

SOURCE IDENTIFICATION OF POTENTIAL MALFUNCTION OF BALANCED SCORECARD SYSTEM AND ITS INFLUENCE ON SYSTEM FUNCTION

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Introduction

Since the first publication of the article about the Balanced Scorecard system (BSC) by the authors Kaplan and Norton [21], there was publicized many books and professional and scientific reports related to this topic [6], [7], [17]. Empirical researches of practical applications that exist within them refer to identical statement that states: "there exist only few experimental papers with this topic" [2], [3], [8], [15], [27], [28]. This was the reason for substantiation of the solution meaning for a performance measurement of the BSC system in Slovakia, where there has not been realized any complex study of the BSC system implementation yet. There also exist only few empirical proofs about the number of companies, which one and by what form they implement the BSC system in Slovakia. In the Czech Republic, there is a more beneficial situation, because the use of the BSC system has been mapped. The results show the following conclusions: only 3 % of analyzed Czech companies use the BSC system. 55 % of companies confirm the knowledge of the BSC system, but they do not consider its future implementation. The BSC is planned to be implemented by 20 % of companies and for 17 % this term is totally unfamiliar [30].

1. Fundamental Principles of Performance

The notion performance represents characteristics, which closely describes a process by which the examined subject provides certain activity on the basis of comparison to

a reference method, or more precisely to a process of this activity [32]. Interpretation of this notion supposes a possibility of comparison of the examined and reference event that is based on properly stated criteria. In case of performance evaluation, on a company strategic level, for reference event, there is a need to consider a set strategy of given company, that is a group of targets and ways of their gaining. The final relation between the actual state and the planned state represents an interpretation of company performance, and subsequently, it conveys an extent to which the strategy of company is implemented. The fundamental performance principles are based on this substance: aim, finality, activation, and self-reflection [32].

System understanding of performance is based on a comparison of stated target values with the gained values, and implicitly it carries the risk that the performance increase does not have to be the result of more purposeful valuation of invested sources, but it is a result of a few ambitious target values [13]. In practice, it is a complicated task to state the adequate target values while their influence on quantification and improvement of company performance is very expressive. The differences in performance measurement in small and large companies are also expressive. Small companies do not define their aims, and because of that it is hard to apply a definition of system understanding of performance. Literature that is available critically evaluates an inadequate interest in measurement performance topic in small and medium companies that also declares an insufficient number of theoretical

and empirical researches in this field. Findings acquired in studies of [9] are beneficial, and they pay attention to numerous researches realized in Australia by means of companies that support a development of systems for an efficiency measurement of small and medium companies (thereinafter SMC) Commonwealth Scientific and Industrial Research Organization – CSIRO (in Finland, in Great Britain and in Germany). Similar researches absent in Slovakia. The reason is a long-time influence of directive planning, which did not encourage efforts to apply new, untraditional methods for measurement and performance control. It also manifested in negative efforts of managers to accept new knowledge and changes in the next period. At present, a question of the way of the measurement and control performance in

Slovak companies is the subject of constant discussions of professionals [33], who search for a solution how to measure an performance while not improving only one part of a company as well as how to create a managerial tool that supports a constant improvement from the measurement system of performance.

1.1 System Development for Performance Measurement

The development of a world economy as well as the local needs and requirements of users influenced the development of systems for performance measurement. Late 20th century brought strong effort to conceive the synthetic measures by means of which it would be possible to reliably predict the future economic results in a better way than on the basis of the

Tab. 1: Comparison of traditional and complex systems for performance measurement

TRADITIONAL PERFORMANCE MEASUREMENT SYSTEMS	COMPARING ASPECT	COMPLEX PERFORMANCE MEASUREMENT SYSTEMS
Accounting system: information about the past and the present financial situation.	DATA SOURCE AND ORIENTATION OF SYSTEM	Mission, vision and strategy formulation of company: information of the emergent and planned situation.
Horizontal and vertical financial analysis, expenses, revenues, economy result.		Values, quality, process performance in company, sustainable increase.
Financial aims: profit, margin, activity, indebtedness, effectiveness.	PREFERRED ORIENTATION	Complex values: strategic performance, branch, company value, market share.
Short-term orientation.	TIME ASPECT	Long-term orientation.
Static evaluation of situation – towards the past and the present facts, limited possibilities of future development prognosis.		Dynamic evaluation of situation towards the present and the future potential possibilities to reach the strategic aims.
Prevalence of quantitative measures.	CONCEIVABILITY OF MEASURES	Combination of quantitative and qualitative measures.
Prevalence of individual measures.		Prevalence of complex, team measures.
Prevalence of functional measures.		Prevalence of sectional measures.
Comparison of real values with the target ones and values of the past periods.	INTERPRETATION OF MEASURES	Monitoring of constant improvement, continual evaluation of target, or critical values.
Oriented to change evaluation as opposed to target ones as well as the past values.		Oriented to evaluation of connections and causes of actual values and identification of possible provisions.

Source: own scheme

economy results and its component decompositions. The constant changes of economic environment since the 1990s led to an effort to conceive the systems for performance measurement, and consequently to join the strategic aims of subjects that include quantitative and qualitative side of performance. Comparison of traditional and complex systems for performance measurement declares Tab. 1.

Some gaps in construction and methodology related to design, implementation, and development of systems come with the system complexity for performance measurement. The most significant critical places of systems for performance measurement are:

- Hierarchical and functional aggregation of financial and non-financial measures.
- Construction of dynamic and flexible measures – their modification concerning the internal and external changes to prevent the filling of the system by additional indicators [5].
- Technique of target and standard value determination of the system measures.
- Identification and quantification of irreversible influence consequences of the original strategy that was registered.
- Identification and quantification influence of emergent strategies from those proposed.
- Time delay – effects from different company activities (investments to equipment, employees, marketing programs, etc.) default in different periods of time, and so they obstruct the identification of casual-consequent relations, and misrepresent the aggregation of measures.
- Content of control mechanisms, and the subject of assessment is as the evaluation process of strategy implementation so the evaluation of its adequacy concerning the actual conditions as well as the evaluation of reliability and contribution of the system for performance of the control strategy.

1.2 Performance Measurement Systems in the Slovak Company Practice

In the last years, there is a notice of an intensive effort in the Slovak and foreign advisory and consultant companies to offer various performance measurement and management systems based on the so called "principles of good practice". Advisory and consultative

companies become the center of professional knowledge in the sphere of various managerial disciplines, combined with the rich practical experience, and the approach to the primary company data. The main reason is an intensive competition and global processes. This provides an acquiring of relevant information from subjects that dispose of various experience of the implementation and the usage of measurement and performance control systems. Experience of advisory and consultative companies is not exclusively related to a sole subject, and it transforms to a valuable knowledge of measurement and performance control systems. Despite the expressive efforts, it is possible to assert that an infiltration of these tools into the Slovak company practice is slower and less intensive than in abroad. On the basis of the three year scientific-experimental activity results that are oriented to the application of the Balanced Scorecard system in the Slovak companies [10], it is documented that the Slovak companies prefer an application of predominantly these systems: Process Management, Performance Management, Controlling, Organizational and process audit, Management quality system, Six, Sigma, Balanced Scorecard. The research results show that the most preferable method of performance increase in the examined companies is the Process Management (37.5 %), which is not perceived as a new managerial discipline in the companies. Process approach is also evident in the quality systems (TQM, norm ISO model 9000, etc.). Performance Management is the second most frequently used method of company performance increase (31.25 %) according to the respondents. It is a provision of a long-term gaining of a high level of the company operational and economic performance processes by applying the system management tools as well as a provision of an effective company operation by an optimization of used sources, and decreasing the expenses depending on the new-adjusted company processes and activities. The companies use different applied methods to do so, which depends on a company character as well as a department in which, e.g. the Balanced Scorecard Enterprise Value Map functions [8], etc. Some companies use the given systems to measure the performance on the basis of a parent company requirement to continue the activity in

a verified method as well as in the subsidiary corporations. Other companies try to apply the systems of performance measurement on the basis of so called "the principles of good practice" by using the services of the advisory and consultative companies as well as the companies that provide their services in the sphere of information systems and technologies.

2. Researches in the BSC field

The lately realized experimental studies of practical application of the BSC system were realized within various academic institutions, or within different advisory companies and professional associations. The difference between them was predominantly in their content as well as the extent of examined subject sample. Researches of advisory companies are conceived generally, and they are oriented to a satisfaction with the BSC. The standard method is a questionnaire, which is usually oriented to that geographical area, where such advisory company functions. Studies that are publicized by companies exclusively oriented to the topic of the BSC application, e.g. Balanced Scorecard Collaborative, Inc. (at present Palladium Goup, Inc.), Balanced Scorecard Interest Group, or Balanced Scorecard Institute [2], [3] have an individual status within this group of experimental studies. They represent a highly specialized source of knowledge by this. Many studies are frequently realized after certain time, and due to this reason, their significant strong side is an availability and comparability of data from different periods of time.

Studies that are realized by academic and research institutions are different by their orientation, and also methodological technique. As compared to studies of commercial institutions, the academic studies are oriented in a more specific way, they are defined by specific research problems, and also they are supported by scientific hypothesis. Data collection is realized by research questionnaires and by personal interviews, but there also exist some studies based on experiments [25], [31] or case studies [17]. The study by the authors [7] is also very unique, because it is the only one that analyses data for a long period of time on the small examined subject sample (9 subjects). Simultaneously, it is the only study that compares data of subjects, which applied the BSC together with the data of subjects

where the BSC was no longer used. This comparison was possible to use at the sample of different branches of one bank, because the basis was the common outlets: business focus, strategy, its aims, sources, etc. The mutual comparison is complicated as a result of a heterogeneity of business subjects (with implemented BSC and without it), and because of that, there is an absence of another similar researches. Research studies are very difficult to compare as a result of the specificity of their research problems and hypothesis, but there were identified some serious limitations that are necessary to take into account, while the interpretation of research results. They also represent the critical places in realization of one own research, which should be eliminated: use of general measures for comparing of different conditions of the BSC application [16], [26], artificially created experimental conditions [25], [31], and a trust in the individual subjects of evaluation, or information mediation.

I. Research phase – the BSC implementation

The ambition of the first research phase (2008–2010) was to systematize, research, and evaluate the chosen attributes of the BSC system application within the process of strategy implementation in the examined companies as well as to identify the problematic areas of the BSC implementation, and to propose some options of their solution. There were addressed two types of subjects within the achievement of stated objectives: companies that implement the BSC system (thereinafter the BSC implementation), and companies that are present in their references as the companies with the implemented BSC system (the BSC users).

Research sample selection

It was found that the BSC system in Slovakia is implemented by the advisory and the consultative companies, and by the companies that are oriented to the information systems and information technologies (IS/IT). The source is simply the knowledge from the publicized technical and scientific periodicals as well as own research. The information about the companies that implement the BSC in Slovakia was obtained by the company web pages concerning the nature of companies that deal with the advisory and consultative services as

well as the companies in the IS/IT field. There were searched the most visited servers according to a number of so called unique visitors, and by entering the key words related to given problem that was specified by companies that implement the BSC in Slovakia. Following these facts, there were found 40 companies with the given BSC implementation, from which only 20 companies really implement the BSC. Subsequently, these companies were addressed. 16 respondents were interested in research participation. A method in the written, electronic, and personal form was used in a research realization while addressing the respondents. A part of a research was an obtaining of information – references about the BSC users from the companies that implement the BSC. Each company implementing the BSC has provided information on one client, a BSC user, where consequently the second research phase aimed at the BSC functionality was realized. All of 16 companies were personally visited (a census was realized). From the point of view of the high denounced value of the company characteristics that use the BSC, there is a brief characterization of companies that implement the BSC in Slovakia.

Company characteristics that implement the BSC system

The first research sample is created of the 16 advisory and consultative companies as the companies that implement the BSC (those who implement). In the sample, there are companies with a history from 3 to 19 years, while the companies that have 12 years are represented the most (37.5 %). Sample is created of companies established in certain branch for a long period of time. Micro companies are represented the most 62.5 %, in a lesser extent are small companies 25 %, and medium companies 12.5 %.

Company characteristics that use the BSC system

In the second sample, there are 16 companies from 8 to 14 years since their foundation, while the most frequent are companies established for 10 years in certain field (37.5 %). The number of employees in a company tells about the representation of medium and large companies. Three quarters of respondents is interested in the activities in Slovakia and abroad. It is influenced by 38 % portion of major foreign company owner. Five-year experience with the

Tab. 2: Problem areas of the BSC implementation in the BSC users in Slovakia

PHASE OF BSC IMPLEMENTATION	PROBLEM AREA
STRATEGY FORMATION	<ul style="list-style-type: none"> – Application of strategic analysis methods. – Methodology of CSF definition.
BSC FORMATION	<ul style="list-style-type: none"> – Formation of methodology for choice of suitable measures from the actual that are used in a company. – Formation of methodology for the right KPI determination. – Determination of right target values, knowledge of the base in their determination. – Knowledge of methods for a process of the BSC extension and criteria in their selection. – Implementation of employee control system by a company management.
BSC IMPLEMENTATION	<ul style="list-style-type: none"> – Redefinition of reporting process.
BSC CONTINUAL USAGE	<ul style="list-style-type: none"> – Auto-evaluation of the BSC system. – Harmonization of the BSC system.

Source: own elaboration

implemented BSC system has for about 38 % of respondents, and by the same portion there are presented companies that use the BSC for 6 and 4 years (25 %). 13 % of respondents have the BSC in a phase of implementation, or in testing period as a pilot project. The BSC system was the most frequently implemented in the field of trade and industry (71 %), in a smaller extent in the field of health care (29 %).

Evaluation of partial results of the first research phase

There were specified these problem areas of the BSC implementation on the basis of the first research (Tab. 2).

Problem phase of the BSC implementation is a process of strategy formation as well as a process of strategy map formation, Key Performance Indicators (KPI), and Critical Success Factors (CSF) as well as an extension of the BSC on a lower hierarchical level. Insufficient extent of knowledge and experience with the use of strategic analysis methods was identified by a research realization. Their imperfect, insufficient use may aggravate the quality of the implemented BSC, eventually it may aggravate the system function. The significant role plays an external support. The external professionals may provide feedback about the activities that are happening, reflect a company status, reveal weak places as well as offer a support to company, team, and individual needs. Problem article is also a definition of precise performance measurements, and the provision of their balance as well as an absence of measures to the given strategic aims. This obstructs a formation of a relation definition among the individual indicators as well as the following interconnection among the individual perspectives. Usually, there is a problem of converting the "soft" aspects into the numeral parameters while setting the qualitative indicators [29]. In the analyzed companies certainly absents a methodology to determine the right KPI, which would be a certain string in the process of determination of the suitable measures to selected strategic aims. Similarly, as in the foreign companies so in the analyzed companies in Slovakia, it is very difficult to interconnect a formal system of remuneration with the BSC measures. The remuneration system must be

joined to the achievement of company targets. In many cases, the primary BSC measures do not correspond to aims, short-term measured results are not consistent with a long-term goal achievement, some measures are not correctly selected, or they have unreliable data.

II. Research phase – the BSC functionality

According to the results of the first research results, there was realized the phase II. in a period of 2010–2011. Its main aim was to verify the connection of inaccessibility of the strategic goals, or non-increase of performance with the BSC system, and also to quantify an extent of function and malfunction of the BSC system in the individual conditions of respondents. Quantification of the function and malfunction extent was realized by means of own proposal of an examined material, and that is on the basis of a factor systematization of function from the process, and also content view of the BSC methodology.

The BSC malfunction within the second phase of own research is understood as an inaccessibility of positive contribution of the BSC implementation and use, or as an inaccessibility of individual company strategic goals by the BSC. Non-functional application is an application which does not lead to a positive contribution and to an achievement of goals to which it has been applied. It evokes a discontent with the BSC system and arouses mistrust from the management organization's side [10], [11].

Research methodology II.

The subject of a research was a sample of 16 business subjects – the BSC users in references of the BSC implementers. The active BSC system underwent the implementing and testing phase, and it is in a phase of a service. The subject of a research was a satisfaction and objectivity of outputs from the system. Data collection was exclusively realized by a personal interview, which was combined with a filling of an evaluative research material that was conceived into several parts:

1. strategy and aim evaluation,
2. evaluation of performance development,
3. evaluation of the connection of goal inaccessibility and performance non-increase with the BSC critical places,

4. evaluation of the BSC process attributes,
5. evaluation of the observance of the BSC theoretical principles.

In an effort to understand a problem complexity, there was conceived two different evaluations for the BSC methodology application – content and process. Content view of the BSC represents a static side of application, and it is oriented to a verification of an extent of the BSC principles' application in practice. Process view of the BSC absorbs a dynamic side of the application, and it is oriented to a cause identification of the BSC malfunction that results from an incorrect implementation, use, or revision of the BSC. The systematized potential reasons represent the factors of system function from the content and process aspect, while the result of the II. research phase is a verification that these reasons are really the reasons of the BSC malfunction.

Evaluation of partial results of the second research phase

Results that were found from the subjects of a sampling file were generalized to a basic file. A significant finding was a high extent of the BSC malfunction (from 11 % to 76 %). The most frequent reasons of malfunction are mutually related and they may be grouped into the following problem spheres:

- the BSC cascading into lower organizational levels,
- harmonization of lower organizational levels with a strategy organization,
- the BSC interconnection to a control system of human resources and remuneration system,
- balance within the BSC system.

The most influential potential reasons of malfunction were identified within the system of potential reasons of malfunction as follows:

- identification and analysis of reasons for the BSC implementation,
- design of implementation project, support of change from the management's side,
- resolution and consensus in the field of strategic company direction, design of the BSC strategic maps,
- cascading and harmonization of organization with a strategy, launching of the BSC service and analysis and evaluation of the BSC system.

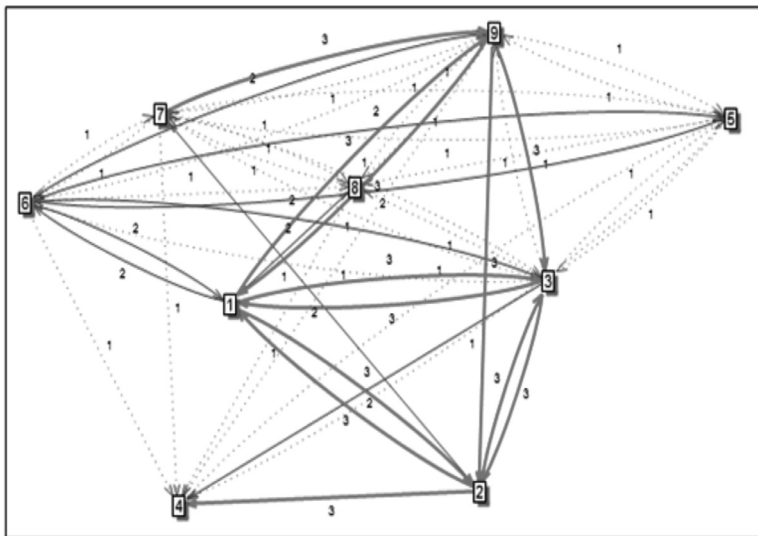
The most significant and most frequent reasons that lead to a decrease of function of the BSC system within the examined subjects as well as within the influential potential reasons of malfunction reasons are substandard values within the design of the BSC strategic maps, cascading, and harmonization of organization with strategy.

In the beginning of the article, the fundamental performance principles as well as the comparison of selected attributes of traditional and complex performance systems show nine BSC principles that are also created from own research activity [11]. The BSC principles represent the basic rules within the BSC method and its practical application, by which the application is conditioned to achieve the expected contribution from this application.

1. **Strategic focus** – it represents an outlet of the BSC system, which is a definition of mission, vision and subject strategy that are projected into the conceivability of the strategic maps as the basic BSC component. If the system has no strategic interest, it can not be a tool of strategic control and it represents a file of randomly selected measures.
2. **Significance and balance** – balance is the main characterization that differentiates the BSC from other methods of performance management based on a scorecard. It is impossible to talk about the fulfillment of the base of the Balanced Scorecard system, while an effort for searching a balance in the system absents.
3. **Strategy operationalization** – it is closely related to the first principles, while at this point, it is related to transformation of the strategic outlet to the concrete everyday activities that are principal for the strategy implementation and goal achievement. In the case that strategic goals are not operationalized into the ordinary processes, it is impossible to evaluate whether or how they are or are not realized.
4. **Causality** – definition and verification of casual-subsequent relations among the individual system components are inevitable for goal achievement as well as for indicators' evaluation. An absence of causalities make impossible to predict the development, and it degrades the system for the list of isolated indicators.

5. **Measurability** – it is one of the basic assumptions of management. At first, it is a substantial effort to quantify difficult measured quantities. System unbalance and misrepresentation of required outputs are caused by paying attention to well-quantified factors. It is important to concentrate on primary indicators that complicate their mutual aggregation and interpretation of result
6. **Cascading and harmonization** – it is related to operationalization of strategy, and it represents the strategy transformation to concrete activities and results in accordance with the organizational subject structure. An absence of this process isolates the BSC system at the highest operational level without any possibility to a direct influence of the results by the lower levels. It does not enable to increase the strategic performance of the subject.
7. **Interconnection to human resource management and financial sources** – it is a determination of the strategic priorities that should be projected into the formation and pumping of sources for these priorities.
8. **Continuity and feedback** – the BSC is a cyclical system, and because of that the interruption of the process in one of the following steps (strategy – measurements-evaluation-strategy, and so on) negatively influences the system function and it influences the results
9. **System auto-evaluation** – self evaluation is on of the basic principles of the strategic management as in the case of performance increase, so in the case of strategy implementation. Self evaluation helps to consider its contribution and function, which has a direct influence on quality information for strategic decision.
It is obvious that the consequences of maintenance subsequently strengthen or weaken a contribution of the BSC system for performance measuring and management of company. In the context, the BSC is considered to be the key for the evaluation of the BSC principles' application as well as for the analysis of some deficiencies, and identification of possible impacts on the conclusions of the strategic management.
The mutual interactions among the formalized principles of the BSC (Fig. 1) were analyzed

Fig. 1: Significance of interactions among the formalized principles of the BSC



- | | |
|---------------------------------|--|
| 1 – Strategic focus | 6 – Cascading and harmonization |
| 2 – Significance and balance | 7 – Interconnection to human resource management and financial sources |
| 3 – Strategy operationalization | 8 – Continuity and feedback |
| 4 – Measurability | 9 – System autoevaluation |
| 5 – Causality | |
- Source: own graph, in software LIPSOR MICMAC

according to vast theoretical outlets that create the basis for own research, the BSC methodology [15], and for own research activity. We applied a structural analysis method – the MICMAC (Matrice d'Impacts Croisés Multiplication Appliqués à un Classement [1], [14]). The structural analysis is a tool used to an analysis of a system, its dynamics, elements and their mutual interactions. Its significance consists in identification of main system determinants and its most sensitiv parameters. It enables to analyze and assess relationships between variables and to reduce a system complexity by selecting the most influential external parameters and the most sensitiv internal variables (key variables). It takes into account both direct and indirect (mediated) links between variables.

The significance of interactions has been analyzed with respect to a direction and strength of influence between the principles. A strong dependence is depicted by a dark arrow and a middle strong by a light arrow. Considering the goals of research, weak interactions were not analyzed.

3. Discussion

The strategic focus, significance and balance in the BSC system, operationalization of strategy and auto-evaluation of system are identified as prominent variables, which influence the rest of the given BSC principles. The fundamental BSC critical areas concerning the formalized principles and their impact on a system contribution for an organization as a consequence for strategic management of the organization are presented in the Table 3.

Tab. 3: Critical areas and their influence on the BSC (part 1)

PRINCIPLE	CRITICAL AREA	CONSEQUENCE FOR THE BSC
STRATEGIC FOCUS	Absence or insufficient strategic analysis (internal and external) and synthesis.	The BSC system provides significant misrepresented information as a consequence of insufficiently or incorrectly defined strategic outlets, or as a consequence of decreased motivation to its usage.
	Absence of support or insufficient support from management's side to the use of the BSC.	Decrease of the BSC significance in the emaning of its inutility or unimportance, increased resistance towards the changes incited by the BSC.
	Deficiencies in formulation of strategic outlets (vision, mission, strategy).	Decrease of the BCS function by incorrectly defined outlets that are subsequently projected into other parts of the BSC.
SIGNIFICANCE AND BALANCE	Unbalance among perspectives.	Unfulfilled base of the BSC that is the balance – system is a file of measures, about which i tis impossible to decide whether they provide a balanced view on a strategy function.
	Unbalance among the strategic aims.	Unbalance vision of the strategy as a whole, risk of concentration only on some parts of strategy area.
	Unbalance among indicators (internal-external, long term-short term, strategic-operational, financial-non-financial).	Unbalanced view of strategy as a whole, risk of concentration on easily quantified measures.

Tab. 3: Critical areas and their influence on the BSC (part 2)

PRINCIPLE	CRITICAL AREA	CONSEQUENCE FOR THE BSC
STRATEGY OPERATIONALIZATION	Absence or insufficient connection to tactic goals and operational tasks on strategy.	Monitored targets and measures without any connection to strategy, it is not obvious what is necessary to monitor, measure, and evaluate.
	Absence or insufficient evaluation of subserving the operational tasks, tactic and strategic.	Strategy is an abstract notion, and it is hard to evaluate its function, possible allocation of sources on unstrategic activities, possible neglect of activities that are inevitable for strategy success.
CAUSALITY	Absence, non-investigation, and non-definition of causalities among the strategic perspectives, targets, and actions.	Misrepresented information of causal-subsequent relations among the perspectives, targets, measures, values, actions.
	Absence or non-investigation and non-definition of causalities among measures and their critical and target values.	Limited possibility of prediction of the future subject results, or prediction of the impacts on intended interferences into the system.
MEASURABILITY	Excessive or insufficient number of measures.	System opacity, management overloading by unnecessary data.
	Excessive effort of measure complexity.	Difficult definition of primary areas, difficult interpretation of results.
	Excessive focus on transparent and easily quantified measures.	System unbalance, misrepresented view of strategy realization.
	Absence and insufficient regular quantification of measures.	Absence of necessary data, or data are not of required quality.
CASCADING AND HARMONIZATION	Insufficient distribution and harmonization of strategic, tactic, and operational targets concerning organizational structure.	Strategy is an abstract notion for employees, possible allocation of sources for unstrategic activities, possible allowance of employees' activities that are the key for strategy success.
	Insufficient distribution and harmonization of strategic measures, and their values concerning the organizational structure.	Strategy is not distributed within the individual working tasks and responsibilities concerning the organizational structure.
INTER-CONNECTION TO HUMAN RESOURCE MANAGEMENT AND FINANCIAL SOURCES	Insufficient connection of the remuneration system with the company objectives, missing interconnection between the remuneration system and the motivational system.	The system does not motivate to improve everyday performance, difficult motivating the employees to fulfil strategic goals, difficult change of a company culture.

Tab. 3: Critical areas and their influence on the BSC (part 3)

PRINCIPLE	CRITICAL AREA	CONSEQUENCE FOR THE BSC
INTER-CONNECTION TO HUMAN RESOURCE MANAGEMENT AND FINANCIAL SOURCES	Insufficient interconnection of strategy and plans for budget.	System testifies the requirements of sources, but not of the possibilities of their allocation possible allocation of sources to their non-strategic activities.
CONTINUITY AND FEEDBACK	Insufficient knowledge of the BSC method in implementing and servicing the system.	Incorrect outlet of the setting of the system components.
	Insufficient specified conditions and rules of using the BSC (rights, duties, quantification, error reporting, etc.).	Absent necessary data, or data are not of required quality, difficult motivation of employees to fulfill the strategic goals.
	Absent or insufficient analysis based on the outlet information from the BSC.	Decrease function by incorrectly defined outlets for the system revision, system with absent, insufficient, or incorrect revision that provides misrepresented information.
SYSTEM AUTO-EVALUATION	Absence or insufficient conditions and rules for assessment of the BSC function.	Absence of information about the critical places and deficiencies in the system, absence of information about the fact whether the BSC provides relevant and correct information for the strategic management.

Source: own elaboration

Information of the performance status and extent of the strategy implementation that were obtained by the systems for performance measurement and support of strategy implementation represent the model performance illustrations. It is a minimized illustration of reality, while the extent and character of this minimization is influenced by the characteristics of the used model (tool). Measurement and evaluation of the strategy performance and implementation is, as a consequence of this fact, except the real achieved results significantly influenced by methods for measuring and evaluation. Consequently, the evaluation of the BSC system is considered to be the key for assuring that the system provides correct and relevant information, and it is very useful for the strategic management.

The method, which was used in examination and evaluation of the BSC systems for business practice, is considered to be very

suitable proposal for the BSC evaluation based on the examined sample of the respondents. The following priorities are some of many examples that may be proposed:

- The BSC evaluation provides information to what extent are the BCS outlets inaccurate and misrepresented for the strategic management as a result of some deficiencies in its implementation, use, or violation of the BSC principles;
- The BSC evaluation leads very responsible employees to consider system's contribution, and also the fulfillment of functions, for which the system has been established;
- The BSC evaluation helps to identify the probable reasons of potential function failure, for which the system has been established, or its small contribution to the strategic management.
- The BSC evaluation enables the realization of a strategic benchmarking. It is possible to

realize the benchmarking visions, strategies, initiations, metrics effectively, and predominantly to realize the measurements' results ("scorecards") of a company. Benchmarking is a process of measurement, which may significantly contribute to a competitive advantage achievement as well as to an obtaining of important benefits [20].

To evaluate the BSC system we used a structural analysis method, the MICMAC, in a software LIPSOR MICMAC. The emphasis is on the proper identification of strategic variables (they do not have to be quantifiable) in order to gain the most objective and complex view of the analyzed system possible. In other countries, these analyses are mainly used in various marketing studies [22], to prognose market returns, to identify strategically significant market segments, to prognose their market shares etc. The application can also be useful to solve issues of the hypotheses testing on share markets (e.g. [12]). Its contribution are visible in early identification of significant shortcomings of the system and in the proces of its alignment, too. With respect to methodological aspects of the structural analysis and the possibilities of its efficient software support, we can see its use for the system analysis and evaluation of influence and dependence of its main determinants in macroeconomic studies [4], [18], [19] and on the micro level to prepare business plans of private and nonprofit organizations (e.g. [23], [24]). Although Slovak companies have to face the competition continuously, the number of users of external and internal analysis methods is low. The future increases the requirements on managers regarding their knowledge of strategic management methods utilization. To what extent they will benefit from the implementation of the systems is a question of future.

Conclusion

Balanced Scorecard is a complex managerial method, which is oriented to the aims, and which is based on a direct interconnection of the strategic targets and their measurements, which mirror the level of business activities in a specific period of time. The center of the BSC is not in monitoring of the traditional financial indicators, but in reception of the difficult

quantified and qualified indicators (employees' satisfaction, customers' loyalty, extent and reasons of fluctuation, etc.), and their interconnection with the traditional financial indicators. This is the way how the basic condition of this method, which is the balanced principle, is fulfilled. The examined sample of own research in Slovakia is exclusively created of medium and large companies. This is the reason of considering the problem of the implementation and usage possibilities of the BSC in small and medium large companies for the right subject of the next research. The suitable findings may be revealed by the following research, which would deal with the continual developmental changes of financial, economic, and market results by long-term usage of the BSC system, which emerges from the aforesaid aspects. Own research focuses on the analysis and evaluation of the BSC application of the structural analysis by means of the method MIC MAC (*Matrice d'Impacts Croisés Multiplication Appliquées à un Classement*) [1], [14] and that by the attributes of the process as well as content side of the BSC application, whose main advantage is that it also makes provision for indirect, that is mediated relations among the variables. The output of analysis is a qualification of input variables according to the extent of their influence and dependence. It enables to identify their mutual interconnections, and also the reasons of malfunction that are the most influential, and because of that, it is necessary to concentrate on them in practical application. The regular reevaluation of the function fulfillment, for which the BSC has been established, would be constantly adjusted as well as the BSC system, and so it could provide relevant and precise information for the strategic management.

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SOURCE IDENTIFICATION OF POTENTIAL MALFUNCTION OF BALANCED SCORECARD SYSTEM AND ITS INFLUENCE ON SYSTEM FUNCTION**Beáta Gavurová**

The constantly increasing complexity of competitive environment emphasizes the demands on area of measurement and performance control in many companies. Number of utilized systems for measurement and performance control were criticized due to many asymmetries in the sphere of measurement and control so far. Especially their synthetic view of performance, expressive orientation to past, disconnection of strategic stem with operative, minimal emphasis on intangible assets seen as vehicles of present as well as future company success were criticized. These deficiencies are markedly eliminated by Balance Scorecard system (BSC). It is approved system for measurement and performance control as well as for strategy implementation for almost 20 years, and predominantly in the countries of Western Europe and USA. The BSC basis is a formulation of vision, mission and strategy that are the result of company management consensus. The core of the system is the way and content of file measure conceivability in a mutual balance and also casual relations that are interconnected to strategy formulation. The correct construction of measures for company strategy is to tip the strategic priorities, and by means of casual-subsequent connection it is possible to tip the way to strategy realization. Equilibrium in system is provided by implementation balance and strategy evaluation. Besides many positive responses of implemented BSC system and its contribution to effective measurements and performance control in companies, there were also observed some negative experiences that declare an insufficient contribution of the BSC, dissatisfaction with the system and failure. This view signifies that the BSC system is non-functional as well as without any contribution. The article is based on the results of a research realized in a period of 2008–2011 in two phases. The aim of the first research phase (2008–2010) was to identify the problematic areas of the BSC system implementation and to propose some possible solutions. Together with the results of the first research, there was realized the second research (2010–2011) to verify the connection of aim fall, or more precisely the decrease of performance with the BSC system, and to convey the extent of function/malfunction of the BSC system in the individual respondent conditions. In the context of the research results, there is the aim of the article – systematization of the basic BSC principles and their concretization by means of potential reasons of malfunction.

Key Words: fundamental principles of performance, Balanced Scorecard, the BSC principles, critical area of the BSC, the BSC function.

JEL Classification: M 19, P 27.