

## **DEVELOPING AND IMPLEMENTING THE SBS MODEL WITH THE AIM OF IMPROVING ENTERPRISE COMPETITIVENESS .**

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**Bojan Krstić, Vladimir Ivanović**

University of Niš, Faculty of Economics, Serbia

**Abstract.** *Dynamic business and stricter customer requirements can cause expansion of the Balanced Scorecard (BS) with dimensions of sustainable development and corporate social responsibility. That is how we get a Sustainability Balanced Scorecard concept (SBS) which represents an opportunity for enterprises to translate their missions, visions, and sustainable development strategies into the operational targets and actions. Their successful realization will be monitored via key success factors or key performance measures. Expansion of the traditional BS model with ecological (environmental) and social components represents a significant step in practical implementation of socially responsible business. Application of the expanded BS model becomes one more challenge for the management of modern enterprises. The aim of this paper is to light up key aspects of SBS model development and application. Considering the fact that social responsibility, sustainable development and ecological dimension of business activities can cause improved sales to the ecologically (environmentally) conscious customers, create benefits from "green" purchase, make savings from ecologically acceptable production process, then the application of SBS model can have a positive reflection on improving business performances and enterprise competitiveness.*

**Key Words:** *balanced scorecard, business performance, sustainable development, corporate social responsibility, Sustainability Balanced Scorecard.*

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**Corresponding author:** Bojan Krstić

Faculty of Economics, Trg Kralja Aleksandra 11, 18000 Niš, Serbia

Tel: +381 18 528-686 • E-mail: bojan.krstic@eknfak.ni.ac.rs

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## INTRODUCTION

Corporate social responsibility and sustainable development are subjects that have recently become very exploited, because of their importance for business success and enterprise competitiveness. Having in mind that information about working conditions, environmental problems, ethical behaviour and other matters get to the customer quickly, they are making an increasing pressure on enterprises to correct their actions. Enterprises, therefore, must take more responsibility in order to maintain the trust and loyalty of its customers based on their satisfaction with products/services. Otherwise, corporate social responsibility and sustainable development are concepts that have lately emphasized the legal obligation, but primarily the voluntary decision by an enterprise to contribute to a better society and so called "healthy environment". This is achieved by integrating social and environmental objectives into daily business operations and competitive strategy.

Whether the management will succeed to overcome the challenges of integration of social responsibility and sustainable development components into the "Balanced Scorecard" (BS) and successfully implement a new concept "*Sustainability Balanced Scorecard*" (SBS), depends exclusively on its ability. Corporate social responsibility is gaining a greater importance, so more and more enterprises want to play the role of good corporate citizen. Declarative disclosure of policies, codes of conduct and similar activities are only an initial step towards corporate social responsibility. Consistent application of the concept of social responsibility in everyday business is a challenge for several reasons. First, management systems of most enterprises focus solely on financial performance, ignore non-financial, and especially the social responsibility performance. Second, social responsibility is the domain of human resources department which, in most enterprises, is more concerned with operational aspects such as recruitment, selection, etc., and less or not at all concerned with aspects of strategic human resource development. Third, enterprises should have a specifically responsible person and the department, which will focus on the achievement of corporate social responsibility and sustainable development practices.

SBS allows enterprises to translate their missions, visions, and strategies for sustainable development into operational objectives and actions. The success of their implementation will be monitored by key success factors or by using more diversified set of key performance measures. Improvement of the classical BS with environmental and social components represents an important step in promoting the concept of corporate social responsibility. Inclusion of sustainable development dimensions requires the extension of existing perspectives (as well as a set of indicators) in the BS, or addition of new perspective to the existing concept, which is composed of four standard dimensions (financial, customer, business processes efficiency, and employee learning and development). The current perspectives in BS cover financial and non-financial determinants of success of the enterprise - the economic aspect of sustainable development. But, the conventional BS does not explicitly emphasize the social responsibility of enterprise and its sustainable development. The question is how the process of managing social responsibility and sustainable development can be supported by modified enterprise management system? The answer to this question can be provided by a consideration of the process of developing and implementing the relatively newer SBS model.

## 1. EXPANDING THE CONCEPT OF BS WITH THE DIMENSIONS OF SUSTAINABLE DEVELOPMENT AND ITS EVOLUTION TO THE SBS CONCEPT

A new dimension in the BS, besides existing perspectives - financial, customer, business processes, and employee learning and development - may be described as a perspective of social responsibility and sustainable development. This perspective is directed towards the needs and interests of the community as a specific stakeholder of the enterprise. This perspective should cover environmental and social aspects of sustainable development and to emphasize the tendency of contemporary enterprises to operate much more in a socially responsible manner. In this regard, one can emphasize the necessity that business performances be improved "in all three dimensions of sustainability - economic, environmental and social - simultaneously." (Figge, Hahn, Schaltegger, Wagner 2002a, 272). In fact, for business performance improvement and achievement of sustainable development in enterprises, it is relevant to focus on: 1) Economic dimension of sustainable development (financial or profit), and 2) Non-economic dimensions of sustainable development and corporate social responsibility (precisely, ecological/environmental and social dimensions) (Krstić, Ivanović 2010).

Researches of the current literature dealing with the problem of developing the BS, the concept of corporate social responsibility and sustainable development of the enterprise, provide analysis of the proposed SBS concept and BS extension with the dimensions of sustainable development.

The authors (Gminder, Bieker 2002a) identify three possible approaches in designing the SBS. The SBS should be developed jointly by managers who deal with environmental dimension of business activity and sustainable development of enterprises, and managers who have previously had experience in applying the BS.

a. *Gminder and Bieker called their first approach "Stand-alone SBS plus integration later"*. It emphasizes the development of a special management instrument, so called, *stand-alone SBS* in strategic business units (SBUs) for which the sustainable development dimension (environmental and social) is relevant. Later on, the full integration of these dimensions in the BS at the enterprise level will be performed. This approach is proposed for cases when an enterprise uses environmental and social actions on the assumption that they will contribute to its financial performance.

b. *Second approach, "Integrated SBS"*, is basically the "standard" BS, but keeping in mind two key moments: 1. To include, uniformly, environmental and social component in the BS model, and 2. "Cause-effect" relationships among the perspectives and among the objectives within them, do not necessarily end in the financial perspective of BS, because certain objectives of an enterprise are non-economic, such as ecological, social, ethical, etc. The authors suggest several ways in which it is possible to integrate environmental and social component in the concept of BS.

- *"Partial integration"* means that only one or two environmental/social objectives/indicators are integrated in the specific BS. Therefore, they will be associated with only one perspective in a "scorecard", which is the most exposed and the most associated with sustainable development. For example, internal business processes perspective or the consumer perspective.

- "*Additive integration*" consolidates social and environmental aspects in a separate perspective. It has even been called the sustainable development perspective. As the fifth perspective, so called environmental and/or social perspective, it has been added to four existing perspectives of the enterprise's BS. In diversified enterprises, it has been added to the four existing perspectives in the BS of the SBU level.
- "*Complete integration*" implies that the environmental and social dimensions are involved in all four (classical) perspectives of the BS separately. Such an approach significantly accelerates the integration of sustainable development dimension into the management process.

c. The third approach that the authors propose is so-called "*total integration*". It is the most extensive approach because it is based on the previously shown full integration and extends the traditional BS concept by adding the fifth dimension which is going to deal with requirements of the community. This type of integration emphasizes the relationships with stakeholders, which are not covered by the previous perspectives. In this "full" approach, the requirements of the community will be linked with all indicators of the previous four dimensions thus creating a significant "cause-effect" relationship among the dimensions of SBS.

*Figge et al.* (Figge, Hahn, Schaltegger, Wagner 2002a, 2002b) believe that the environmental and social dimensions of social responsibility and sustainable development can be implemented in the traditional BS concept in three ways. First, the authors discuss the possibility of introducing environmental and social components through the implementation within four existing BS dimensions. Another way they propose is the formation of additional (the fifth) perspective, that will also include environmental and social component. The third method involves the formulation of specific environmental and/or social "scorecard". Each of the methods is appropriate for implementation in adequate external and internal conditions. The enterprise will choose the way which best suits its business environment conditions.

If we examine the interpretation of *Figge et al.* and compare it with the attitudes of *Bieker* and *Gminder*, certain parallels can be drawn. *Figge et al.* point out the possibility of implementing environmental and social components of corporate social responsibility (CSR) in four existing dimensions or in the fifth, new dimension that is added to the existing BS concept. A similar concept can be found in works of *Bieker* and *Gminder*, except they call it "complete integration" (for implementation in the four existing perspectives), and "additive integration" (for addition of new dimensions). Considering two presented approaches, it can be concluded that *Bieker* and *Gminder* treat the implementation problem of environmental and social aspects in the BS much more comprehensively, considering this issue from a broader practical perspective. The approach of *Figge and his co-authors* covers only a part of the analysis of the previously mentioned researchers, but goes deeper into the essence of their proposals, and makes their explanations more consistent.

## 2. STRATEGIC ASPECTS OF DEPLOYING AND IMPLEMENTING SBS

Deploying and implementing SBS in the business practice of an enterprise includes a consideration of specific steps/activities. Before commencing the process of deploying and implementing SBS, it is necessary to fulfil some requirements (Figge, Hahn, Schal-

tegger, Wagner 2002a, 276). Firstly, the process of implementation should be focused on the integration of environmental and social components into the enterprise's management system. Secondly, when we look at the process of implementation at the level of strategic business unit, one should take into account the characteristics of the strategy, as well as environmental and social aspects of the business activity for the concrete SBU. The third requirement relates to the fact that the environmental and social component will be included if their strategic importance has been identified and confirmed.

SBS implementation is a complex procedure that must be properly coordinated both at the level of top management, as well as at the lower operating levels. Therefore, all the strategic and operational issues are to be analyzed, because they actually affect the successful implementation of this concept. Based on the results of research projects carried out in practice, it turned out that the best way to deploy the SBS concept is through a series of workshops (Figge, Hahn, Schaltegger, Wagner 2002a, 10). In order to reach an acceptable solution, activities within workshops ought to be carried out by the project team for SBS implementation, which will be made up of participants from the following organizational units: a) the organizational unit (department) dealing with environmental and social problems, b) the organizational unit dealing with the business performance control (especially those who have already applied the traditional BS in the aim of performance management), c) the organizational unit dealing with issues of strategic development, and d) the organizational unit or units, in which SBS is to be implemented.

In deployment of SBS, the role of top management is crucial in order to motivate others involved in this process. If management cannot directly assist in this process, it is important to keep up with undertaken activities and to have a regular contact with a team leader of working team for the SBS deployment.

In process of the SBS deployment, it is very important to consider the following strategic aspects: (a) *strategy*, and (b) *organizational culture and structure*. These elements determine the relationship among subjects who participate in this process - primarily top management and employees, as well as other stakeholders.

a. Both traditional BS and modern SBS (expanded with environmental and social components) are essentially oriented to the *corporate strategy (enterprise strategy) and/or business strategy (i.e. SBU strategy)*. Defined strategy for sustainable development is quite rare. Nevertheless, aspects of sustainable development should be integrated into the strategy of the enterprise and/or the SBU strategy.

Since the SBS concept deals with converting strategy into operational actions, a relevant question is about the possible strategies that are formulated to improve the competitiveness of enterprises, but through a framework of sustainable development. In the relevant literature, a different classification of competitive strategies for sustainable development can be found (Bieker, 2005).

"*Reputational*" type of strategy promotes and fosters reputation. Taking into account the public importance of the sustainable development of an enterprise, the importance of credibility and reputation of the enterprise stands out as very valuable, intangible property. The main function of this type of strategy is to prevent conflicts between the enterprise and its stakeholders. On the other hand, the "reputational" type of strategy provides attraction of the necessary staff and efficiently meets customer needs. Reputation is often viewed as a sort of "capital" when one considers the fact that it can greatly assist the en-

terprise in the crisis conditions. Some industries such as oil, chemical, pharmaceutical industries, for example, carry a high risk of reputation. Enterprises invest substantial resources in its reputation in order to achieve a good image in society and acquire the status of "good corporate citizen." The main goal of this type of strategy is the development, maintenance, and protection of "reputation capital". Protection actions can be defensive, as they relate to communication with relevant stakeholders, and offensive, that focus on generating appropriate products/services which will meet customer requirements (Bieker, Dyllick, Gminder, Hockerts, 2001). By focusing on the fulfilment of legal obligations and open dialogue with the public, the enterprise seeks to increase the level of trust and acceptance in the social sphere. The essential goal is to fully satisfy the society requirements in terms of environmental and social issues, and provide public acceptance of the sustainable development strategy of an enterprise.

"*Cost efficient*" type of strategy emphasizes *efficiency improvement*. Enterprises that follow this strategy will focus on environmental and social goals/ indicators, with the intention of reducing costs. The main aspiration of this strategy is to achieve that the environmental and social standards are met in a cost-effective way. In the field of environmental management, this strategy is known as the "eco-efficiency" strategy. The most important is its application in the industry in which it has led to significant cost reductions through increased efficiency in usage of energy, water and material resources. On the social side, the strategy seeks to improve the "socio-efficiency." This is achieved by providing support to employees, which will, in turn, exert influence on their productivity, and the overall degree of satisfaction. It is necessary to create a more sensitive staff management system in order to identify their needs, and thus bring the planned performance to realization. The goal of this type of strategy is to improve "eco-efficiency" and "socio-efficiency".

"*Innovative*" type of strategy - allows differentiation in the market. Enterprises that implement this type of strategy constantly strive to proactively deal with environmental issues that are in some way associated with the market. Such enterprises are usually encountered in saturated and mature markets where the products/services of competitors become more interchangeable and make possibility for competitive differentiation. Environmental and social components, through its impacts, constantly create opportunities for products/services differentiation. Sustainable or "green" products/services contribute to achieving the unique position in offer (sales). The main objective of this strategy is to increase sales volume and profit margins through the marketing of environmentally oriented innovations of products. With the intention of measuring competitive effects of such a strategy, one needs the appropriate indicators that are associated with environmental/social quality of products/services. As an indicator example, one can quote the benefits from the environmental/social attributes of products/services for potential customers, as well as the longevity of products used.

b. *Organizational culture* is shaped by values, assumptions, attitudes, and beliefs of employees concerning strategies and enterprises' strategic goals. The fundamental question when talking about the impact of culture as a strategic factor of successful implementation of the SBS concept is: What are the key values of organizational culture that influence the implementation of the SBS concept? Very important relationship is between top management and employees. There are numerous relevant facts about the characteris-

tics of enterprises that management must take into account when deploying the SBS. Also, it is very important to provide the acceptance of this management concept by managers and employees by support of the proper values of organizational culture. In addition, the motivation of managers and employees is essential for the effective application of the concept, and the benefits which arise from its implementation must be clearly pointed out. If one wants a new instrument to "come to life" within an organization, it must be integrated into its general management system.

Application of the model is complex because of certain changes within the organization and the resistance of its members. Therefore, before implementing SBS concept, it should be carefully considered what management control systems ought to be eliminated, and the assessment about that elimination should be based on the limits or boundaries which are set by the value system of organizational culture. Of course, in that process, top management has a crucial role.

### 3. MANAGEMENT PROCESSES IN THE SBS CONCEPT

SBS concept can be presented as an "integrated flow of mechanisms of how an enterprise can cascade economic, environmental and social visions from a strategy level down to the operational level and at the same time aggregate learning surrounding these three aspects from the "bottom-up" in the context of CSR" (Cheng, Fet, Holmen 2010, 7). Management processes in the SBS concept can be specified as follows (Cheng 2010, 10): 1) *System of strategy planning*; 2) *Communicating the strategy through organization*; 3) *Business performance management*, and 4) *Sustainability assessment*. These processes make the management cycle.

*System of strategy planning (formulation)* is the starting process in above mentioned management cycle. Such a system, within SBS, builds a learning platform that will most effectively use environmental and social components, as a factor of greater efficiency in resource consumption and competences development. The strategic planning system takes into account the strategic objectives from all the SBS perspectives, because it is the only way which provides the formulation of a unitary enterprise strategy.

After the strategy selection and strategic goals setting, there is a need for their *dissemination* throughout the organization both *vertically*, to the lower managers and operational positions, and *horizontally* across all organizational units. All this is achieved through a *system of communication*. Such an organized way of communication provides absolute focus on each perspective. This means, if the lack of goals at a certain perspective is identified, it can be immediately recognized, and then, communicated to the responsible manager. Communicating the strategy allows translating strategic goals into operational tasks. This is done in such a way that each manager and employee can be in the position to objectively consider how environmental and social components (through their interconnections with other perspectives), contribute to achieving the corporate and the SBUs objectives.

In the *performance management system* previously defined goals, at all organizational levels, get their specific performance indicators that will reflect the success in managing the enterprise. Performance measures will be organized into a system of performance indicators for each SBU or organizational unit, and for the enterprise as a whole. Deviations

that occur, as a result of the gap between planned and actual performance levels, are the basis for learning and undertaking improvement actions within the enterprise.

At the end of the management cycle, *sustainable development assessment system* receives information about the actual performances, and the differences between planned and real performances. Information about realised performance can be collected both by an external system of environmental reporting and through collecting the data from internal sources. Based on the information and taking into account the opportunities for learning and improvement in environmental, social and financial dimensions, the enterprise's management makes the decision what CSR activities should be abandoned, and which should be further improved and developed. Opportunities for learning and advancement go to the bottom-up direction, because they come from the challenges and experiences of employees at operational levels, which make them most competent to make suggestions for improving performance in the future.

The enterprise adopts strategy and allocates resources in order to provide the maintenance of the desired level of business performance. Compared to other three managerial processes, the result of the *sustainable development assessment system* is particularly important. This is because the self-evaluation of the enterprise and critical analysis of performance deviations have been done through that system, and they can serve as valuable information for initial process in the new management cycle.

#### 4. OPERATIONAL ASPECTS OF DEPLOYING AND IMPLEMENTING SBS

Operational aspects are related to the methodology that should resolve the issue of steps and actions that should be taken in order to implement the SBS. First, it is necessary to provide sufficient resources (personnel, time, information, etc.) for the deployment of this management tool. Both the new and traditional BS proposed methodologies that are directed top-down. This implies that the strategic goals are determined by the top management. Often, this leads to internal resistance because employees are not consulted sufficiently or not consulted at all regarding the introduction of a new concept. Business experience and practices show that the combination of top-down and bottom-up approaches can contribute to better acceptability of the SBS within an organization, as well as internally defined strategic goals. Yet, top management still gives the main inputs (in the form of manuals, guidelines...), which are concerning the goals, key performance indicators, and information that serve to promote the SBS concept through all parts of the organization. In addition, *the methodological aspects* are related to SBS setting. For example, it is related to the number of performance targets and chosen key performance indicators for their monitoring, as well as to the number of perspectives in SBS and composition of these perspectives. In defining the response to these methodological issues, in general, it is recommended to take into account all the strategically important stakeholders of an enterprise. Also, here, cultural and other factors (such as fear, loss of power or budget limits) are playing an important role.

Conducting of the implementation process includes several steps or phases (Krstić, Ivanović-Đukić 2011). Bearing in mind the recommendations for a concept deployment, one can define the relevant phases in implementing the SBS:



1. Defining the mission, vision and strategy for the enterprise or the business unit;
2. Formulating the sustainable development strategy for an enterprise and/or incorporating elements of the sustainable development into the enterprise strategy (corporate strategy) or into the SBU strategy;
3. Identifying environmental and social exposure of the enterprise/SBUs and analyzing the strategic relevance of sustainable development dimensions and determination of key dimensions in the concrete SBS;
4. Identifying key performance factors, with special emphasize on the determinants related to environmental or social component of sustainable development, and the factors that influence success in implementing sustainable development strategies for the enterprise level or its business units;
5. Identifying key performance measures, by each of the perspectives in concrete SBS, for tracking a set of key performance factors;
6. Identifying the "cause and effect" relationships among the SBS perspectives, and graphically presenting the enterprise strategy or SBU strategy by, so called, "strategic map";
7. Defining the target level of selected performance indicators for the future period (usually for a year);
8. Implementing the SBS model by identifying initiatives, actions and programs that will help to achieve defined operational objectives/targets. Also, enterprises separately identify and plan the activities related to social responsibility and sustainable development i.e. environmental and social dimensions.

In order to effectively carry out the process of implementation, it is necessary to realize each step properly. Also, every step has its own significance for the entire implementation process, so it is relevant to explain the essence of those steps.

#### **4.1. Mission, vision, and strategy for sustainable development**

In the management process, planning is the starting point. One aspect of planning relates to *strategic planning* "the essence of which is the analysis of the business environment, formulating the mission, vision, and target levels of strategic corporate performance and, finally, the choice of enterprise strategy" (Krstić, Sekulić 2007, 55). The *mission* determines the areas of business where the enterprise would like to compete. Since the mission provides the identity of the enterprise and thus has a core role, then not only the members of management team may participate in its determination, but also other internal, and especially, some external stakeholders. Vision provides a description of existing and desired characteristics of the enterprise strategic profile, but it indicates the potential gap between them. It is the basis for formulating long-range goals and for selecting the enterprise strategy.

In modern enterprises the issue of sustainable development is one of the main ones that managers must keep in mind when designing the mission and vision. Derivation of sustainable development goals which are to be realized in the future is very important for an enterprise that wants to be environmentally and socially responsible in doing business. It should be noted that BS is an instrument of translating strategy into action (initiatives, programs, and projects) for its implementation. BS, in order to fulfil its function, requires

determination of the normative and strategic elements. In practice, however, one can face the opposite situations when the enterprise's sustainable development policy is not formulated and/or when an enterprise has no sustainable development strategy. In this case, defining strategic goals and selecting performance measures may be much more difficult. Strategies that are focusing on the realization of sustainable development goals and competitiveness are treated as the "input" for the SBS.

"In the formulation of a BS the objectives and measures in all perspectives are deducted from the long-termed strategic financial goals in a *top-down* process." (Figge, Hahn, Schaltegger, Wagner 2002b, 6). The above principle in the deployment of the BS can be used to support environmental and social aspects of business operations. The possibility of integrating the three basic pillars of sustainable development (economical, environmental, and social) into the traditional concept of BS, provides an opportunity to simultaneously achieve economic/financial, environmental, and social goals. Thus, in the focus of sustainable development management is the relationship between measures of environmental and social performance. Those measures are indicators of achieving the objectives of sustainable development, which are derived from the mission and vision.

Defining the objectives of sustainable development in enterprises should be accompanied by face to face discussion in which the participants give proposals, solutions, and express expectations. All this is because the goals of sustainable development are something employees are related to. Current strategy must be revised or even redefined in order to be able to provide the desired growth and development of enterprises, in the spirit of achieving the goals of sustainable development. This is particularly relevant in the case of an enterprise in which the strategic importance of environmental and social aspect is not appropriately valued.

#### **4.2. Identifying the relevance of environmental and social dimensions for enterprise business activity, key performance factors and indicators**

Identification of exposure to environmental and social dimension, at the business unit and at enterprise level, is a necessary step in the assessment of whether the SBS concept implementation is appropriate. In that direction, the so-called profile of environmental and social exposures can be identified.

When we examine environmental exposure of the enterprise or its strategic business units, it is necessary to treat the types of environmental interventions (emissions to air, water and soil, waste, noise, heat energy loss, materials/raw material, radiation, direct intervention in nature, etc.) and determine the specific activities (actions, projects, programs) for the enterprise/SBUs (Figge, Hahn, Schaltegger, Wagner 2002a, 277).

Strategically relevant social aspects can be identified analogous to environmental aspects. However, it is very hard to achieve their overall classification. It is emphasized, nonetheless, that social aspects depend on the preferences and values of various stakeholders on the business scene. It is advisable, therefore, to make the classification of social factors according to the actors involved. Stakeholder approach provides quality and useful base to classify actors that have different social requirements. In relation to requirements of each stakeholder or stakeholder group, the problems or issues should be identified. The group of direct stakeholders includes those who are connected with the enterprise through the direct exchange of material resources. For indirect stakeholders

there is no such type of exchange. So, in the first step, all relevant stakeholder groups must be identified. Then, in the second step, the social requirements and issues presented by these groups must be determined.

*Identifying strategically relevant aspects* is the key step in both the classical and the expanded concept of BS. The main purpose of the establishment of such a step is in translating the formulated strategy in the causally linked targets and indicators. For better understanding and appropriateness of the concept, it is necessary to repeat *Kaplan and Norton's* (Kaplan, Norton, 1996, 2001, 2004) recommendation that the process of identifying strategically relevant aspects is implemented according to the top-down principle. In other words, all major initiatives, proposals and solutions are coming from the top management. Of course, the same approach, which is applied at the traditional concept, can be applied with the SBS too. The only difference, comparing to the traditional BS, is that SBS takes into consideration environmental and social perspective aside the four existing perspectives.

Environmental and social components may represent strategic performance factors or key success factors, which could be controlled by appropriately chosen set of indicators. Their role is to measure whether the strategic and essential requirements have been achieved in each perspective of SBS.

In order to strategically emphasize the importance of environmental and social components and determine whether they represent the key strategic factors, a matrix (Figure 1) can be conceptualized. Matrix intersects, on the one hand, environmental and social exposure, and on the other hand, the key performance factors and key performance indicators. These indicators serve to monitor previously mentioned key performance factors.

		Environmental exposure								Social exposure					
										Direct stakeholders		Indirect stakeholders			
		Emissions	Waste	Material input/intensity	Energy intensity	Noise and vibrations	Lost heat energy	Radiation	Soil usage	Internal	Along the value chain	Local community	Internal	Along the value chain	Local community
Key Performance Factors															
Key Performance Measures															

Fig. 1. Matrix for determining the strategic significance of environmental and social components (adapted according to: Figge, Hahn, Schaltegger, Wagner 2002b).

The decision about the introduction of additional (the fifth) perspective should be performed during the implementation of SBS, and not before that. After the strategic importance of environmental and social components is determined, the next phase is defining indicators so that enterprise/SBU management can direct business performance in order to obtain the largest possible contribution to sustainable development of the enterprise. Identifying or selecting the key performance measures within each of the perspectives for the monitoring of key performance factor is quite important. In identifying or selecting performance indicators one should take care about the number of indicators which is chosen for each perspective, so that manager can be able to control them. Otherwise, the measures that can be used are numerous (Table 1), but their selection is carried out by taking into account the criteria of consistency, the criteria of possibility for providing information for measurement, criteria of the necessary infrastructure for measuring (software, personnel, etc.).

**Table 1.** Possible performance indicators for the dimensions shown in SBS

<i>Financial Perspective Measures</i>	Profitability, Cost, Total assets, Total assets per employee, Net profit, Net profit per employee, Economic profit, Economic profit per employee, Market value, Cash flow, Stock price, Capital structure, Total cost, Turnover ratio, Profit margin, Debts, P/E ratio and others.
<i>Customer Perspective Measures</i>	Number of customers, Market share, Sale per customer, Lost customers, Number of consumers per employee, Customer satisfaction index, Customer loyalty, Number of visits to customers, Costs per customer, Brand image, Number of consumer visits received, Marketing costs, Rate of gaining upon consumers, Profit per consumer, Sales volume, Number of proposals by consumers, Consumer complaints, etc.
<i>Internal Process Perspective Measures</i>	Average costs per transaction, Shortening cycle of work, Use of space/capacity, Administrative costs per employee, Timeliness of delivery, Defect rate, Number of newly introduced products, Capacity utilization and flexibility of equipment, Rate of delivery to consumers without the involvement of defects, Frequency of customer complaints, Supplier performance, Number of patents, Research and development costs, Investments in information technology, etc.
<i>Learning and Development Perspective</i>	Percentage of highly qualified personnel, Absenteeism, Number of employees' suggestions, Employee satisfaction, Participation in the stock options compensation programme, Number of managers in totally employed staff. Costs of training and education, The total number of training and additional education hours per employee, Quality of working environment, Quality of internal communication, etc.
<i>Social Responsibility and Sustainable Development Perspective Measures</i>	Percentage of suppliers (in the last three years) that are not classified as pollutants, Number of products that can be recycled, Indicators of change in the quantity of waste from the production process, Reduction of material and energy intensity, Changes in the quality of air, water, and emissions of other pollutants compared with the previous year, Non-discrimination at work, Job certainty, Indicators of human aspects of work, Contribution of an enterprise to employment level in the local community, Value of charity donations, Number of relevant organizations and institutions that gave a negative opinion about the environmental, social and occupational safety issues during the reporting period, Annual average number of hours of training related to occupational safety, Number of accidents at work and occupational injury rates, Number of positive stories and reviews in the media regarding the ethical issues of enterprises and its management structure, Number of ethical codes violations by managerial and non-managerial staff, etc.

Selection of key performance measures in a globalized business environment is becoming increasingly important, considering that modern enterprises face increasing environmental and social challenges. In the first place, there are numerous laws that force enterprises to take responsibility for their environmental actions, which consequently, makes enterprises continually measure and monitor their environmental performances. They will, in regard of their significance, help enterprises make the strategic decisions. In addition, environmental performances are relevant for considering their impact to overall business performance. Indicators of environmental performance "represent numerical measures, financial or non-financial, that provide key information about environmental impact, regulatory compliance, stakeholder relations, and organizational systems." (Henry, Journeault 2008, 166).

In everyday business, there may be a need for using the environmental performance measures by the internal as well as external stakeholders of the enterprise. The literature (Thoresen 1999, 366) points out some possibilities of environmental performance measures usage for management purposes. From the perspective of external stakeholders, the measures can be used for the following purposes: a) control and supervision by the competent environment authorities; b) making the impact on the enterprise to provide desirable performance for sustainable development, and thus meet the individual interests of external stakeholders, and c) providing relevant information to all external stakeholders. From the perspective of the internal stakeholders, the measures have found its purpose in: a) goal defining and control of product attributes and internal processes efficiency, and b) further improvement of products and internal processes compared to the best rivals in the industry.

The environmental standards' importance is confirmed by the fact that "International Organization for Standardization" (ISO) has set a specific standard - ISO 14031. This standard refers to evaluation of environmental performance (International Organization for Standardization, [www.iso.org](http://www.iso.org)). Standardization in this area leads to certain principles (Rauberger, Jasch 1997) which an enterprise must follow when introducing environmental performance indicators. Measures are firstly to be aligned with the principle of "*relevance*", i.e. must reflect only the significant environmental aspects. Indicators must also be "*understandable*" in order to clearly and unambiguously provide necessary information to users. *Orientation towards targets* suggests that indicators should be defined in order to achieve the objectives of environmental improvement. The fourth principle, the principle of "*consistency*" is achieved through the standardization and harmonization of environmental and financial indicators within the enterprise. The principle of "*comparability*" provides comparison of measures of the environmental performance in the different parts of the enterprise. The principle of "*balance*" points out the inclusion of all relevant environmental aspects and impacts through environmental performance measures. Last, but not the least, the principle of "*continuity*", which indicates the increasing importance of environmental performance measures if they are monitored during a longer period of time.

#### **4.3. Identifying the causal relationships between the dimensions of the BS and the graphic representation by a strategic map**

The sixth step is necessary because it reflects the relationship among strategically relevant environmental and social dimension, and organizational goals and activities to assess the potential impact of these aspects of the business. In other words, it defines the preconditions for implementing the concept of sustainable development. An important fact, which we must emphasize, is that such a connection must exist among all aspects and

indicators, directly or indirectly. An important instrument used here are *strategic maps* (Figge, Hahn, Schaltegger, Wagner 2002b, 25). The result of the process of formulating a SBS can be presented graphically using the strategy map. On such a map all the economic, environmental, and social aspects, identified as strategically relevant, are shown. They are presented in a hierarchical "cause-effect" network. Once the strategically relevant aspects are identified and aligned, one can define goals and measures for control and performance management in the direction of a long-term success and the greatest possible contribution to sustainable development of an enterprise.

The causal link which is established between the goals in the strategic map must be transparent. In defining the strategic map, it is necessary to discuss the way of integration of environmental and social aspects and decide about a number of perspectives in the SBS map. All aspects and indicators should be directly or indirectly related to the financial perspective, which is positioned at the top of the strategic map. Fundamental aspects and goals in the perspectives at the lower-levels in strategic map are, actually, used to realize a set of goals defined in higher-level map perspectives. Every time one moves from the higher-level perspective to the lower level (according to the cascade principle), certain requirement has to be fulfilled. It means to explicitly show how the key performance factors/key performance measures in lower level perspectives contribute to achieving the goals, which are defined in higher-level perspectives. This creates the possibility of establishing a hierarchical "cause-effect" chain, linking all strategically relevant aspects in the direction of successful strategy implementation. In other words, this means that strategically relevant aspects, which are represented by indicators, are a part of "cause-effect" network. Actually, this network visualises and translates goals of enterprise into the actions. Moving through the perspective with the top-down principle, strategic importance of relevant ecological and social aspects is determined in the same manner as for all other "traditional" aspects of the BS. This ensures the integration of environmental and social components in the enterprise control system.

#### **4.4. Derivation of the operational objectives of sustainable development and implementation of the SBS model**

Since the performance indicators are defined and their relationship is determined too, in the budgeting process the target levels of performance have been set for a future period (a year). Namely, in the strategic map, specific targets for each indicator of performances are being defined. In order to achieve these targets, it is necessary to identify the actions and programs, which will help in accomplishing desired operational performance. In addition, management must particularly identify and plan actions and programs related to social responsibility and sustainable development, i.e. environmental and social dimension. Finally, after the realization of all these stages, it comes to the implementation of the SBS and from that moment it can be used for purposes of measurement, control, and reporting of economic, environmental, and social performances of an enterprise.

A significant mechanism that may be helpful in implementing and using the SBS is certainly the performance management system for sustainable development. Such a system allows the enterprise to cover all areas of sustainable development. In addition, it requires that all employees and relevant external stakeholders be involved in monitoring and controlling sustainability performances. Besides, it is important to emphasize that the role of the sustainability performance management system is to promote continuous im-

provement of enterprise business success by the improvement of the sustainability performance (Krstić, Jovanović, Janković-Milić, 2008). Through this system, the enterprise can control its impact on the ecological and social environment, and thus the performance of sustainable development. That system includes various programs and practices for integrating social and environmental principles into existing business processes. Implementation of these principles facilitates the definition of sustainability development targets.

## CONCLUSION

The development of the SBS concept is based on the improvement of classical BS, by incorporating the dimensions of sustainable development. The main contribution to the SBS model development, in the literature, is given by *Bieker* and *Gminder* with their comprehensive treatment of incorporation problems of environmental and social aspects into the SBS concept. On the other hand, *Figge's* approach is based on accurate and consistent presentation of practical solutions for creating the concept of SBS, with the aim of improving the competitiveness of enterprises in global competition. Considering the process of developing the SBS model, it is important to point out the role of top management, employees, and other stakeholders that are reflected in the key (strategic) aspects, which are expressed within the business strategy, organizational culture and structure of an enterprise. Furthermore, with the operational aspects of deploying and implementing the model, through which activities become more concrete, the implementation of the model of SBS is practically achieved.

The application of such a formed model, based on the key performance factors and key performance measures, allows the significant influence over the enterprise performance, thus creating the opportunity for improving its competitiveness. By using numerous measures of environmental and social performance, the enterprise is able to gain significant business benefits for itself and the environment. Some of these benefits can be: reducing costs, increasing productivity, improving sales, getting the status of preferred supplier, increasing the attractiveness for potential investors, attracting highly educated and experienced workers and developing relationships with regulatory authorities.

Application of operating postulates and methodological framework of the SBS model represents a challenge for top management, especially in the modern environment, characterized by increasing demands for corporate social responsibility. Thus, the importance of SBS reflects in the fact that performances of corporate social responsibility and sustainable development have an impact on business success and competitiveness of an enterprise.

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## **RAZVIJANJE I PRIMENA SBS MODELA U CILJU UNAPREĐENJA KONKURENTNOSTI PREDUZEĆA**

**Bojan Krstić, Vladimir Ivanović**

*Dinamično poslovanje i sve strožiji zahtevi klijenata dovode do toga da se tradicionalni koncept Balanced Scorecard-a (BS) treba da proširi dimenzijama održivog razvoja i društvene odgovornosti. Tako nastaje koncept Balansna karta performansi održivog razvoja (SBS), koji preduzećima pruža mogućnost da prevedu svoje misije, vizije i strategije održivog razvoja u operativne ciljeve i akcije čije će se uspešno ostvarivanje pratiti preko ključnih faktora performansi, odnosno ključnih merila performansi. Proširenje klasičnog BS koncepta ekološkim i socijalnim komponentama predstavlja značajan korak u unapređenju praktične implementacije koncepta društveno odgovornog poslovanja, čija primena predstavlja još jedan izazov za menadžment preduzeća. Cilj ovog rada je da u tom pravcu rasvetli ključne aspekte razvijanja i primene SBS koncepta. Imajući u vidu da društvena odgovornost, održivi razvoj i ekološka dimenzija poslovne aktivnosti može da ima odraza na bolji plasman proizvoda kod ekološki svesnih potrošača, ali i ostvarivanje benefita od ekološke ili zelene nabavke, te ostvarivanje ušteda pri ekološki prihvatljivom procesu proizvodnje i slično, onda se primena SBS modela može pozitivno odraziti na poboljšanje ukupnih poslovnih performansi i konkurentnosti preduzeća.*

*Ključne reči: Balansna karta, poslovne performanse, održivi razvoj, društvena odgovornost, Balansna karta performansi održivog razvoja*