



## A COMPARATIVE ANALYSIS OF MODERN PERFORMANCE MEASUREMENT AND MANAGEMENT MODELS OF COMPANIES

**Vesna Janjić**

*University of Kragujevac, Faculty of Economics, Serbia*

✉ [vesnajanjic64@gmail.com](mailto:vesnajanjic64@gmail.com)

**Mirjana Todorović**

*University of Kragujevac, Faculty of Economics, Serbia*

✉ [mtodorovic@kg.ac.rs](mailto:mtodorovic@kg.ac.rs)

**Dejan Jovanović**

*University of Kragujevac, Faculty of Economics, Serbia*

✉ [djovanovic@kg.ac.rs](mailto:djovanovic@kg.ac.rs)

UDC  
330.526.33:  
65.015.25  
Review paper

**Abstract:** Modern business conditions have led to the development of a large number of different models for strategic performance management, which view performance measurement through the prism of financial and non-financial indicators, from multiple perspectives. Strategic performance management models should enable efficient and effective management, i.e. an adequate response to continuous changes in the business environment. Theory and practice in this area suggest the development and implementation of various integrated frameworks (models) for performance management of companies, in order to achieve business excellence. In addition to the well-known integrated models, such as the Balanced Scorecard (BSC), Performance Pyramid, SAILS model (Strategy Aligned Integrated Linked Scoring System), GRASP model (Goals-Resources-Actions-Structure-People), and others, Kanji's Business Excellence Model (KBEM) and Kanji Business Scorecard (KBS) have been developed as well. Kanji's model was created with the objective of eliminating the weaknesses and shortcomings of previous models, particularly the Balanced Scorecard. The application of multidimensional performance measures should increase the informational power of management in making strategic business decisions. The goal set by this paper is to consider some of the basic features of modern performance measurement and management models of companies that are represented in theory and applied in practice, and, on the basis of comparative analysis, to draw conclusions about their advantages and disadvantages.

Received:  
04.09.2014  
Accepted:  
27.03.2015

**Keywords:** performance measurement and management models, Balanced Scorecard, SAILS model, GRASP model, Kanji's model

## **Introduction**

Designing an adequate system of performance measures and measurement of effectiveness and efficiency is the basis of company management. When selecting a performance measurement system, the company relies on driving forces and key success factors, taking into account the chosen strategy. It is not an easy task. On the contrary, the selection of appropriate performance measures is a very complex process for a particular company, because it needs to cover all aspects of this multidimensional phenomenon. At the same time, modern business conditions require continuous improvement of performance measurement system of companies. Today's companies are expected to measure all areas of activity, i.e. to include a large number of financial and non-financial indicators of success in modern systems of performance measurement. The process of observing a correlation between financial and non-financial indicators results in a performance measurement system that becomes a very complex mechanism for evaluating business performance. However, it is not enough just to measure the results and success; it is necessary to manage the performance, as well. For the purpose of performance management, company can choose among a number of models that focus on business processes or key stakeholders, or that focus on both business processes and key stakeholders. Although theory and practice abound in these models, a number of authors in this field try to improve the existing or propose and develop the new ones. Bearing in mind the above-mentioned research subject, this paper will test the applicability of some modern, multidimensional performance measurement and management models of companies. Hence, the aim of this paper is to clarify the basic characteristics of multi-dimensional performance measures, analyze their advantages and shortcomings, and attempt to give a critical assessment. The paper puts special emphasis on the Kanji's business excellence model. The key starting hypothesis in this paper is that there is no perfect performance measurement and management model that could be used in all companies, and that could fully satisfy their needs.

The research approach will involve a theoretical, qualitative analysis of the research subject, based on the study of available literature sources. In order to test the established hypothesis, the authors will rely on the results of previous theoretical and empirical studies, conducted by various authors dealing with this problem, especially in the field of accounting, business economics, and management. The description of the research problem will point to general conclusions regarding the applicability of certain contemporary performance measurement and management models. Special attention will be devoted to a comparative analysis of different multi-dimensional performance measurement and management models, which should provide an answer to the question of whether there is a perfect model of performance management, and in which conditions it can be applied.

The paper is structured in three parts. In the first part, after the introductory section, the focus is on the discussion of the necessity of changing and determining an adequate performance measurement system, in accordance with the changed business conditions. Then, the second part presents the basic characteristics of some of the modern performance management models, with emphasis on the pros and cons of their use. The third section presents the Kanji's performance management model. The final section will point to relevant conclusions and limitations in the application of certain performance management models.

### **1. The Necessity of Improving Performance Measurement Systems of Companies**

Modern business environment is characterized by rapid growth and competitiveness of companies, the explosive development of technology, and globalization. Organizational learning and knowledge have become the dominant elements of competitive advantage. The business world completely changes the basic preconditions of creating competitive advantage of companies, which must measure value creation, stimulate profitable development, and continuously learn on the basis of success.

Efficient management of the company in such business conditions involves the establishment of an adequate system of performance measurement. At the same time, it is necessary to continuously analyze the performance measures, develop and improve them, enrich or eliminate them, in order to bring them into line with the new situation, and adapt them to a specific company. The fact is that there is no system of performance measures, in the form of a set of universal indicators, which will apply to all aspects of business performance. Moreover, theorists in this field agree on the premise that there cannot be only one indicator of all aspects of business performance, and admit that there are many reasons why companies measure the results of their operations. Theory and practice abound in performance measurement systems. The selection of an adequate system of performance measures is a very complex task for a particular company, which requires creativity and responsibility of managers, as well as the ability to adapt to new and changed business conditions.

Financial performance measures have traditionally been the main instrument for quantifying the business success, so that the majority of business activities of companies are accompanied by classic quantitative indicators. They originate from the information system of financial accounting, are monetarily and quantitatively expressed, and play an important role in business and financial analysis for the needs of company management (Niven, 2002, p. 4). These criteria have short-term orientation, are based on an accounting concept of results, and are focused on financial outcomes that are the ultimate goal of

overall company operations. In addition, they are accepted as relatively valid by external users, and are widely applied in practice. They also represent, to some extent, a good basis for making business decisions, thereby indicating their specific benefits (Krstić, Sekulić, 2007, pp. 75-77). Excessive emphasis on financial, traditional measurement indicators has neglected, or put aside, the so-called non-financial performance measures. In fact, traditional approaches to measuring business performance have become inadequate and incomplete in the new, turbulent environment, because of their past and short-term orientation, and do not include intangible aspects of the business.

Key changes in the environment and business of companies, which have occurred in recent years, have faced the management accounting and financial management with a number of challenges that required the adoption of new approaches, in order to eliminate the shortcomings of the existing control mechanisms. In such circumstances, it has become necessary to observe the companies in a more complex manner, so that determining business performance required the use of both financial and non-financial indicators, i.e. performance measurement was to be based on several, more balanced perspectives. Product quality, customer satisfaction, business flexibility, lead time, time for the launching of new products, and the like could not be shown in the balance sheet. The fact is that this and similar information is relevant and necessary in the process of business decision-making, in order to improve competitive ability, and enhance financial performance. Therefore, to develop a clear picture of the results achieved, using both financial and non-financial performance measures is necessary. Redesigning performance measurement system also occurs due to a decline in profitability, increased share price, changes in strategy, business process redesign, the appearance of new technologies, new competence, attracting and retaining employees (Hirst, McAnallz, 2001, p. 32). New circumstances have necessitated the need for measurement of the so-called "hard variables", which can be measured and expressed numerically, and the so-called "soft variables", such as creativity, motivation, management flexibility, etc., which cannot be expressed through classic indicators. This requires a comprehensive approach to measuring of both soft and hard performance fields, as well as adequate connections between them. Both approaches have their pros and cons, so that companies should strive towards utilization of advantages, through their adequate integration.

All the above-mentioned aspects and perspectives of observing the success of companies need to be measured and monitored, but that option is not provided by the accounting information system. These and similar circumstances have created the conditions for a redefinition of the traditional performance measurement system and the emergence of modern indicators of business performance. In the past two decades, the focus has been on the development and use of non-financial performance measures of companies, which can be used for reporting on the results, and for motivating and rewarding.

There are many advantages and disadvantages of qualitative approach to performance measurement. The advantages of non-financial aspects of business performance measurement are related to their focus on the end user, focus on lower organizational units, improving resource allocation, and improving decision-making processes. A number of drawbacks have been noted as well, such as increased costs of training and education of employees, costly implementation of concepts, slow process of obtaining concrete measurable data, rivalry and distortion of teamwork. Comparing advantages and disadvantages, i.e. the application of *cost benefit* analysis, is to show whether performance measurement through a qualitative approach is economically feasible. What is certain is that modern performance measurement systems are more complex and comprehensive, that they are adapted to modern business conditions, and are of great use to management in creating and maintaining financially viable and competitive companies. Therefore, one should expect that companies in the future will adapt their systems of performance measurement to turbulent conditions and market changes, and that modern performance measurement and management systems will be in greater use in the future.

## 2. Contemporary Performance Management Models of Companies

In the past two decades, a number of broader and complex performance measurement models have been developed, taking into account both financial and non-financial indicators, balanced on several grounds, primarily on the basis of long-term and short-term perspective, and then based on the ability of quantification. The need for continued strengthening of competitiveness has caused that, in addition to increased profits and cost control, as important competitive goals of the company, the system of performance indicators includes non-financial measures, which will, together with the financial measures, adapt multidimensional system to the chosen strategic directions of the company. Apart from the fact that the company management has paid great attention to financial performance measures, they must be aware that there are other factors of efficient company management, which cannot be covered by such indicators.

Therefore, present reports on actual and projected financial results should be supplemented by non-financial information. The aim is to provide more detailed insight into the factors that have caused such results. Mere presentation of financial and non-financial performance measures in a multidimensional reporting system, and their correlation, can provide clearer and more complete picture of the results achieved. This requires the implementation of integrated ways of performance measurement, which goes beyond the classic controlling role. Successful implementation of an integrated system of performance measurement requires a realistic measurement, daily, weekly, and monthly reporting, and inclusion of all critical success factors of the company

(Parmenter, 2007, pp. 20-22). In addition, the report should contain information on intangible and intellectual assets, which mostly contribute to the success of the company in the current business environment. With this in mind, every company, in accordance with its own goals and strategies, needs to design an appropriate performance measurement system. Any selected contemporary multidimensional system should include three dimensions: dimension of perspective, dimension of goals, and dimension of focus. Dimension of perspective refers to multiple perspectives of performance evaluation of companies, for the needs of stakeholders. Dimension of goals include formulating, developing, and implementing strategies, control, accountability, and evaluation, and the dimension of focus includes the ratio of internal and external, short-term and long-term, and past and future performance of companies. The theory in this area has offered, and practice has partially accepted, several modern performance measurement and management systems, such as the Balanced Scorecard (BSC), the SAILS model (Strategy Aligned Integrated Linked Scoring System), the GRASP model (Goals-Resources-Actions-Structure-People), Kanji's Business Excellence Model (KBEM) and Kanji Business Scorecard (KBS), Performance Pyramid, The Results and Determinants Framework (RDF), and others. The common characteristic of all modern, integrated, multi-dimensional performance measurement and management models is their comprehensiveness, or striving towards comprehensiveness, establishing a correlation between financial and non-financial performance measures, as a condition to achieve superior results. In this regard, the company is viewed as a system that operates in a turbulent environment, and which should meet the requirements of a number of stakeholders. The fact is that all these models emphasize different priorities, goals, and strategies, but what they have in common is that they must focus on value creation. The work exhibits features of some of the modern performance measurement and management models, without minimizing the importance of others, which will not be discussed.

### ***2.1. The Balanced Scorecard – BSC***

One of the contemporary performance measurement and management models, which has important application in practice, is the Balanced Scorecard (BSC). It is a contemporary performance measurement and management model, which was created with the aim to resolve the shortcomings of traditional financial criteria, based on the accounting system. The conceptual basis of the BSC, as the planning and controlling system of performance measurement, includes, in addition to financial measures that will continue to be significant, non-financial indicators that predict future financial success. The creators of this concept, Kaplan and Norton, started from the idea that companies are no longer able to gain competitive advantage on the basis of tangible assets only, and that it is

necessary to create “intellectual capital”, as a critical success factor. In fact, the BSC allows the introduction of a wide range of criteria, which include financial and non-financial indicators, short-term and long-term performance, which provide managers with relevant information for managing the process of value creation in the company (Domanović, 2010, pp. 21-25).

Accordingly, the BSC integrates financial and non-financial performance measures, which enables the creation of a balanced system of performance measures. The need for such a system has resulted from increased competition and the need to implement corporate strategies. The introduction of the BSC solves the problem of successful strategy implementation, and creates an efficient and effective performance measurement system.

Through its four perspectives, financial, customer, internal process, and innovation and learning, the BSC measures company performance, by determining the main goals for each management area, and translating them into specific criteria. Each company, depending on the time period and the adopted strategy, selects the performance criteria. In other words, this system provides a framework for translating the strategy and mission of the company into the system of understandable and measurable targets and indicators, organized into four above-mentioned perspectives. In the BSC, each perspective is related to others, as well as to the overall strategy of the company, thus establishing a balance between external measures, aimed at owners and customers, and internal measures, oriented to business processes, innovation, learning, and growth. Bearing in mind the fact that it is not a perfect performance measurement and management model, its weaknesses have brought to the development of new models, such as the SAILS model.

## ***2.2. The Strategy Aligned Integrated Linked Scoring System – The SAILS model***

The SAILS model is an integrated, strategic, global model for managing sustainable profitability, which was created in 2009, and developed by Bala B. Balachandran, Keshav Naraygan Kantamneni, and Mohandas Pai. The creators of this model were familiar with the characteristics of existing models, primarily with the BSC, and, based on identified deficiencies, looked for a solution in the new model. Specifically, the BSC was used as the basis for the development of this model. The authors of the model start from the four parameters or perspectives (value, volume, velocity, variability), with multiple elements within them. Perspectives are determined by strategic business units, and a causal relationship between the criteria within the perspectives and between the perspectives is established. The aim of the SAILS model is to manage sustainable profitability by managing value, volume, velocity, and risk. The above-mentioned parameters, i.e. the perspectives, are measured and

determined by strategic business units, and strategic business units' strategies should be integrated into the global strategy of the company and linked to sustainable profitability. The SAILS model offers the possibility of eliminating those strategic business units that do not have prospects, and keep those that have the basis for further growth.

The SAILS model was developed through four perspectives: value, volume, velocity, and variability. Each parameter or perspective has several elements. So, *value*, as a parameter, includes knowledge about the market, potential market share, and the cost of capital on the regional market. All elements that are included in the value perspective are of particular importance for companies, especially in times of crisis, when this model originated. Market data and the ability to detect potential markets give companies a chance for reorientation in unexpected situations (Bala et al., 2009, pp. 3-6). *Volume*, as a parameter of this model, includes: regional market share, customer relationship management on the global market, understanding the customer value system in certain regions, and customer profitability by individual country markets. Modern business conditions have turned *velocity* into a key criterion. How fast will the company adapt to the new conditions depends on the knowledge of the business risks in certain countries and regions, the stability of the currency in some countries, technological changes, customer behavior, and tendencies of shortening product life cycle. *Variability*, as a parameter, includes change management in an uncertain environment. Based on the four perspectives and a few elements within them, the creators of the SAILS model created the Pyramid of performance metrics maturity model (Bala et al., 2009).

The SAILS model measures, controls, directs, and maximizes profitability at the company level, through four above-mentioned perspectives. Implementation of this model is done through a process that includes six stages (Figar, 2010):

1. identifying strategies by strategic business units,
2. linking strategies with the mission of critical business processes and investigating critical business problems,
3. integration of organization,
4. determining performance measures for each strategic business unit,
5. determining the drivers for continuous improvement of the value/revenues/costs, and
6. measuring, controlling, directing, and maximization.

So, the realization of this model applies the above-mentioned methodology, which, in the first stage, makes a distinction between strategic business units that have prospects, and those that need to be abolished. In addition, the model highlights the continued presence of changes in the business, and the importance of knowledge of regional markets, while risk management is seen as



a special perspective. Although the implementation of the SAILS model attempts to correct the shortcomings of the previous model, the BSC, thus-far the most complete model, even SAILS is not an ideal model, but it attempts to improve performance management models based on knowledge on the existing models, and represents the basis for the emergence of the new, GRASP model.

### ***2.3. The GRASP Performance Management Model***

GRASP is one of the integrated performance management models, but is primarily focused on the management of resources, in order to achieve a sustainable competitive advantage. The point is to continuously meet the goals of stakeholders, better than the competition. GRASP model is a process-oriented performance management model, resource-oriented (because it deals with resources that enable and create value), strategic (as it observes the current capability of the company and future benefits), can be applied to all types of companies, is easy to use, and has proven excellent results in practice. The GRASP model includes the GRASP concept, the GRASP elements, the GRASP acronym, and the GRASP map.

*The GRASP concept* is based on the premise that the company sets a global target, whose essence lies in meeting the goals of individual stakeholders, better than the competition. Hence, this model involves the orientation towards the stakeholders in the process of performance management.

*The GRASP acronym* includes all the key elements that need to be managed in order to achieve the goals of the company. The initial letters of the elements form the title of this concept: Goals, Resources, Actions, Structure, and People.

So, the *GRASP elements* are: goals, resources, actions, structure, and people. The first element of this model refers to goals, indicating that the global goal of the company is to meet the needs of different stakeholders, better than the competition. This model sees the key stakeholders in customers, employees, suppliers, shareholders, government, and other partners whose goals are in conflict with each other, which raises a problem of their identification and of how to satisfy them better than the competition. The second element of the GRASP model refers to resources that are defined as assets, used to achieve the goals of the company. To meet the goals of the stakeholders better than the competition, and at the same time achieve the global goal of the company, resources are crucial. The resources are divided into resources that enable the creation of value and resources that create value. The first group includes resources that allow employees to carry out their activities in accordance with the goals of the company, and these are physical resources, financial resources, technology, and human resources. The second group includes resources that create value for the company and for the stakeholders, and include quality of service, customer loyalty, leadership talent, and quality of relations with

stakeholders. The global goal of the company, according to the GRASP model, is a sustainable competitive advantage. This global goal is not achieved on the basis of all resources, but only with the resources that are rare, specific, immobile, inimitable, and non-substitutable (Figar, 2010). Actions, as elements of the GRASP model, include activities in a company that can change the volume of resources that enable the creation of value. The GRASP model insists on carrying out only the needed activities with the smallest volume of resources, in order to meet the goals of stakeholders, better than the competition. Goals, resources and action are related to the fourth element, the structure. The structure should enable synchronization of local goals of companies with the global goal, and effective and efficient use of resources. In fact, the structure coordinates, balances, and effectively links resources and action with the goals of stakeholders and the global goal of the company. The last, fifth element in the GRASP model, includes people, or employees, who start from the global goal of the company, take action in relation to obtaining and using resources in an appropriate structure, and head for the realization of the goal (Figar, 2010, pp. 32-33). People, as an element of the GRASP model, link goals and actions, i.e. establish and achieve corporate goals through activities, established organizational structure, and use of resources.

*The GRASP map*, as an integral part of this model, is used for visualizing the GRASP elements, acronyms, and concepts.

The creators of the GRASP model, James L. Ritchie-Dunham and Luz Maria Puente, believe that this model can be used at all managerial levels – strategic, tactical, and operational level, in all organizations – small, medium, and large, profit, non-profit, at all organizational levels – at the level of the organization as a whole, at the level of organizational units, at the level of the business network, and has undoubtedly practical value despite the identified deficiencies. Its major drawback is seen in the fact that elements of this model do not follow the actual course of action and resources in the process of reproduction, so that the first element in the GRASP acronym should be people, employees, who set goals and carry out activities.

### **3. Kanji's Business Excellence and Kanji's Business Scorecard**

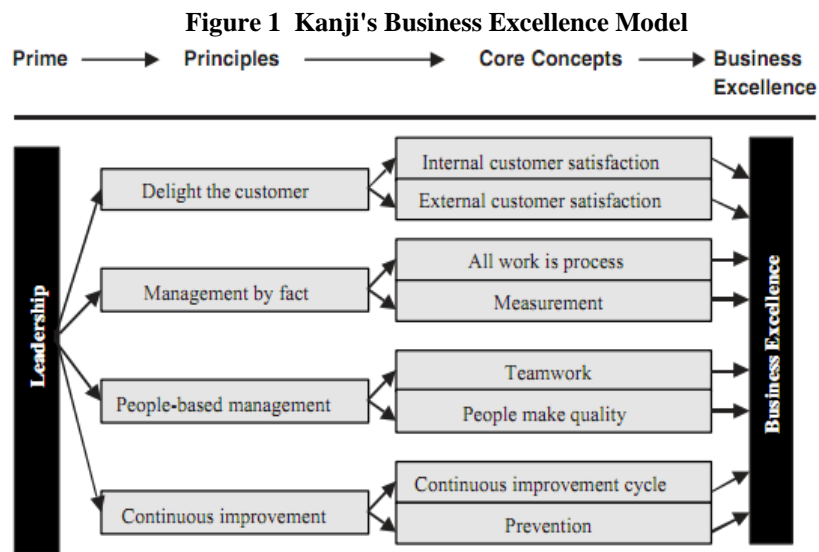
Business Excellence (BE) is a management philosophy that is widely applied in a number of companies, with the aim to achieve better performance in all dimensions of the organization. Business excellence, as a new management paradigm, is based on the principles of total quality management and improvement of various aspects of the company, in order to satisfy all stakeholders and achieve balance of interests, and thus accomplish long-term results. A number of companies see business excellence as the primary means for achieving competitive advantage. Applying the concept of management based on

business excellence was particularly evident during the harsh globalization, when companies used it to establish, maintain, and strengthen competitive advantage. What is more, the use of the concept of business excellence leads to the achievement of competitive advantage through cost reduction, excellence in products and services, improving partnerships, global recognition, and image.

In order to improve the performance of companies, numerous tools and philosophies in the field of quality management are used. Business excellence is one of the widely applied philosophies that is based on two important elements, ideas and principles, which together make up the Business Excellence Model. There are several known models of organizational excellence that apply to companies around the world, offering instruments for measurement and assessment of business performance, and guiding companies to focus their efforts on areas that need improvement. Business excellence, as an effort to fulfill almost all expectations of stakeholders, who are in any way interested in the operations of the company, is becoming the condition of achieving long-term goals of the organization. In fact, a necessary condition for long-term survival and development lies in finding new ways to improve efficiency and performance. Therefore, companies are forced to introduce different performance measurement and management models (Domanović, 2010, pp. 163-167). One of the famous business excellence models is called *Kanji's Business Excellence Model (KBEM)*, which was developed by Kanji, and based on the Total Quality Management (TQM) principles. In fact, Kanji's Business Excellence Model is based on the principles of Total Quality Management. At the same time, within this model, the system for measuring organizational performance that is complementary to the KBEM principles has been developed. The basic idea that underlies Kanji's Business Excellence Model is to highlight the relationship that exists between each TQM principle and improved organizational performance in the company. KBEM consists of four key dimensions: top management, basic principles, concepts, and business excellence. KBEM dimensions are shown in Figure 1. Kanji used the pyramid structure to explain this model, with the top management viewed as the foundation of the company, and the policy, strategy, vision, and mission being suppressed. The principles are seen as the main ideas in order to improve organizational performance. Each key principle contains two elements of the concept, as important techniques in improving organizational performance, which can be seen in the picture. Business excellence is added to the top of the pyramid, as the ultimate goal in improving organizational performance.

Another important part of KBEM is the measurement system, or performance measurement. The KBEM measurement system is based on the statistically processed results of the survey, containing all the criteria of business excellence. To assess the company's achieved level of business excellence, it is necessary to measure a number of indicators, such as customer satisfaction, satisfaction of

shareholders, business performance, and the like. To measure these important parameters, standards are needed. What is characteristic of KBEM is that all criteria have the same base, which means that all criteria are equally important. This model calculates the business excellence index, which ranges from 0 to 100. In fact, companies that apply the business excellence index use this index to analyze and compare how the company is progressing. That means that companies can use the business excellence index as a tool for self-assessment of progress in a certain period of time, and as the basis for improving performance in the future.

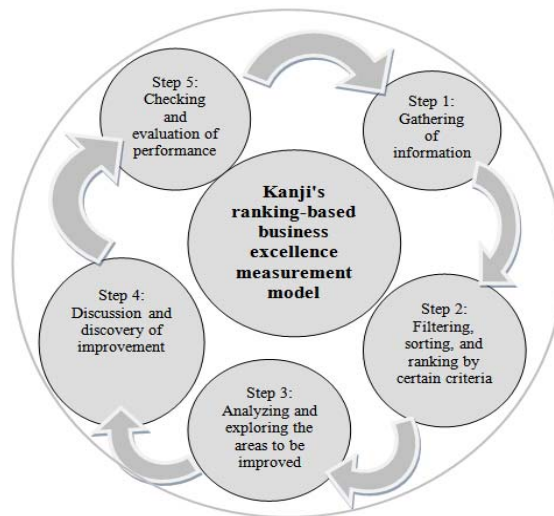


Source: Kanji, G. K. (2001) Forces of excellence in Kanji's Business Excellence Model, *Total Quality Management*, 12(2), p. 261.

KBEM is accepted as one of the business excellence models, used to improve company performance, and is applicable, according to Kanji, in all companies at all times. KBEM application also points to some shortcomings. The main disadvantages attributed to this model are related to the complexity of the measurement system and the insufficient involvement of employees in the organization. The KBEM measurement system is based on statistical calculations and methods, which requires a lot of work, time, and resources, so that Kanji proposed software package for solving this problem. However, companies that would use these software packages would have to invest a lot of money in training employees and its installation. Besides, the reason why this model is not so popular is the insufficient participation of employees in improving business performance. In making decisions and forming plans, managers should take into account not only the mathematical calculations, but should allow the participation of employees in improving performance, and take into account their suggestions (Chen et al., 2012, pp. 993-994).

For solving the above-mentioned problems, the Kanji's ranking-based model is proposed. This model helps the organization find areas that need to be improved. This model is not complicated and complex to apply, and does not require a lot of resources. The essence of this model lies in repeating the five-step procedure, in order to improve the company performance. The first step in this model refers to the distribution of questionnaires to the relevant respondents. After gathering information, one should proceed to the second step, which involves its filtering, sorting, and ranking, according to certain criteria.

**Figure 2 Kanji's Ranking-Based Model**



*Source:* Chen, C., K., Songsithipornchai, S., Jang, J., Y., (2012) Does Kanji's Business Excellence Model Work Well? A Study from the Measurement Aspect, Proceedings of the Asia Pacific Industrial Engineering & Management Systems, p. 995.

The third step involves analyzing and exploring areas to be improved. After that, techniques to improve performance are discussed and defined, which means the transition to the fourth step in this model. What is insisted upon in this step is the participation of employees in discussions and decision-making, who are in contact with the source of the problem, or are in any way connected with the problem. The last step in this model refers to the checking and evaluation of performance, which means that the company checks whether all steps have been successfully carried out and implemented, and whether it has reached the desired goal. If the desired goal is not achieved, the company needs to continue to work on improving performance. Furthermore, if a company wants to make an improvement in some other areas, it is necessary to repeat the above five steps. Once a company reaches a target, which means good business, it is the basis for further progress and continuous improvement of performance (Chen et al., 2012, pp. 995-998).

Unlike Kanji's business excellence model, which focuses on the system of internal assessment and collection of data from managers and employees in the company, *Kanji's Business Scorecard* is mainly directed towards the external evaluation of companies. KBS measures the performance of companies from the external perspective, through the key areas, for which strategic goals are established, namely:

- creating value for stakeholders,
- process perfection,
- organizational learning, and
- satisfaction of stakeholders.

Creating value for stakeholders, as the area of management, allows the achievement of business excellence through the achievement of excellence in operations. Process perfection focuses on monitoring the operational processes, organizational learning, continuous improvement, teamwork, leadership, and prevention of quality, whereas satisfaction of stakeholders focuses on external and internal satisfaction of customers, suppliers, investors, employees, and the social community. As noted, this business excellence model is similar to the Balanced Scorecard. In KBS model, some improvement has been made, in line with modern and dynamic business environment. In fact, given the potential and limitations of the BSC, the new, 's model for measuring and managing the performance of the company has been proposed.

According to KBS model, performance measures are defined, based on the key factors of business excellence and values of the organization. Thus, the *value for stakeholders'* perspective, which replaces the financial perspective in the BSC, includes financial performance measures, such as cash flow, return on equity (ROE), profit margin, and non-financial indicators, such as customer demand, the ability to recruit and retain qualified employees, and the like. *The field of process perfection*, which replaced the internal process perspective, is seen in the company as an interconnected process network, whose excellence requires reaching the excellence of each sub-process. What is more, it is necessary to define measures for each sub-process. The most important measures of excellence are measures of productivity, measures of non-fulfillment of expectations of customers, measures of deferred liabilities, and the like. *The field of organizational learning* emphasizes the importance of training and education at all levels of the organizational structure of the company, and some of the important measures are the number of new products, the number and relevance of the improvement programs, existence of teams, and the like. The perspective *satisfaction of stakeholders* is an expanded customer perspective within the BSC. This model insists on expectations of all stakeholders, investors, employees, suppliers, and the social community, not just the customer. Measures related to stakeholders' satisfaction include the level of satisfaction of customers and

suppliers, employees' connections with customers and suppliers, the level of satisfaction of employees, and the like (Kanji, Moura, 2002, pp. 21-23).

According Kanji's Business Scorecard, business excellence is achieved through the simultaneous impact of all areas, implying that improvement in one area encourages progress in the next one, thus achieving continuous improvement. Managing all key success factors leads to achieving good financial results, creating value for stakeholders, and enviable reputation.

## Conclusion

The performed analysis shows that there is no perfect performance management model that would be applicable to all companies, which confirms the starting research hypothesis. Since there is no ideal model for measuring and managing the performance of the company, and given the fact that each of them has its advantages and disadvantages, the general tendency of development of new, more advanced models, with the aim of eliminating the weaknesses of the past, is inherent in the modern era. The appearance of Kanji's business excellence model and Kanji's Business Scorecard is precisely an attempt to resolve the perceived weaknesses of the Balanced Scorecard, in order to achieve business excellence.

Kanji's business excellence model insists on maximizing the shareholder value, achieving process perfection, improving organizational learning, and the satisfaction of stakeholders' interests. The basic idea underlying Kanji's business excellence model is to highlight the relationship that exists between each of the TQM principles and improved organizational performance in the company. It is based on four key dimensions: top management, basic principles, concepts, and business excellence. To assess the company's achieved level of business excellence, it is necessary to measure a number of indicators, so that its measuring system stands for an important part in this model.

Kanji's Business Scorecard focuses on performance measurement from the external perspective, and looks at the company's operations from four perspectives, similar to the BSC, with the difference that KBS measures the performance that will become the key to achieving the satisfaction of all stakeholders, not just the customers. The main drawbacks of this model relate to the complexity of the measurement system and the insufficient involvement of employees in the organization, so that Kanji's ranking-based model has been proposed as a solution in this situation. This model is an attempt to eliminate the shortcomings of previous models, but also to initiate the formation of new successful solutions. As there is no perfect model, and in order to answer the demands of companies in modern business conditions, it is necessary to combine several models into a hybrid model that will resolve disadvantages and highlight the advantages of integrated models.

## References

- Bala, V. B., N. K. Keshan, and P. T.V. Mohandas (2009) "Performance Metrics Maturity Model: Strategy Aligned Integrated Linked Scoring System", *Journal of Cost Management*, 23 (6): 5-14.
- Chen, C. K., S. Songsithipornchai, and J.Y. Jang (2012) "Does Kanji's Business Excellence Model Work Well? A Study from the Measurement Aspect", in Kachitvichyanukul V., H.T. Luong, and R. Pitakaso (eds.), *Proceedings of the Asia Pacific Industrial Engineering & Management Systems*, pp. 991-1002.
- Domanović, V. (2010) *Balanced Scorecard – mogućnosti i efekti primene*, Kragujevac: Ekonomski fakultet.
- Figar, N. (2010a) "GRASP model upravljanja performansama preduzeća", *Računovodstvo*, 54 (7-8): 27-36.
- Figar, N. (2010b) "SAILS model upravljanja performansama preduzeća", *Računovodstvo*, 54 (3-4): 23-30.
- Hirst, E. D., and M. L. McAnally (2001) *Cases in Financial Reporting: an Integrated Approach with an Emphasis on Earnings and Persistence*, London: Prentice Hall.
- Kanji, G., and P. Moura (2002) "Kanji's Business Scorecard", *Total Quality Management*, 13 (1): 13-27.
- Krstić, B., V. Sekulić (2007) *Upravljanje performansama preduzeća*, Niš: Ekonomski fakultet.
- Niven, P. R. (2002) *Balanced Scorecard Step by Step-Maximizing Performance and Maintaining Results*, New Jersey: John Wiley & Sons, Inc.
- Parmenter, D., (2007), *Key Performance Indicators – Developing, Implementing, and Using Winning KPIs*, New Jersey: John Wiley & Sons, Inc.

## KOMPARATIVNA ANALIZA SAVREMENIH MODELA MERENJA I UPRAVLJANJA PERFORMANSAMA PREDUZEĆA

**Apstrakt:** Savremeni uslovi poslovanja prouzrokovali su razvoj velikog broja različitih modela za stratezijsko upravljanje performansama, koji ukupnu uspešnost preduzeća posmatraju kroz prizmu finansijskih i nefinansijskih indikatora raspoređenih kroz brojne perspektive. Modeli za stratezijsko upravljanje performansama treba da omoguće efikasno i efektivno upravljanje, odnosno adekvatan odgovor na kontinuirane promene u poslovnom okruženju. Teorija i praksa iz ove oblasti predlažu razvoj i primenu različitih integralnih okvira (modela) za upravljanje performansama preduzeća, a u cilju postizanja poslovne izvrsnosti. Pored već poznatih integralnih modela, kao što su Izbalansirana karta rezulta (Balanced Scorecard - BSC), Piramida performansi, SAILS model (Strategy Aligned Integrated Linked Scoring System), GRASP model (Goals-Resources-Actions-Structure-People), i drugi, razvijeni su i Kanjijev model poslovne izvrsnosti (Kanji's Business Excellence Model - KBEM) i Kanji Business Scorecard (KBS). Kanji model je nastao sa ciljem eliminisanja slabih strana i nedostataka prethodnih modela, posebno Balanced Scorecarda. Primena multidimenzionalnih merila performansi treba da poveća informacionu moć menadžmenta pri stratezijskom poslovnom odlučivanju. Cilj postavljen ovim radom jeste razmatranje osnovnih karakteristika nekih od savremenih modela za merenje i upravljanje performansama preduzeća koji su zastupljeni u teoriji i primenjeni u praksi, te na osnovama uporedne analize izvođenje zaključaka o njihovim prednostima i nedostacima.

**Ključne reči** modeli merenja i upravljanja performansama, Izbalansirana karta rezultata, SAILS model, GRASP model, Kanji model