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INSTRUMENTS OF THE STRATEGIC ACCOUNTING IN MANAGEMENT OF ORGANIZATION: OPPORTUNITIES AND CHALLENGES

Lahovska O. A.,

Doctor of Economics, Professor, Zhytomyr State Technological University

- A** Integration processes, that take place in the world economy, cause the necessity of developing of the mechanism of investment attractiveness of domestic enterprises improvement. Opportunities of value-based approach to management of the activity of the enterprise in this context have been described. In turn, the efficiency of management actions concerning implementation of this mechanism causes the necessity of the strategic accounting of the company. The article highlights the ways of: 1) adaptation of informational opportunities of the system of the strategic accounting to those informational queries, that are in demand concerning the support of the process of formation and assessment of value as integrated indicator of investment attractiveness and efficiency of activity of domestic business-formations; 2) instruments of the strategic accounting in management of the value of organization in terms of the feasibility of their application in this process.
- K** strategic accounting, balanced scorecard, value-based approach, value of the company, accountability scorecard, systemic scorecard, dynamic balanced scorecard, management, economic value added, economic analysis.

ІНСТРУМЕНТИ СТРАТЕГІЧНОГО ОБЛІКУ В УПРАВЛІННІ ОРГАНІЗАЦІЮ: МОЖЛИВОСТІ ТА ПРОБЛЕМИ ЗАСТОСУВАННЯ

Лаговська О. А.,

доктор економічних наук, професор, Житомирський державний технологічний університет

- A** Інтеграційні процеси, що відбуваються в економіці країни щодо світового господарства, породжують необхідність формування механізму підвищення інвестиційної привабливості вітчизняних підприємств. Описано можливості вартісно-орієнтованого підходу до управління діяльністю організації в цьому контексті. У свою чергу ефективність управлінських дій із реалізації вказаного механізму зумовлює необхідність трансформації стратегічного обліку компанії. У публікації розглянуті шляхи: 1) адаптації інформаційних можливостей системи стратегічного обліку до тих інформаційних запитів, що пред'являються до неї в частині забезпечення процесу формування й оцінки вартості як інтегрованого показника інвестиційної привабливості та ефективності діяльності вітчизняних бізнес-утворень; 2) досліджені інструменти стратегічного обліку в управлінні вартістю організації щодо доцільності їх застосування в цьому процесі.
- K** Стратегічний облік, система збалансованих показників, вартісно-орієнтований підхід, вартість компанії, система показників відповідальності, система систематичних показників, динамічна система збалансованих показників, управління, економічна додана вартість, економічний аналіз.

ИНСТРУМЕНТЫ СТРАТЕГИЧЕСКОГО УЧЕТА В УПРАВЛЕНИИ ОРГАНИЗАЦИЕЙ: ВОЗМОЖНОСТИ И ПРОБЛЕМЫ ПРИМЕНЕНИЯ

Лаговская Е. А.,

доктор экономических наук, профессор, Житомирский государственный технологический университет

- A** Интеграционные процессы, происходящие в экономике страны относительно мирового хозяйства, порождают необходимость формирования механизма повышения инвестиционной привлекательности отечественных предприятий. Описаны возможности стоимостно-ориентированного подхода к управлению деятельностью организации в данном контексте. В свою очередь эффективность управленческих действий по реализации данного механизма обуславливает необходимость трансформации стратегического учета компании. В публикации рассмотрены пути: 1) адаптации информационных возможностей системы стратегического учета к информационным запросам, пред'являемым к ней в части обеспечения процесса формирования и оценки стоимости как интегрированного показателя инвестиционной привлекательности и эффективности деятельности отечественных бизнес-образований; 2) исследованы инструменты стратегического учета в управлении стоимостью организации на предмет целесообразности их применения в данном процессе.
- K** Стратегический учет, система сбалансированных показателей, стоимостно-ориентированный подход, стоимость компании, система показателей ответственности, система систематических показателей, динамичная система сбалансированных показателей, управление, экономическая добавлена стоимость, экономический анализ.

Statement of the problem

Value-based approach to management is aimed at the balance of interests of different groups of people interacting with the organization. It is not aimed not only at the absolutization of interests of owners of the corresponding group of stakeholders. Achievement of positive growth of the value of the company can be reached by means of balancing of three sectors of its activity (economic-social-environmental). At the same time, the priority of only financial

indicators in the company's operations management is leveled in contrast to non-financial indicators.

Changes of reference points in management (in particular, the immateriality of the most components of the value of the company, whose efficiency of management is not possible to measure and to present by means of parametric indicators, the need for formation of complete set of value factors in order to take into account their impact in the process of implementation of management functions) determine the need for the implementation of an effective mechanism of integration of financial and non-financial indicators as a basis for improving the quality of information support for managerial staff, and, as a consequence, the creation of conditions for maximizing the value of the company. The problem is exacerbated by the lack of evidence-based integrated system of interrelated indicators serving as an effective tool for management of the value of organization based on the balancing antagonistic interests of stakeholder groups. This predetermines the need for formation of the information support of analytical procedures as a basis for modeling of the activity of the company and forecasting its states under the influence of the identified factors of value.

Analysis of recent research and publications

The research of issues of accounting and analytical support of management, including the value of organization, has been made by Ukrainian economists: Yu.Yu. Moroz, O.V. Oleinyk, M.S. Pushkar, V.K. Savchuk; foreign economists: N.A. Adamov, A. Apcherch, R. Banker, M.A. Vakhrushyna, M. Verner, P. Uytmen, D. Hobbs, P. Dzhein, Э. Dzhenkyns, K. Dzhons, R. Kaplan, T.P. Karpova, Dzh. Cyhel, Ch. Khornhren, M. Khan, Dzh. Foster, Y. Shym.

The goal of the research. Taking the identified problem of the research into consideration, it is necessary to substantiate the choice of the effective accounting and analytical tool of management of the value of the organization.

Presentation of the basic material of the research

One of the means of solving the declared problem is Balanced Scorecard (BSC), which allows "to balance short-term and long-term goals, internal and external aspects of activity, financial and non-financial information" [3, p. 27]. This system is based on the principles of the Stakeholder theory. This theory was popular at the beginning of the twentieth century. Prototypes of the system of R.S. Kaplan and D.P. Norton are concepts of economists of post-Soviet countries (in particular, the search for an integrated system of indicators as an effective management tool has been carried by M.I. Bakanov, M.V. Melnik, A.D. Sheremet, etc.) and French economists in

terms of formation of the board of key indicators "tableau de bord".

Problems of complex analytical support of management of the activity of the enterprise were investigated by a number of Ukrainian economists, in particular by I.M. Parasyi-Verhunencko, O.V. Oleinyk, V.K. Savchuk.

Balanced Scorecard (hereinafter - BSC) is one of the most popular tools of management, which is actively used by leading world companies. Thus, according to the survey, conducted in 2009 among the management personnel over 1430 largest companies in North America, Latin America, the Pacific region, Europe, the Middle East by the consulting company "Bain & Company", 53% of respondents used BSC. At the same time, the level of satisfaction from its use was 3.83 out of 5, and its popularity assumes 6th spot in the rankings of the 25 most advanced management tools, which have been chosen as the objects of the study, after benchmarking, strategic planning, management of relationships with customers and outsourcing [11, p. 9]. This study covered companies of different sectorial focus, namely: food, pharmaceutical, biotechnological, chemical, manufacturing, constructional, retail trade, as well as companies that provide financial services and dealing with the supply of electricity. Considering the popularity of BSC, the possibility of its modification (as evidenced by the research of L.S. Maisel [9, p. 50], M. Epstein, P. Wisner [2]) and a fairly high level of satisfaction from its usage in the process of implementation of management actions, the research should be directed at:

1) identification of root causes of the appearance of BSC and their validity;

2) determination of advantages and disadvantages of BSC, named by leading foreign economists. The research of their papers is caused by the priority spread of this system in the English-speaking countries and a large period of its approbation in the economic entities of these countries;

3) proofs of the possibility of integration of principles of value-based management with BSC;

4) the development of the modified version of this system, that takes into consideration key indicators of the efficiency of implementation of management actions in the course of economic, environmental and social activities in the interests of groups of stakeholder in implementation of these activities and on the basis of the common focus on maximization of the value of the company.

The first reason, that prompted the development of BSC, was the failure of financial indicators to meet the requirements of management. Thus, disadvantages of financial indicators, which served as the impetus of the development of BSC, P. Niven systematizes by means of the following groups: 1) disregard of current conditions of the business environment (these figures can not

be indicators of problems or opportunities that arise in the field of relations with customers, quality, relationships in the work collective); 2) reflection of performance of past activity; 3) focus only on short-term goals; 4) inconsistency to the needs of all levels of management [10, p. 3-4].

I.I. Yaremenko has radically different position concerning the priority of non-financial indicators and even concerning their ability to act as a basis for making management decision and to influence the controllability processes taking place in the enterprise. Thus, I.I. Yaremko notes, that “nowadays, theoretical researches and publications are based on Balanced Scorecard (related to her models), which has been developed (more properly poured from forgotten forms of organic balance theory)” by the professor of the department of accounting of Harvard University R. Kaplan and financial analyst D. Norton. Instead of improvement (brining to the terms of the real economy of the entire financial reporting system and the balance sheet format) of formalized accounting methodology, they started the development of the system that allows to evaluate value characteristics of potential of the company and capitalization efficiency of functioning of the company (the reproductive value of the enterprise and the real profit according to the organic balance theory) by means of non-financial indicators”[13, p. 551-553].

Concerning this author’s position, it should be noted that BSC is not based solely on the performance of non-financial nature, but it integrates financial performance with non-financial, the first ones of which, according to developers, “reflect the results of the past activities”, the last ones “determine the results of future activities” [6, p. 71].

Taking these circumstances and priorities of non-financial indicators during the process of production of value-oriented management, we believe, that the usage of synthesizing properties of BSC is expedient.

Let’s determine advantages and disadvantages of BSC. As noted above, in modern conditions of managing BSC is a rather popular management tool, the level of satisfaction from the usage of which according to the consulting company “Bain & Company” is 3.83 out of 5. A number of shortcomings of this system, which arise during the process of its implementation, influence the decrease in the level of satisfaction.

Analyzing shortcomings of BSC, which are determined by the authors, it is important to note those ones, that are of the highest priority: the complexity of the selection of key indicators according to relevant prospects and establishment of correlation between them and the strategic objective of the activity, in particular, that one, that under the conditions of the implementation of value-based management approach is to maximize the value of the company and to ensure its growth in the

long term. Concerning the insufficient level of flexibility of this system and, as a consequence, the insufficient consideration of interests of all groups of stakeholders in the traditional prospects, we consider this shortcoming of organizational character to be ill-founded, as BSC may be modified with other target prospects with their subsequent relationship with classical ones and thereby cover the interests of key stakeholder groups. Thus, we believe, that it would be appropriate to introduce into BSC the prospects “Social Processes” and “Environmental Processes”, which correspond to the concept of sustainable development and does not contradict the concept of value-based management as the basic one and neutralizes the negative effects of shortcomings, which have been singled out by C. Chen and L. Chen.

However, despite the shortcomings of organizational and methodological nature, arising during the process of implementation and application of BSC as a management tool, the experience of the world’s best companies shows the benefits of its use: 1) improvement of financial performance indicators, 2) interlinkages of long and short term goals, 3) rise of level of coordination of work among the employees during the process of the achievement of the strategic objectives of the activity; 4) improvement of the efficiency of operational management, 5) improvement of the competitiveness of the enterprise; 6) promotion to the implementation of the strategy [4].

In addition to the aforementioned advantages, managers of the corporation “JoseR.LindleySA”, which is engaged in manufacturing soft drinks, note the following benefits, received by them after the implementation of BSC: 1) the establishment of two-way communication between the strategic priorities of the activity of the company and its operation activity; 2) the establishment of the integral system of evaluation of results of the activity of the enterprise, that allows to control and to monitor all business – processes in order to ensure the achievement of the set goals; 3) control of the fulfillment of the strategic plan of activity of the enterprise; 4) prompt detection of deviations of operational indicators from the planned standards; 5) ability to use for the evaluation of results of the activity of employees and determination of adequate remuneration; 6) conversion of a significant amount of data into information, that is useful for decision-making [8].

Managers of the company “Bristol-Myers Squibb Co.” (the chemical & pharmaceutical corporation, which is in the list of Fortune 500 and manufactures a wide range of foods, beverages, pharmaceutical and cosmetic products, baby foods and also household chemicals), mention, that implementation of BSC allows to single out and to focus at the very important aspects of the activity of the company, to coordinate the work of

structural subdivisions, to improve the system of motivation of personnel and helps to identify risks and to manage them in the future [2].

Considering shortcomings of BSC, individual economists propose their own management tools and approaches to evaluation of the effectiveness of

management actions and performance of the business unit in order to address them. At the same time, the majority of them are based on BSC, proposed by R. Kaplan and D. Norton, or on the prototype system tableau de bord, which is popular among French companies. Systematization of the most common approaches is presented in the table 1.

ALTERNATIVE BSC APPROACHES TO EVALUATION OF THE RESULTS OF THE ACTIVITY OF THE COMPANY Table 1

NAME (AUTHOR)	
CHARACTERISTIC	SHORTCOMINGS
Tableau de bord	
This concept is based on a set of key performance indicators, that describe internal processes of the company and ensure their control from the side of the subjects of management	Difficulty of identification of key performance indicators
Carnet de bord équilibré (J. Hoffeker, K. Goldenberg)	
Is a modified variant of the previous approach	Difficulty of identification of key performance indicators
OVAR (Objectifs-Variabes d'Action-Responsables) (D. Michel, M. Fiol, H. Jordan)	
This concept is focused on the consistent definition of groups of target and functional indicators. These groups of indicators are ranked according to the hierarchical levels of management (for the whole company and for lower-level managers), determining the level of responsibility of certain subjects. Target indicators and indicators of responsibility form an OVAR control outline, which can be multi-layered	Difficulty of identification of key target and functional (responsibility) indicators
Accountability Scorecard / Stakeholder Scorecard (F. Nickols)	
Is focused on the evaluation of the results of the activity of the company, based on its ability to ensure balance (optimum) between the different interests of such groups of stakeholders, as customers, employees, suppliers, management personnel, society as a whole by means of controlling the process of creation of value for each of the groups and implementation of its exchange to the new cost (raw materials, labor), suppliers of which are the subjects of these groups	Difficulty of the selection of indicators for the assessment of results of the activity of the company
Systemic Scorecard (C. Voelpel, M. Leibold, R. Eckhoff, T. Davenport)	
This system includes four prospects: "value for the client", "systematic changes and upgrading", "externally-oriented business processes", "value for stakeholders". In frames of the prospect "clients" results of the activity of the company are evaluated based on its ability to create new, different from competitors value for customers, based on competitive advantages, which belong to it, in frames of the prospect "value for stakeholders" – based on the totality of financial and non-financial indicators, that describe the growth of the value for this group, by the prospect "externally-oriented business processes" – based on the ability of the enterprise to establish relationships with the external environment and effectively implement internal business processes on the basis of the reached agreements, in frames of the prospect "systematic changes and upgrading" – based on the ability to innovate and training	Difficulty of the selection of indicators for the assessment of the results of the activity; overemphasis on the external features of the activity and almost complete duplication of BSC prospects
Dynamic Balanced Scorecard (F. Ridzak)	
Possibilities of this system are oriented on the large enterprises that have several separate divisions. It assumes primary development of the structure of indicators for the enterprise as a whole, and then, on the basis of it, formation of a set of performance indicators for the structural units	Is in the stage of the development, is one of the most difficult, needs additional knowledge, low level of testing in practice, especially in large enterprises

Present modified variants of BSC, which, according to the results of the analysis, do not neutralize shortcomings of BSC and on the contrary add their list with specific problematic moments. That is why it can be stated, that in conditions of the usage of value-based approach to the management, modified variant of BSC can be recognized in the capacity of universal instrument among the existing ones. This allows to co-ordinate tactic and strategic goals of functioning of the company (maximization of the value and obtaining of the greatest possible profit), fully evaluate the results of its operations, to identify the factors of the impact on the value, their connection with the performance indicator, as well as the potential sources of added value creation. BSC also allows to structure the information flows, has an impact on improving the quality of information support of management personnel and the effectiveness of the performance of its duties, as well as on the efficiency of the company as a whole.

Implementation of activities by domestic economic entities should subordinate to the concept of sustainable development, requires them to fulfil social and environmental functions, implementation of which can be seen as a means of reproduction at the social level. At the same time, it is necessary to consider consequences of social and environmental activity or inactivity of the organization in the process of value-based management.

As it was mentioned by BSC developers, the model of four components, proposed by them, "is a model, not a dogma" [12, p. 25]. Four components are only a minimal set, which allows to describe the company's activities, and depending on its specific features may be supplemented by others.

Except abovementioned, separate economists, in particular S. Jonson, M. Radcliffe, E. Nilsson, M. Epstein, P. Wisner emphasize on the need of singling out in the capacity of the component of BSC the prospect, that characterizes environmental and social aspects of the activity of the enterprise, as "leading companies in the whole world recognize the importance of management of social and environmental consequences of their functioning, the benefits of which are essential and appears as a reduction of the magnitude of the environmental costs and as an increase of revenues as a result of the formation of a positive image of the company" [2].

Thus, M. Epstein, P. Wisner mention the ability of receiving of such benefits under condition of singling out of mentioned prospect in the structure of BSC: 1) possibility of considering the environmental and social aspects of activity as one of the strategic prospects of the activity of the enterprise, allowing to create a number of competitive advantages in the form of a positive image and business reputation, and not just as means to improve operational efficiency, 2) ability to focus attention of management personnel and employees on the

social and environmental responsibility of business as a key mechanism for creation of added value, 3) ability to track the correlation between the costs, associated with environmental and social aspects of the activity and implementation of the business-strategy [2].

Considering the support of both business and economists, we believe that in order to strengthen management in the context of environmental and social orientation it is necessary to extend classical projections of BSC by means of prospects "Social Processes" and "Environmental processes".

Introduction of these prospects is determined by the following factors:

1) prospect "Social processes":

- significant impact of the level of social activity in the framework of the existing social policy on the growth of the value of the company, as well as on the level of potential threats and opportunities associated with it, implemented through the appropriate objects of accounting reflection, in the capacity of initial assumptions in forecasting of prospects for the company's activities;

- close correlation of the social activity, the level of motivation of employees as bearers of the company's workforce and the effectiveness of its functioning;

- minimizing the negative effects of social tension within the internal environment through the satisfaction of requirements of relevant groups of stakeholders.

2) prospect "Environmental processes":

- priority of environmental activity of the company for the majority of groups of stakeholders and the need to monitor the process of balancing the environmental risks and benefits of functioning of the business unit as a whole;

- significant level of influence of actual and conditional (future) results of environmental activity of the company to the level of its value and other indicators of the efficiency in the future;

- the need for achieving the balance of interests of groups of stakeholders in the frames of environmental activity of the enterprise.

Regulation and accounting in frames of realization of environmental and social components of the activity and their tight correlation with other prospects of management will allow to reach positive dynamics of resulting indicators of activity of the company on different hierarchic levels of management.

Integration of possibilities of BSC into procedures of value-based management will allow to realize management activities, that are based on the system approach of examination of the enterprise as dynamic object with complicated hierarchy of structural elements and indicators, that describe their interaction and interdependence.

Realization of value-based approach to management on the basis of BSC proposes passing of the complex of

interconnected stages. The first one is to establish cause-and-effect relations between strategic goals of the activity of the company and key indicators, which will help to monitor, and also preliminary, current and next evaluation of results of the activity and formation of infobase as the source of receiving information in frames of dedicated indicators. The source of internal information in the vast majority are the accounting data during organization of the communication process on the network type "wheel". The source of external information are regulations, statistics and etc.

The choice of key indicators is rather labor-intensive and methodologically difficult process. As it was mentioned by R. Kaplan, D. Norton, every chosen indicator must be a separate link of cause-and-effect relations, directed to the improvement of financial activity [12, p. 43].

Results of internet-survey, conducted by the consulting company "2GC Active Management" in 2010 at 50 enterprises of different branches in Great Britain, showed, that usually during the development of BSC companies choose from 2 to 5 its components, average number of indicators is 26. At the same time 22 % of companies use the component "clients", 19 % - "finance", 15 % - "shareholders", 15 % - "education", 13 % - "internal processes", 11% - "people", 6 % - "operations", 4 % - "style of management".

Brown M. determined two approaches to determination of key indicators of evaluation of results of activity. The first one is in structuring of indicators, used by the company during the long time, over the chosen directions, choosing the most priority ones, statement of cause-and-effect relations between them, and also in gradual introduction of new indicators. In contrast to the first approach, the second one supposes, that all new indicators must be introduced at once [1, p. 16]. At the same time, as the economist points out, in order to ensure the efficiency of BSC the totality of indicators must be: 1) chosen in accordance with the stage of the cycle of the company and the level of its development, 2) correlated with the strategy of the activity of the company, 3) balanced around key groups of stakeholders, 4) developed by means of taking into account needs of managerial personnel of both higher and lower levels of management [1, p. 7].

Taking into consideration the need for formation of the system of aggregative indicators, that certify about the efficiency of realization of activities of managerial personnel on certain priority directions (projections) in frames of the chosen strategy, to our mind, it is important to keep to the next sequence: 1) clear definition of strategic goals of organization and definition of key informative needs and interests of groups of stakeholders for the accounting during formation of the panel of indicators and increasing of their ability to inform managerial

personnel about the level of satisfaction of the circle of certain needs and consideration of interests during realization of the activity in frames of certain groups of subjects within identified prospects; 2) to identify key indicators and indicators of lower sequence on projections based on established interconnections between them and reasoning from correlation with strategic goals of the company with amendment for the stage of its life cycle. The last amendment is caused by the dependence of the model of management from the stage of life cycle and correspondingly changes in priority indicators of the efficiency of its realization, 3) monitoring of changing of key indicators from established parameters and factors of influence on this process.

Compliance with this sequence during the formation of key indicators of the strategic map minimizes redundant information, that turns into noise for users and helps to improve the efficiency of the process of decision-making, since, as confirmed by studies of E. Iselin [5], excessive or unstructured information reduces the quality of decisions taken on its basis, in particular, adversely affects their efficiency.

The first stage in the process of determination of indicators is formation of the strategic goals and singling out of interests and needs of groups of stakeholders. Concerning the first part, the more priority thing is the growth of the value of the company and added value for shareholders. This can be achieved basing on the search of optimal combination of different interests of different groups of stakeholders that are direct or indirect participants of this process.

Thus, during the process of implementation of the first phase we propose to introduce:

1) clear definition of the priority objectives of the company on selected prospects are projections of the management vision of the production of economic, social and environmental performance;

2) detailing of the strategic goals of functioning on the tactical level of management and establishment of their connection with interests of groups of stakeholders, with whom organization interacts or indirectly have a significant impact on its operations.

Realization of the second stage provides for:

1) singling out of financial and non-financial indicators on dedicated projections, definition of correlation with changes of internal and external factors of value, definition of correlation between these indicators both in frames of projection and on the level of other projections;

2) establishment of limit values of indicators as borders of values of variation considering the stage of the life cycle of the organization.

The main financial goal of the activity of organization during the usage of value-based approach to management is creation of added value for shareholders. Considering

this, the first group of indicators, which is being proposed to include into BSC, are indicators that allow to determine the amount of growth of value of the company.

During the process of formation of the prospect of BSC “Clients” we consider appropriate to base on peculiarities of management of correlation with clients (Customers relationship management), which is one of the components of value-based management, as presupposition of maximization of value of the enterprise is establishment of proper relations with buyers and customers during advancement of products (goods, works, services).

Management of correlations with clients is totality of processes, connected with establishment or support of existent correlation with clients in order to provide the possibility of creation added value for them and, as a consequence, and for the enterprise. Main goals of management of correlation with clients is growth of the quantity of constant and new clients and growth of the level of their loyalty, growth of profitability of clients, creation of value for clients [7, p. 5-6]. Considering the direction of this concept of management, formation of the list of indicators in frames of this projection, that characterize creation of the value for the customer, we consider appropriate to carry out in three groups (correlation with clients, satisfaction of clients and image) with filling these groups with both quantitative and qualitative indicators. Usage of qualitative indicators will allow to determine what represents the greatest value for the customer in the company’s products, the quantitative indicators will measure the performance of a selected target segment.

During the process of formation of indicators on the prospect “Internal processes” it is important to determine

those business-processes, with further accentuation of attention on indicators, which must be improved and developed with the aim of creation the value for customers and achievement of tangible competitive advantages.

Considering the priority of labor resources in the process of creation of added value of the enterprise as the source of knowledge and skills, and also that fact, that technologies and corporate culture are the sources of creation of added value, an important thing is definition of the list of indicators on the prospect “Learning and prospects of growth”, on the basis of which will be their assessment, in order to provide the ability of increasing of the efficiency of internal business - processes, improvement of correlation with clients, as the result of increasing of the level of their satisfaction and, ultimately, improvement of the financial performance.

As for formation of prospects “Social Processes” and “Environmental processes”, during the process of selection of key performance indicators it is important to take into account the density of their relationship with the key indicators for the prospect “Finance” and the probability of the occurrence of unexpected facts of economic life.

Inclusion of coefficients of social and environmental activities in corresponding prospects is caused by the level of their connection with growth of the value of the company (economic value added). These coefficients indicate the level of incurred costs in the context of relevant types of activities, including those, that must be capitalized in relation to the level of the profit of the previous reporting period. At the same time, it must be noted, that the level of these coefficients is connected with the probability of occurrence of contingent liabilities of both environmental and social nature (tables 2, 3)

EVALUATION OF THE RELATION BETWEEN CONTRIBUTIONS OF THE COMPANY FOR THE IMPLEMENTATION OF SOCIAL AND ENVIRONMENTAL ACTIVITIES (INITIAL DATA)

Table 2

SERIAL NUMBER OF THE COMPANY THAT IS THE SUBJECT OF THE RESEARCH	COEFFICIENT OF SOCIAL / ENVIRONMENTAL ACTIVITY	EVA THOUSAND. UAH.
Initial data for social activity		
1	0,00	85998
2	0,00	94670
3	0,10	123000
4	0,11	192000
5	0,20	378900
Initial data for environmental activity		
1	0,00	85998
2	0,00	94670
3	0,10	123000
4	0,15	192000
5	0,30	378900

In this calculation resulting sign – is EVA during the period, factorial - values of coefficients of social and environmental activity, that certify the level of costs of the company for the support of social and environmental processes, initiated by them.

In order to determine the level of connection and its density, we should determine the coefficient of determination (η^2):

$$\eta^2 = \delta^2 / \sigma^2 \quad (1)$$

где, δ^2 – factorial dispersion;
 σ^2 – common dispersion.

ASSESSMENT OF THE RELATION BETWEEN CONTRIBUTIONS OF THE COMPANY TO THE REALIZATION OF SOCIAL AND ENVIRONMENTAL ACTIVITIES (CALCULATED DATA)

Table 3

№	x	y	xy	x ²	y ²	y	(y- \bar{y}) ²
Environmental activity							
1	0,00	85998	0	0	7395656004,00	13374,15	18752412966,30
2	0,00	94670	0	0	8962408900,00	13374,15	18752412966,30
3	0,10	123000	12300	0,01	15129000000,00	180373,48	903596385,61
4	0,11	192000	21120	0,0121	36864000000,00	197073,413	2186480111,79
5	0,20	378900	75780	0,04	143565210000,00	347372,81	38832332245,82
TOTAL	0,41	751568	109200	0,0621	211916274904,00	751568,003	79427234675,84
Social activity							
1	0,00	85998	0,00	0,00	7395656004,00	98137,766	2722317653,60
2	0,00	94670	0,00	0,00	8962408900,00	98137,766	2722317653,60
3	0,10	123000	12300,00	0,01	15129000000,00	145570,344	22498477,48
4	0,15	192000	28800,00	0,0225	36864000000,00	169286,633	359975981,22
5	0,30	378900	113670,00	0,09	143565210000,00	240435,5	8121956859,61
TOTAL	0,55	751568	154770,00	0,2125	211916274904,00	751568,009	13949066625,50

Environmental activity:

$$\begin{cases} na + b \sum x = \sum y \\ a \sum x + b \sum x^2 = \sum xy \end{cases} \quad \begin{cases} 5a + 0,41b = 751568 \\ 0,41a + 0,0621b = 109200 \end{cases}$$

$$\begin{aligned} b &= 1669993,3 & a &= 13374,15 & \bar{y} &= 150313,6 \\ \delta^2 &= 15885446935,17 \\ \sigma^2 &= 189322096559,04 \\ \eta^2 &= 15885446935,17 / 189322096559,04 = 0,0839 = 8,39\% \end{aligned}$$

Social activity:

$$\begin{cases} na + b \sum x = \sum y \\ a \sum x + b \sum x^2 = \sum xy \end{cases} \quad \begin{cases} 5a + 0,55b = 751568 \\ 0,55a + 0,2125b = 154770 \end{cases}$$

$$\begin{aligned} b &= 474325,78 & a &= 98137,766 & \bar{y} &= 150313,6 \\ \delta^2 &= 2789813325,1 \\ \sigma^2 &= 19789076635,84 \\ \eta^2 &= 2789813325,1 / 19789076635,84 = 0,14097 = 14,097\% \end{aligned}$$

Results of calculations are the evidence of that fact, that the growth of EVA for 8,39 % and 14,097 % depends on the level of contributions in frames of realization of environmental and social activities correspondingly.

Considering these results, one should note a direct correlation between the prospects, planned for the

introduction into BSC for the operational control of a key indicator of a strategic nature - the company's value and the level of its growth.

Considering the company as a socio-environmental-economically formation and the complexity of these connections it can be concluded that the introduction of BSC with the proposed set of prospects will ensure the achievement of strategic goals of the activity based on taking into account activities of divergent interests of stakeholder groups in the context of types of activities, that ensure achievement of sustainable development. Operational monitoring of these types of activity can be carried out on the basis of coefficients of social and environmental activities as the basis for the improvement of the quality of the indicator of the value of the company as a whole and in the context of relevant groups of stakeholder.

Monitoring of solely on the dynamics of the indicator of growth of the value of the company is only a tactical measure, as for functioning of the company in the future, ensuring of the level of its sustainable development and considering global problems of the development of the society and economics of the country, where this business-unit is situated, it is important to base on the level of the quality of the resulting indicator (in conditions of value-based management – this

is a value of the company and EVA, which have been created during the period). Consideration of BSC in the capacity of accounting and analytical tool of management and expansion of its capacities by means of introduction into the system of indicators of certain indicators on the prospects of “Social Processes” and “Environmental Processes” will be the basis for the improvement of the level of quality of performance indicators with maintenance of the positive dynamics of their growth.

Conclusions and perspectives of further research

Investigation of peculiarities and methodological difficulty of analytical support of the process of evaluation of the value of the company allowed to substantiate the expediency of integration of BSC and EVA as instruments of management under condition of application of branchy version of the first instrument in terms of widening of its system panel of indicators of management by prospects “Social processes” and “Environmental processes”, that will help to increase the level of the quality of the indicator of EVA and the value of the enterprise as a whole.

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