

PERFORMANCE EVALUATION: LITERATURE REVIEW AND TIME EVOLUTION.

Pintea Mirela-Oana

Babeş-Bolyai University, Cluj-Napoca, Faculty of Economic Sciences and Business Administration

Performance evaluation of an economic entity requires approaching several criteria, such as industry and economic entity type, managerial and entrepreneurial strategy, competitive environment, human and material resources available, using a system of appropriate performance indicators for this purpose. The exigencies of communication occurred on the growing number of phenomena that marked the global economy in recent decades (internationalization and relocation of business crises and turmoil in financial markets), demand performance measurement to be made in a comprehensive way by financial and non-financial criteria.

Indicators are measures of performance used by management to measure, report and improve performance of the economic entity. The relationship between indicators and management is ensured by the existence of performance measurement systems. Studies to date indicate that economic entities using balanced performance measurement systems as a key management tool registered superior performance compared to entities not using such systems.

This study attempts to address the issue of performance evaluation by presenting opinions of different authors concerning the process of performance measurement and to present, after revising the literature, the evolution of the performance evaluation systems.

We tried to do this literature review because sustainable development and, therefore, globalization require new standards of performance that exceeds the economic field, both for domestic companies as well as international ones. So, these standards should be integrated into corporate strategy development to ensure sustainability of activities undertaken by harmonizing the economic, social and environmental objectives. To assess the performance of economic entities it is required that performance evaluation to be done with a balanced multidimensional system, including both financial ratios and non-financial indicators in order to reduce the limits of the two categories of indicators.

Performance measurement and management can't be separated; performance management is a philosophy that is supported by performance measurement. Performance management precedes performance measurement and creates the context for performance measurement.

Key words: performance, performance measurement, indicators, sustainable development, global performance.

JEL Classification Code: G00, G30

1. Introduction

Because performance "represents the aggregation of basic stages of action, from intention to result" (Lebas 1995), we can't separate the result, namely the performance obtained, of the resources and activities through which it was obtained, of the objectives to be achieved because a result doesn't mean anything if it is analyzed by itself. Moreover, "If you can't measure, you can't control. If you can't control, you can't manage. If you can't manage, you can't improve and can't be efficient" (Kuegen and Krahn 1999 quoted by Albu and Albu 2005:41).

Founder of the principles of management, Peter Drucker (1954) considers that "few things are important to a firm's performance as performance measurement", which tells us that it could represent a vulnerability for management today. Performance management includes and precedes performance measurement.

2. Literature review

There are several theories on how the concept of performance measurement appeared. Morgan (2004) believes that modern performance measurement appeared in Venice in the fifteenth century, with the appearance of the double entry accounting. Another view is that of the authors

Johnson and Kaplan (1987) that consider that performance measurement appeared during the industrial revolution. Either way we can say with fair certainty that performance management has emerged as the dominant research area in the early '50s, when academics and practitioners have become interested in the need to measure performance and measurement consequences (Argyris, 1952, Ridgway, 1956).

Interest in management and performance measurement has increased considerably in the last 20 years (Taticchi, 2008). Number of publications on this topic has grown significantly over the last decade (Beamon 1999, Lohman et al. 2004, Gunasekaran et al. 2004). We believe that this is mainly due to a fundamental change in business. Furthermore, performance is not a subject easily addressed. It is clear the need to study and rethink the concept and, in this context, to rethink how performance measurement it is done.

According to Atkinson et al. (1997) performance measurement should help the economic entity to understand and assess the value received from suppliers and employees, the value provided by the stakeholders and the effectiveness of processes implemented in the economic entity and its strategic properties. Therefore, we can say that performance measurement plays the role of coordination, monitoring and diagnosis of economic entity's activities.

Marr (2004) distinguishes the following activities in the process of measuring performance: (1) building a model of performance for each business separately, (2) data collection, (3) data analysis and interpretation, (4) retrieval and communication information. Such a definition of performance measurement is more comprehensive than those mentioned above. Thus, Marr manages to emphasize that performance measurement is a structured process, focused on results.

Another answer to the question "What is performance evaluation?" is provided by Maria Niculescu in "Global Strategic Diagnostics", where it considers that "performance measurement is a process that allows you to connect an abstract concept to empirical indicators" (Niculescu 2005:246). So, performance measurement tools are established to be the indicators. The economic literature can account for dozens of definitions of indicators. An indicator is an element or a set of information elements, representative in relation to a concern or an objective, resulted from tangible measuring or observing a state of a phenomenon or an output (Boldeanu, 2008:24).

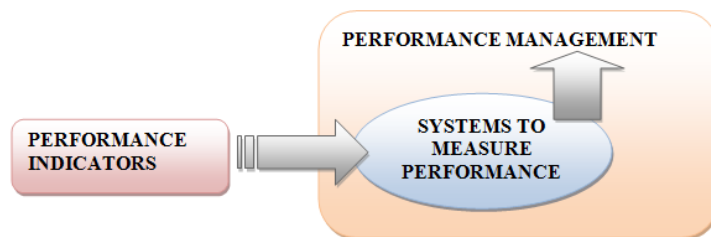
Since the performance of an economic entity is influenced by various factors we consider that the indicators used to assess the performance have to cover all performance determinants and their influence on performance by highlighting the quantifiable aspects and also the unquantifiable ones. The measure "financial" or "non-financial" has not such a great importance and there is no strict rule on the matter. Relevant criteria are different (strategic relevance, operational efficiency) and can be met, as appropriate, by the financial indicators and / or non-financial (Lorino 2002: 237). The so-called "non-financial indicators", even if they can't always be expressed in monetary units, their effect is reflected in other indicators of economic and financial dimension whose size is easily translated in monetary units. Improving the quality of the entity's activity is acting on the entity's image (non-financial indicator), but also on the size of turnover.

Currently performance measures should meet the following requirements (Maskell 1992:44-48): to use primarily the non-financial techniques; to vary from one location to another, from one region to another; to change over time, as entity needs change and to improve performance, not just monitor performance.

Performance evaluation of an economic entity requires approaching several criteria, such as industry and economic entity type, managerial and entrepreneurial strategy, competitive environment, human and material resources available, using a system of appropriate performance indicators for this purpose (Petrescu 2008:281).

The management of an economic entity uses indicators to measure, report and improve entity's performance. The relationship between indicators and management is ensured by the existence of performance measurement and can be captured as in figure number 1.

Figure no. 1 Relationship between performance indicators and performance management



Source: the author

The exigencies of communication occurred on the growing number of phenomena that marked the global economy in recent decades (internationalization and relocation of business crises and turmoil in financial markets), demand performance measurement to be made in a comprehensive way by financial and non-financial criteria. Non-financial criteria take into account the entity's long-term orientation and they derive from aspects such as social responsibility (Mironiuc 2009:152).

In the current context of sustainable development, performance evaluation process should take into account the interests of all parties involved (Kubiak 2003:41): internal and external customers, suppliers, partners, investors, society as a whole. Thus, indicators of the economic entity's performance evaluation that should be included in the set of indicators indicated by Evans (2005) can be divided into the following categories (Paunescu 2007:19): "financial indicators; indicators reflecting the overall performance of an economic entity; indicators reflecting on the market performance of the entity; indicators for quality of products and services; indicators on customer relationships; indicators on human resources and indicators for social responsibility and ethical behavior."

As we have seen during the literature revised, research to date in order to identify the appropriate structure of a system for assessing the performance of economic entities have found that it takes a "set of indicators that reflect a balanced picture of entities' performance" (Ciobanu 2006:13) and reflecting the multidimensional nature of performance. An example is provided by Kaplan and Norton that offer the Balanced Scorecard in 1996, which is a balanced assessment of the economic entity's performance, including both financial and non-financial indicators.

According to Epstein and Manzoni "systems (models) for measuring performance should include more non-financial indicators to complement the financial ones, in particular with regard to customer perception and performance of internal processes" (Epstein and Manzoni, 1997).

For sustainable development of an entity, value creation can't be seen in strictly financial terms, therefore any strategies that are defined by entities concerns not only the quantitative aspects (economic-financial) but also qualitative aspects (social and environmental). Based on these aspects Global Reporting Initiative proposed a set of performance measures covering the three dimensions of overall performance, divided into: environmental indicators, social indicators and economic indicators.

3. Research methodology

In terms of working tools for collecting data, the most used method of research was the longitudinal method, by presenting the time evolution of the concepts discussed in the paper. In terms of research techniques and procedures used most frequently was reviewing the literature regarding the concept of performance measurement and the systems for performance evaluation.

4. Results of the research

For an economic entity to achieve higher performance is necessary to implement an effective performance measurement system that "would allow for reaching decisions and acting accordingly because it quantifies the efficiency and effectiveness of past actions through the

acquisition, collection, sorting, analyzing, interpreting and dissemination of appropriate data" (Neely 1998:5-6). This definition is important because it indicates that a performance measurement system has several components, namely: individual measures that quantify the efficiency and effectiveness of actions; a set of measures that combined assess overall performance of an economic entity and the support infrastructure that allows data to be obtained, collected, sorted, analyzed, interpreted and disseminated.

In the next table we present the evolution of performance measurement systems while achieving a review of the literature. The main purpose of such systems is to support the economic entity's management to measure performance, analyze and improve operational efficiency by improving decision-making process. Most systems had empirical testing and some of them have been developed only in theory.

Table no. 1 Systems for measuring performance

Period	Model (System)	Author(s)
Before the '80	ROI, ROE, ROCE, derivate	Simons (2000)
1980	Economic Value Added (EVA)	Stewart (2007)
1988	Activity Based Costing (ABC) și Activity Based Management (ABM)	Cooper and Kaplan (1988)
1988	Strategic Measurement Analysis and Reporting Technique (SMART)	Cross and Lynch (1988)
1989	Supportive Performance Measures (SPA)	Keegan et al. (1989)
1990	Customer Value Analysis (CVA)	Customer Value Inc. (2007)
1990	Performance Measurement Questionnaire (PMQ)	Dixon et al. (1990)
1991	Results and Determinants Framework (RDF)	Fitzgerald et al. (1991)
1992	Balanced Scorecard (BSC)	Kaplan and Norton (1992)
1994	Service-Profit Chain (SPC)	Heskett et al. (1994)
1995	Return on Quality Approach (ROQ)	Rust et al. (1995)
1996	Cambridge Performance Measurement Framework (CPMF)	Neely et al. (1996)
1996	Consistent Performance Measurement System (CPMS)	Flapper et al. (1996)
1997	Integrated Performance Measurement System (IPMS)	Bititci et al. (1997)
1998	Comparative Business Scorecard (CBS)	Kanji (1998)
1998	Integrated Performance Measurement Framework (IPMF)	Medori and Steeple (2000)
1999	Business Excellence Model (BEM)	EFQM (2007)
2000	Dynamic Performance Measurement System (DPMS)	Bititci et al. (2000)
2001	Action-Profit Linkage (APL)	Epstein and Westbrook (2001)
2001	Manufacturing System Design Decomposition (MSDD)	Cochran et al. (2001)
2001	Performance Prism (PP)	Neely et al. (2001)
2004	Performance Planning Value Chain (PPVC)	Neely and Jarrar (2004)
2004	Capability Economic Value of Intangible and Tangible Assets Model (CEVITAE)	Ratnatunga et al. (2004)
2006	Performance, Development, Growth Benchmarking System (PDGBS)	St-Pierre and Delisle (2006)
2007	Unused Capacity Decomposition Framework (UCDF)	Balachandran et al. (2007)

Source: Taticchi, 2010:10

In the '80 the SMART model, developed in 1988, is a significant change in the literature on performance measurement, focusing first on linking strategy to operations by internal and external performance measures, and modeling the economic entity as an integrated system. The next, the SPA model, is characterized by the introduction of two innovations, which are: the concept of balanced measures and use of non-financial indicators.

In the 1990s, many performance measurement systems have emerged attempting to provide integrated solutions (RDF, BSC, SPC, IPMS, CBS, IPMF and BEM) or only specific methodologies to solve problems (PMQ, ROQ, CPMF and CPM s). These were followed by BSC

model that included more features, such as financial and non-financial, to bring into focus a mix of performance measures.

Systems that have emerged since 2000 are continuing to improve understanding of performance measurement process. Recently developed systems have specific features to connect strategy to operations carried out, providing a balanced set of measures (both financial and non-financial), in an attempt to create quantitative relations incorporating performance indicators and addressing performance measurement as a cognitive process.

5. Conclusions

In the '80s and early '90s various authors have suggested different systems to manage performance of economic entities among which the following: performance measurement matrix (Keegan et al. 1989), performance pyramid (Lynch and Cross 1991), results and determinants matrix (Fitzgerald et al. 1991), balanced scorecard (Kaplan and Norton 1992), performance measurement process developed at Cambridge University (Neely et al. 1995) and, more recently, there was the performance prism (Neely et al. 2001, 2002). All these have led to a relevant research area related to how these performance measurement systems can be developed and improved.

From the literature review we found that there is a continuing concern about the performance measures and its measure in all areas of activity, wanting to capture the performance of an economic entity in a comprehensible form. To obtain a relevant and coherent picture on the performance of an economic entity is necessary to use a system of indicators. The performance indicators of its structure must reflect in the same time, at least the following aspects: entity's objectives, its strategy, efficiency and effectiveness of the entity's activities, the ability to adapt to the market in which it operates.

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