quality warranty and repair services;
- implementation of timely modernization of previously delivered products;
- ensuring the maximum speed of receiving the final payment from customers.

Operating process:

- ensuring the level of quality of products and services that meets the requirements of customers;
- maintaining the cost of manufactured products and services at a level that allows them to be sold at prices acceptable to customers;
- ensuring timely delivery of products and services, that is, within the terms agreed with customers.

Innovation Process:

- identification of customer needs acceptable to the enterprise related to the production of new types of products and services that will be of the greatest value to customers in the future;
- creating, through the use of innovations, acceptable offers for customers for such types of products and services, which allow them to get ahead of competitors;
- conducting in-depth scientific research on completely new types of products and services that create consumer value;
- implementation of applied research on the possibilities of using existing technological processes for the production of next-generation products and services;
- purposeful development of new types of products and services to promote them on the market.

Strategic goals of the training and development component of the company's BSC:

- implementation of retraining and development of creative abilities of employees to ensure the achievement of the strategic goals of the organization;
- expanding the capabilities of information systems to a level that allows employees of the organization to receive the necessary comprehensive information about customers, internal business processes, as well as the financial consequences of their decisions;
- ensuring the motivation of employees, delegation of authority to them and compliance of personal goals with corporate ones.

All of them were described in sufficient detail in the previous works of the author (Krylov, 2014a, 2014b, 2015, 2016, 2017, 2019, 2022).

Let us give the names of the most important, in the opinion of the author, general (effective) indicators of the company's BSC, which measure the previously listed strategic goals in the context of individual components of the balanced scorecard, and summarize them for convenience in Table 3. At the same time, to ensure the most unambiguous understanding of the achievement of the set strategic goals, only one or two indicators of the BSC are used for each of them.

Table 3. The most important general (effective) indicators of the company's BSC.

Strategic goal	Name measuring indicator
1. Financial component of the BSC	
1.1. Income growth and business structure expansion	Revenue growth rate. Share of revenue from sales of new types products and services in total revenue.
1.2. Reduce costs and increase productivity	The growth rate of the total cost of products and services. Labor productivity by revenue.
1.3. Optimizing the use of assets and investments	Return on assets. Return on investment.

1.4. Effective financial risk management	The effect of financial leverage.
2. Client component of the BSC	
2.1. Ensuring customer satisfaction	The share of repeated transactions in the total number of transactions.
2.2. Maintaining the existing customer base	The share of regular customers in the total number of customers.
2.3. The expansion of the customer base	The share of new customers in the total number of customers.
2.4. Capturing a certain market share	The market share occupied by the company.
2.5. Ensuring maximum customer profitability	Profitability of sales.
3. Component of the internal business processes of the BSC	
3.1. After-sales service	
3.1.1. Implementation of a quick replacement of low-quality products (in case of delivery)	The share of replacements of low-quality products performed on demand in the total number of replacements of low-quality products.
3.1.2. Providing fast and high-quality warranty and repair service	The share of applications executed on demand in the total number of repeated calls.
3.1.3. Implementation of timely modernization of previously delivered products	The share of upgrades of previously delivered products performed on demand in the total number of upgrades of previously delivered products.
3.1.4. Ensuring maximum speed of receiving the final payment from customers	The share of overdue accounts payable of customers in the total amount of accounts payable of customers.
3.2. Operating process	
3.2.1. Ensuring the level of quality of products and services that meets the requirements of customers	The share of low-quality products and services in the total volume of products and services.
3.2.2. Maintaining the cost of manufactured products and services at a level that allows them to be sold at prices acceptable to customers	Percentage deviation from the cost plan for products and services.
3.2.3. Ensuring timely delivery of products and services, that is, within the time frame agreed with customers	The share of untimely deliveries in the total number of deliveries of products and services to customers.
3.3. Innovation process	
3.3.1. Identification of customer needs acceptable to the enterprise related to the production of new types of products and services that will be of the greatest value to customers in the future	The share of consumer preferences of customers acceptable to the company associated with the possibility of producing new types of products and services in the total number of consumer preferences of customers associated with the possibility of producing new types of products and services.
3.3.2. Creating, through the use of innovations, acceptable offers for customers for these types of products and services, which allow them to stay ahead of competitors	The degree of implementation of the identified wishes of customers in relation to completely new types of products and services in percent.

3.3.3. Conducting in-depth scientific research on completely new types of products and services that create customer value	The share of sales of completely new types of products and services in total sales.
3.3.4. Carrying out applied research on the possibilities of using existing technological processes for the production of next generation products and services	The proportion of the number of next-generation products and services that can be produced by applying the processes already in use by the company in the total number of products and services produced by the company.
3.3.5. Purposeful development of new types of products and services to promote them to the market	The share of new types of products and services that met the needs of customers the first time in the total number of new types of products and services.
4. Component of training and development of the BSC	
4.1. Implementation of retraining and development of creative abilities of employees to ensure the achievement of the strategic goals of the organization	The share of employees who underwent retraining in the total number of employees.
4.2. Expanding the capabilities of information systems to a level that allows employees of the organization to receive the necessary comprehensive information about customers, internal business processes, as well as the financial consequences of their decisions	Percentage of required data received in real time through customer feedback channels.
4.3. Ensuring the motivation of employees, delegation of authority to them and compliance of personal goals with corporate ones	The percentage of employees whose personal and goals and objectives are determined on the basis of the corporate BSC and comply with it.

Source: compiled by the author of the article.

The target values of the most important (effective) indicators reflect the specifics of the activities of each particular company. They should be strict but achievable and are determined interactively during an intra-company seminar (meeting) or as a preliminary development with subsequent discussion and agreement during the meeting, which is more preferable.

However, in any case, the balance of strategic goals should be reflected in the balance of the target values of the indicators that describe them.

After determining the target values of the most important (effective) indicators of the BSC, you can proceed to the development of strategic measures necessary to achieve them and equally acceptable to the main stakeholders of the company.

Completion of the formation of a balanced scorecard that reflects the interests of all the main stakeholders of the company equally, allows you to move on to comparing the actual and target values of the most important (effective) BSC indicators as of the end of the corresponding period.

The result of the comparison is the relative deviations of the actual values of the indicators from their target values, which, in turn, are compared with the normative base by the relative deviations of the values of the indicators (in points).

The development of a regulatory framework for the relative deviations of the actual values of the BSC indicators from their target values consists in establishing five classes of stability (the first is the best, the fifth is the worst) depending on the qualitative assessment of the degree of these deviations for the worse (in percent): insignificant, essential, significant, serious, very serious (Table 4).

Table 4. Regulatory framework for relative deviations of the actual values of BSC indicators from their target values (by stability classes).

Deviation of actual values of BSC indicators from their target values for the worse, %	Qualitative assessment of the deviation of the actual values of BSC indicators from their target values for the worse	Stability class
Up to 1	Insignificant	1
1 to 5	Essential	2
5 to 10	Significant	3
10 to 20	Serious	4
20 or more	Very serious	5

Source: compiled by the author of the article.

The result of this comparison is the actual scoring of the relative deviations of the indicators, based on the following considerations:

- if the value of the indicator is in the first class of stability, then it is assigned 5 points;
- if the value of the indicator is in the second class of stability, then it is assigned 4 points;
- if the value of the indicator is in the third class of stability, then it is assigned 3 points;
- if the value of the indicator is in the fourth class of stability, then it is assigned 2 points;
- if the value of the indicator is in the fifth class of stability, then it is assigned 1 point.

Then, a simple summation of the scores of indicators is carried out, based on the approximate equivalence of the selected most important (effective) indicators of the BSC for the purposes of analysis from the perspective of the main stakeholders of the company. As a result of summing the scores, the actual value of the rating according to the balanced scorecard is determined, which reflects the level of the overall long-term stability of the company from the perspective of the main stakeholders equally.

The resulting actual value of the rating for the BSC is compared with the relevant regulatory framework (the regulatory framework for the rating for the BSC).

The formation of the regulatory framework for the rating according to the balanced scorecard involves the allocation of five rating groups, reflecting the level of the overall long-term stability of the company from the position of the main stakeholders equally (very high, high, medium, low, very low) (Table 5).

Table 5. Normative base of the rating according to the balanced scorecard.

Rating group reflecting the level overall long-term sustainability of the company from the position of the main stakeholders equally	Number of points
1. Very high	133 – 135
2. High	123 – 132
3. Medium	109 – 122
4. Low	69 – 108
5. Very low	27 – 68

Source: compiled by the author of the article.

The result of the comparison is the determination of the actual rating group, which reflects the level of the company's overall long-term stability from the position of the main stakeholders equally, which is compared with the corresponding required level. The required level of overall long-term stability of the company from the point of view of the main stakeholders is equally individual in each specific case and depends on a variety of internal and external factors that determine the activities of each particular company, and is characterized by an appropriate rating.

The result of comparing the actual and required levels of the overall long-term sustainability of the company from the perspective of the main stakeholders equally is the absolute deviation of the actual value of the BSC rating from the required value of this rating, which is detailed through the absolute deviations of the scores for exceeding the permissible relative deviations of the actual values of the BSC indicators from their required ones. values reflecting the level of the overall long-term stability of the company from the perspective of the main stakeholders equally.

Next, a factor analysis of the identified excesses of permissible relative deviations is performed using appropriate methods, which allows you to establish the causes (factors) that caused these excesses.

The final stage of integrated business analysis based on a balanced scorecard is to develop recommendations to eliminate excesses of permissible relative deviations and their causes (if possible), as well as to increase the overall long-term sustainability of the company from the position of the main stakeholders equally.

4.3. Practice integrated business analysis based on a balanced scorecard

Let's consider the practical application of the methodology of integrated business analysis based on a balanced scorecard on the example of a public joint-stock company "Sigma" (the name of the enterprise has been changed).

The balanced system of indicators for the development of the Sigma company, developed for 5 years, which includes only the indicators that are most important for the main stakeholders of this company equally, as of the moment it is necessary to achieve the target values of its indicators, is presented in the form of Table 6. It is the basis for conducting IBABSC.

Table 6. Balanced scorecard for the development of the company "Sigma".

Key problem	Strategic goal	Index	Target meaning	Actual value
1. Financial component of the BSC				
What goals should be set based on financial expectations owners and investors?	1.1. Income growth and business structure expansion	Revenue growth rate	70%	67%
		Share of proceeds from the sale of new species products and services in total revenue	40%	38%
	1.2. Reduce costs and increase productivity	Growth rate of the total cost of products and services	43%	39%
		Labor productivity by revenue (thousand dollars / person)	1700	1625
1.3. Optimizing the use of assets and investments	Return on assets	52%	49%	
	ROI	78%	71%	
1.4. Effective financial risk management	The effect of financial leverage	2.3	2.3	
2. Client component of the BSC				
What structure and customer requirements goals need to be	2.1. Ensuring customer satisfaction	The share of repeated transactions in the total number of transactions	80%	74%

set to ensure financial goals are met?	2.2. Maintaining the existing customer base	The share of regular customers in the total number of customers	80%	76%
	2.3. The expansion of the customer base	Share of new clients in the total number of clients	20%	19%
	2.4. Capturing a certain market share	Market share occupied by the company	15%	14%
	2.5. Ensuring maximum customer profitability	Profitability of sales	20%	17%
3. Component of the internal business processes of the BSC				
What business process goals need to be set for ensuring the achievement of financial and client goals?	3.1. After-sales service			
	3.1.1. Implementation of a quick replacement of low-quality products (in case of delivery)	The share of replacements of low-quality products performed on demand in the total number of replacements of low-quality products	90%	84%
	3.1.2. Providing fast and high-quality warranty and repair service	The share of applications executed on demand in the total number of repeated calls	85%	79%
	3.1.3. Implementation of timely modernization of previously delivered products	The share of upgrades of previously delivered products performed on demand in the total number of upgrades of previously delivered products	87%	81%
	3.1.4. Ensuring maximum speed of receiving the final payment from customers	Share of overdue customer accounts payable in total customer accounts payable	0.010%	0.013%
	3.2. Operating process			
	3.2.1. Ensuring the level of quality of products and services that meets the requirements of customers	The share of low-quality products and services in the total volume of products and services	0.000010%	0.000011%
	3.2.2. Maintaining the cost of manufactured products and services at a level that allows	Percentage deviation from the cost plan for products and services rendered	0.0010%	0.0012%

them to be sold at prices acceptable to customers			
3.2.3. Ensuring timely delivery of products and services, that is, within the time frame agreed with customers	The share of late deliveries in the total number of deliveries of products and services to customers	0.000010%	0.000011%
3.3. Innovation process			
3.3.1. Identification of customer needs acceptable to the enterprise related to the production of new types of products and services that will be of the greatest value to customers in the future	The share of consumer preferences of customers acceptable to the company associated with the possibility of producing new types of products and services in the total number of consumer preferences of customers associated with the possibility of producing new types of products and services	100%	96%
3.3.2. Creating, through the use of innovations, acceptable offers for customers for these types of products and services, which allow them to stay ahead of competitors	The degree of implementation of the identified wishes of customers in relation to completely new types of products and services in percent	100%	98%
3.3.3. Conducting in-depth scientific research on completely new types of products and services that create customer value	Share of sales of completely new types of products and services in total sales	25%	24%
3.3.4. Carrying out applied research on the possibilities of using existing technological processes for the production of next generation products and services	The share of the number of next generation products and services that can be produced by applying technological processes already used by the company in the total number of types of products and services		

		produced by the company	10%	9%
	3.3.5. Purposeful development of new types of products and services to promote them to the market	The share of new types of products and services that met the needs of customers the first time in the total number of new types of products and services	100%	97%
4. Component of training and development of the BSC				
What training and development goals should be set to ensure the achievement of financial and client goals, as well as the goals of internal business processes?	4.1. Implementation of retraining and development of creative abilities of employees to ensure the achievement of the strategic goals of the organization	Share of employees who underwent retraining in the total number of employees	65%	62%
	4.2. Expanding the capabilities of information systems to a level that allows employees of the organization to receive the necessary comprehensive information about customers, internal business processes, as well as the financial consequences of their decisions	Percentage of required data received in real time through customer feedback channels	100%	95%
	4.3. Ensuring the motivation of employees, delegation of authority to them and compliance of personal goals with corporate ones	Percentage of employees whose personal and goals and objectives are determined on the basis of the corporate BSC and comply with it	100%	93%

Source: compiled by the author of the article.

As can be seen from Table 6, there is some discrepancy between the target and actual values of the indicators of the BSC of the company "Sigma".

Let us calculate the relative deviations of the actual values from the target values of the indicators of the balanced system and determine their scores (Table 7).

Table 7. Relative deviations and scoring of indicators of the BSC of the company "Sigma".

Index	Relative deviation, %	Score
1. Indicators of the financial component of the BSC		
Revenue growth rate	- 4.29	4
Share of proceeds from the sale of new species products and services in total revenue	-5.00	3
Growth rate of the total cost of products and services	-9.30	3
Labor productivity by revenue	-4.41	4
Return on assets	-5.77	3
ROI	-8.97	3
The effect of financial leverage	0.00	5
2. Indicators of the client component of the BSC		
The share of repeated transactions in the total number of transactions	-7.50	3
The share of regular customers in the total number of customers	-5.00	3
Share of new clients in the total number of clients	-5.00	3
Market share occupied by the company	-6.67	3
Profitability of sales	-15.00	2
3. Indicators of the component of the internal business processes of the BSC		
3.1. After-sales performance		
The share of replacements of low-quality products performed on demand in the total number of replacements of low-quality products	-6.67	3
The share of applications executed on demand in the total number of repeated calls	-7.06	3
The share of upgrades of previously delivered products performed on demand in the total number of upgrades of previously delivered products	-6.90	3
Share of overdue customer accounts payable in total customer accounts payable	+30.00	1
3.2. Operating process indicators		
The share of low-quality products and services in the total volume of products and services	+10.00	2
Percentage deviation from the cost plan for products and services rendered	+20.00	1
The share of late deliveries in the total number of deliveries of products and services to customers	+10.00	2
3.3. Indicators of the innovation process		
The share of consumer preferences of customers acceptable to the company associated with the possibility of producing new types of products and services in the total number of consumer preferences of customers associated with the possibility of producing new types of products and services	-4.00	4
The degree of implementation of the identified wishes of customers in relation to completely new types of products and services in percent	-2.00	4

Share of sales of completely new types of products and services in total sales	-4.00	4
The share of the number of next generation products and services that can be produced by applying technological processes already used by the company in the total number of types of products and services produced by the company	-10.00	2
The share of new types of products and services that met the needs of customers the first time in the total number of new types of products and services	-3.00	4
4. Indicators of the component of training and development of the BSC		
Share of employees who underwent retraining in the total number of employees	-4.62	4
Percentage of required data received in real time through customer feedback channels	-5.00	3
Percentage of employees whose personal and goals and objectives are determined on the basis of the corporate BSC and comply with it	-7.00	3
Total points actually / Actual rating group		82 / 4

Source: compiled by the author of the article.

So, in accordance with the data in Table 7, the magnitude of the relative deviations of the BSC indicators under consideration determined their scores in the range from 1 to 5 points. The actual total score was 82 points, which corresponds to the fourth rating group, reflecting the low level of the overall long-term stability of the company from the standpoint of the main stakeholders equally.

Then we will determine the absolute deviations of the actual scores from the required scores according to the Sigma company's scores (Table 8).

Table 8. Required scores and absolute deviations from them of the actual scores according to the indicators of the Sigma company's score.

Index	Required score	Absolute deviation
1. Indicators of the financial component of the BSC		
Revenue growth rate	5	-1
Share of proceeds from the sale of new species products and services in total revenue	5	-2
Growth rate of the total cost of products and services	5	-2
Labor productivity by revenue	5	-1
Return on assets	5	-2
ROI	5	-2
The effect of financial leverage	5	0
2. Indicators of the client component of the BSC		
The share of repeated transactions in the total number of transactions	5	-2
The share of regular customers in the total number of customers	5	-2
Share of new clients in the total number of clients	5	-2
Market share occupied by the company	5	-2
Profitability of sales	5	-3

3. Indicators of the component of the internal business processes of the BSC		
3.1. After-sales performance		
The share of replacements of low-quality products performed on demand in the total number of replacements of low-quality products	5	-2
The share of applications executed on demand in the total number of repeated calls	5	-2
The share of upgrades of previously delivered products performed on demand in the total number of upgrades of previously delivered products	5	-2
Share of overdue customer accounts payable in total customer accounts payable	5	-4
3.2. Operating process indicators		
The share of low-quality products and services in the total volume of products and services	5	-3
Percentage deviation from the cost plan for products and services rendered	5	-4
The share of late deliveries in the total number of deliveries of products and services to customers	5	-3
3.3. Indicators of the innovation process		
The share of consumer preferences of customers acceptable to the company associated with the possibility of producing new types of products and services in the total number of consumer preferences of customers associated with the possibility of producing new types of products and services	5	-1
The degree of implementation of the identified wishes of customers in relation to completely new types of products and services in percent	5	-1
Share of sales of completely new types of products and services in total sales	5	-1
The share of the number of next generation products and services that can be produced by applying technological processes already used by the company in the total number of types of products and services produced by the company	5	-3
The share of new types of products and services that met the needs of customers the first time in the total number of new types of products and services	5	-1
4. Indicators of the component of training and development of the BSC		
Share of employees who underwent retraining in the total number of employees	5	-1
Percentage of required data received in real time through customer feedback channels	5	-2
Percentage of employees whose personal and goals and objectives are determined on the basis of the corporate BSC and comply with it	5	-2
Total points	135	-53

Source: compiled by the author of the article.

Table 8 shows that the absolute deviations of the actual scores from the required scores for the BSC indicators varied from -4 to 0 points. As a result, the total deviation was -53 points.

The next step is to compare the actual and permissible relative deviations from the required values of the indicators of the BSC of the Sigma company (Table 9),

Table 9. Actual and allowable relative deviations from the required values of Sigma's BSC indicators.

Index	Actual relative deviations, %	Permissible relative deviations, %
1. Indicators of the financial component of the BSC		
Revenue growth rate	- 4.29	0.00 _
Share of proceeds from the sale of new species products and services in total revenue	-5.00	0.00 _
Growth rate of the total cost of products and services	-9.30	0.00 _
Labor productivity by revenue	-4.41	0.00 _
Return on assets	-5.77	0.00 _
ROI	-8.97	0.00 _
The effect of financial leverage	0.00	0.00 _
2. Indicators of the client component of the BSC		
The share of repeated transactions in the total number of transactions	-7.50	0.00 _
The share of regular customers in the total number of customers	-5.00	0.00 _
Share of new clients in the total number of clients	-5.00	0.00 _
Market share occupied by the company	-6.67	0.00 _
Profitability of sales	-15.00	0.00 _
3. Indicators of the component of the internal business processes of the BSC		
3.1. After-sales performance		
The share of replacements of low-quality products performed on demand in the total number of replacements of low-quality products	-6.67	0.00 _
The share of applications executed on demand in the total number of repeated calls	-7.06	0.00 _
The share of upgrades of previously delivered products performed on demand in the total number of upgrades of previously delivered products	-6.90	0.00 _
Share of overdue customer accounts payable in total customer accounts payable	+30.00	0.00 _
3.2. Operating process indicators		
The share of low-quality products and services in the total volume of products and services	+10.00	0.00 _
Percentage deviation from the cost plan for products and services rendered	+20.00	0.00 _
The share of late deliveries in the total number of deliveries of products and services to customers	+10.00	0.00 _
3.3. Indicators of the innovation process		

The share of consumer preferences of customers acceptable to the company associated with the possibility of producing new types of products and services in the total number of consumer preferences of customers associated with the possibility of producing new types of products and services	-4.00	0.00 _
The degree of implementation of the identified wishes of customers in relation to completely new types of products and services in percent	-2.00	0.00 _
Share of sales of completely new types of products and services in total sales	-4.00	0.00 _
The share of the number of next generation products and services that can be produced by applying technological processes already used by the company in the total number of types of products and services produced by the company	-10.00	0.00 _
The share of new types of products and services that met the needs of customers the first time in the total number of new types of products and services	-3.00	0.00 _
4. Indicators of the component of training and development of the BSC		
Share of employees who underwent retraining in the total number of employees	-4.62	0.00 _
Percentage of required data received in real time through customer feedback channels	-5.00	0.00 _
Percentage of employees whose personal and goals and objectives are determined on the basis of the corporate BSC and comply with it	-7.00	0.00 _

Source: compiled by the author of the article.

The data given in Table 9 show that no allowable relative deviations from the required values of the indicators of the BSC of the Sigma company were planned. Consequently, the excess of the actual relative deviations of the allowable relative deviations of the Sigma company's BSC indicators is equal to their actual relative deviations. Under these conditions, the vast majority of actual deviations can be characterized as quite significant and require their overcoming.

Thus, the final stage of the IBABSC involves identifying the factors that caused the occurrence of excesses of the permissible relative deviations of the Sigma company's BSC indicators and developing measures to eliminate the identified excesses (Table 10).

Table 10. Exceedances of acceptable relative deviations of Sigma's BSC indicators, factors of their occurrence and measures to eliminate the identified exceedances.

Index	Excess, %	Factors	Events
1. Indicators of the financial component of the BSC			
Revenue Growth Rate	4.29	The volume of demand for the product as a whole. Product prices. sales structure. Sales volumes.	Optimization of the sales structure. Increase in sales volumes due to some reduction in prices.
Share of proceeds from the sale of new species products and services in total revenue	5.00	The volume of demand for new types of products. Prices for new types of products	Entering new markets. Advertising activation. Raising prices for new types of products that are in greatest demand.

Growth rate of the total cost of products and services	9.30	Depreciation deductions. Material costs. labor costs.	Improving the efficiency of the use of equipment, materials and production personnel.
Labor productivity by revenue	4.41	The level of production technology. The level of production technology. The level of organization of production.	Improvement of technique, technology and organization of production.
Return on assets	5.77	Asset turnover. net return on sales.	Acceleration of asset turnover. Increased net sales margin.
ROI	8.97	Investment turnover. Net return on sales as a result of investment.	Acceleration of investment turnover. Increased net return on sales as a result of investment.
The effect of financial leverage	-	Capital structure. The amount of fixed financial costs.	-
2. Indicators of the client component of the BSC			
The share of repeated transactions in the total number of transactions	7.50	The number of repeat trades. Total number of transactions	Ensuring the outstripping growth of repeated transactions in comparison with the total number of transactions.
The share of regular customers in the total number of customers	5.00	The number of regular customers. Total number of clients	Ensuring the retention and growth of the number of regular customers.
Share of new clients in the total number of clients	5.00	Number of new clients. Total number of clients	Ensuring new customers are attracted.
Market share occupied by the company	6.67	The total size of the market. Market size occupied by the company.	Ensuring the preservation and increase in the volume of the market occupied by the company.
Profitability of sales	15.00	Revenue. Revenue from sales.	Ensuring outstripping growth of profit from sales in comparison with revenue.
3. Indicators of the component of the internal business processes of the BSC			
3.1. After-sales performance			
The share of replacements of low-quality products performed on demand in the total number of replacements of low-quality products	6.67	The number of replacements of low-quality products performed on demand. The total number of substitutions for defective products.	Ensuring faster growth in the number of replacements of low-quality products performed on demand compared to the total number of replacements of low-quality products.
The share of applications executed on demand in the total number of repeated calls	7.06	The number of requests completed on demand. The total number of retries.	Ensuring faster growth in the number of applications completed on demand, compared to the total number of repeated calls.
The share of upgrades of previously delivered products performed on demand in the total number of upgrades of previously delivered products	6.90	Number of on-demand upgrades to previously delivered products. The total number of upgrades to previously delivered items.	Ensuring outstripping growth in the number of upgrades of previously delivered products, performed on demand, in comparison with the total number of upgrades of previously delivered products.
Share of overdue customer accounts payable in total customer accounts payable	30.00	The amount of overdue customer accounts payable. The total amount of customer accounts payable.	Ensuring outstripping growth of the total amount of accounts payable of clients in comparison with the amount of their overdue accounts payable.
3.2. Operating process indicators			

The share of low-quality products and services in the total volume of products and services	+10.00	The volume of low-quality products and services provided. The total volume of products produced and services rendered.	Ensuring outstripping growth of the total volume of manufactured products and services rendered in comparison with the volume of low-quality products and services rendered.
Percentage deviation from the cost plan for products and services rendered	+20.00	The actual cost of products and services rendered. Planned cost of products and services.	Bringing the actual cost of products and services in line with the planned cost.
The share of late deliveries in the total number of deliveries of products and services to customers	+10.00	The number of late deliveries. The total number of deliveries of products and services to customers.	Ensuring faster growth in the total number of deliveries of products and services to customers compared to the number of untimely deliveries.
3.3. Indicators of the innovation process			
The share of consumer preferences of customers acceptable to the company associated with the possibility of producing new types of products and services in the total number of consumer preferences of customers associated with the possibility of producing new types of products and services	-4.00	The number of customer preferences acceptable to the company related to the possibility of producing new types of products and services. The total number of consumer preferences of customers associated with the possibility of producing new types of products and services.	Ensuring faster growth in the number of customer preferences acceptable to the company associated with the possibility of producing new types of products and services, in comparison with the total number of consumer preferences of customers associated with the possibility of producing new ones types of products and services.
The degree of implementation of the identified wishes of customers in relation to completely new types of products and services in percent	-2.00	Number of identified customer wishes for completely new products and services implemented. The total number of customer requests for brand new products and services.	Ensuring faster growth in the number of implemented identified customer wishes in relation to completely new types of products and services compared to the total number of customer requests for completely new products and services.
Share of sales of completely new types of products and services in total sales	-4.00	The volume of sales of completely new types of products and services. Total sales.	Ensuring that the volume of sales of completely new types of products and services grows faster than the total volume of sales.
The share of the number of next generation products and services that can be produced by applying technological processes already used by the company in the total number of types of products and services produced by the company	-10.00	The number of next-generation products and services that can be produced using the processes already in use by the company. The total number of products and services produced by the company.	Ensuring faster growth in the number of next-generation products and services, the production of which is possible by applying the technological processes already used by the company, in comparison with the total number of products and services produced by the company.
The share of new types of products and services that met the needs of customers the first time in the total number of new types of products and services	-3.00	Number of new products and services that meet customer needs the first time. The total number of new products and services.	Ensuring faster growth in the number of new types of products and services that meet customer needs the first time, compared to

		the total number of new products and services.	
4. Indicators of the component of training and development of the BSC			
Share of employees who underwent retraining in the total number of employees	-4.62	The number of employees who have undergone retraining. The total number of employees.	Ensuring faster growth in the number of employees who have undergone retraining compared to the total number of employees.
Percentage of required data received in real time through customer feedback channels	-5.00	The volume of necessary data received in real time through customer feedback channels. The total amount of data received in real time through customer feedback channels.	Ensuring that the volume of required data received in real time through customer feedback channels outpaces the total amount of data received in real time through customer feedback channels.
Percentage of employees whose personal and goals and objectives are determined on the basis of the corporate BSC and comply with it	-7.00	The number of employees whose personal and goals and objectives are determined on the basis of the corporate BSC and correspond to it. The total number of employees.	Ensuring rapid growth in the number of employees whose personal and goals and objectives are determined on the basis of the corporate BSC and correspond to it, compared with the total number of employees.

Source: compiled by the author of the article.

The activities shown in Table 10 are in general terms. However, after specifying and detailing them, as well as determining the period of time for their practical implementation by the relevant managers of the Sigma company, these activities will make it possible to overcome the excess of the permissible relative deviations of the BSC indicators of this company and achieve the target values of these indicators.

5. Discussion

The scientific results presented in this article related to the development of the concept of integrated business analysis based on the balanced scorecard of the company, according to its author, have no analogues and therefore can be considered as fundamentally new scientific knowledge on this issue.

Let's compare the scientific results obtained by the author with the existing developments on the problem considered in the article, described earlier in the "Previous Research" section and reduced to the consideration of an integrated business analysis of the company's activities as such, that is, regardless of its balanced scorecard, and an integrated business analysis of the company's activities. company in relation to its BSC.

Regarding the previously formulated results of summarizing the points of view of a fairly large group of researchers who consider integrated business analysis regardless of the balanced scorecard of the company's development, it should be noted that for all their diversity, theoretical, methodological and methodological elaboration, they do not allow a comprehensive analysis of the overall long-term sustainability of the company, since they are not focused on its strategic goals and indicators describing them reflected by the BSC. Therefore, this kind of integrated business analysis is limited and uninformative to ensure effective strategic management of the company. The author's approach eliminates this shortcoming.

As for those few researchers who assume the use of a balanced scorecard in the process of conducting an integrated business analysis of a company's activities, then integrated business analysis in theoretical, methodological, methodological and practical terms is not well developed by them, but focuses on BSC indicators and allows to some extent analyze the implementation of the company's strategy and ultimately provide strategic management of its activities. However, it is not

focused on the study of the overall long-term sustainability of the company from the perspective of the main stakeholders equally. This is the weakness and limitation of this approach.

This article proposes a specific, well-defined conceptual approach to conducting an integrated business analysis based on a balanced scorecard, which is based on the previously developed by its author and the above-mentioned applied strategic analysis and its individual types. The integrated business analysis proposed by the author makes it possible to explore the overall long-term sustainability of the company from the perspective of the main stakeholders equally, thereby improving the efficiency of strategic management of its activities, and, consequently, its competitiveness and investment attractiveness. The article also discloses the main methodological aspects of integrated business analysis developed by the author based on a balanced scorecard (its purpose and objectives are clearly reflected; the procedure for conducting is presented; the system of selected BSC indicators, the regulatory framework, the rating algorithm) are reflected, which allows to explore the overall long-term sustainability of the company from the position of the main stakeholders equally, as well as a practical example of its use.

6. Conclusions

Having completed the presentation of the concept of integrated business analysis based on a balanced scorecard (IBABSC), the author of this article considers it necessary to formulate the following conclusions:

- integrated business analysis based on a balanced scorecard is a discipline aimed at a comprehensive (integrated) identification of business problems that affect the overall sustainability of the company in the long term, and finding their solution in the interests of all the main (key) stakeholders of the company equally on the basis of its balanced scorecard;
- the methodological basis of IBABSC is the concept of business analysis and the concept of a balanced scorecard;
- it can be considered as a type of business analysis, as well as a supporting function of strategic management;
- the main idea of IBABSC is to identify business problems as discrepancies between the balanced requirements of all the main stakeholders, specified in the target and/or required values of the most important general indicators of the company's BSC, and the corresponding actual values of these indicators, as well as developing recommendations for resolving these problems in order to improving the overall long-term sustainability of the company;
- the process of integrated business analysis based on a balanced scorecard begins with the formation of a balanced scorecard that reflects the interests of all the main stakeholders of the company equally, and ends with the development of recommendations to eliminate excesses of permissible relative deviations of actual from the required values of the most important (effective) indicators of the BSC as at the end of the relevant period and their reasons (if possible), as well as improving the level of the overall long-term sustainability of the company from the perspective of the main stakeholders equally.

7. Directions FOR Further Research

The conceptual foundations of integrated business analysis based on a balanced scorecard considered in this article as an innovative tool for a comprehensive (integrated) study of the overall long-term sustainability of the company from the perspective of the main stakeholders equally, in many respects, determine only its general outlines as a new direction of scientific research and practice, being a kind of "starting point" for further research in this area, primarily in the methodological and practical aspects.

The following can be considered as the main directions for the further development of integrated business analysis based on a balanced scorecard in its methodological and practical aspects:

- improvement of the above (general) IBABSC methodology in the direction of its greater objectivity, which will improve the accuracy of the analysis results;

- development of industry-specific IBABSC methods for companies in various sectors of the economy (trade, services, banks, etc.);
- distribution of IBABSC to the indicators of the company's current activities, since they are derived from the indicators of its BSC;
- construction of economic and mathematical models and writing of computer programs to facilitate the practical use of IBABSC methods.

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