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APPLICATION OF "TRADITIONAL" AND "NEW" APPROACH METHODS IN BUSINESS PERFORMANCE MEASUREMENT

Theoretical article

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Abstract

Business performance and its measurement play a key role in the life of enterprises. For sustainable development, companies must constantly keep in mind and measure their performance, in accordance with their long-term goals. Looking over the performance measurement history, we can see that this area has improved a lot, underlining the importance of this. In addition to „traditional" performance measurement indicators, several completely „new" methods from different perspectives have been developed. The economic and social conditions changed our image about the business performance. A complex and useful corporate performance evaluation, in addition to financial and non-financial indicators based on the accounting reports, has to contain other factors too. The „traditional" indicators must be completed with new performance measurement systems, or at least parts of them.

1. The concept of business performance

Performance is very important in all areas and activities. It is easy to determine the performance of certain activities, but it can be more difficult in others. There can be psychical, mental, work, study, sport, artistic, scientific and many other types of performance. The concept of performance shows a quite different character in each country and it is different in each language, not to mention the performance in different disciplines, and the individual interests.

In Hungarian language, the performance term appeared first in the Hungarian Language magazine in 1853 (Bárczi, 1991). Later it was defined in various fields, such as pedagogy (Nagy, 1979), sports (Nádori, 1986), economics (Ákos, 1968), human resources – employees with disabilities (Dajnoki, 2014) too.

In economic activities, performance is a crucial issue. The economic (business) performance is affected by many factors, and several economic operators are differently interpreting the concept of business performance (according to their expectations). Looking over the national and the international literature, we can agree that most experts are defining the business performance using three factors: efficiency, effectiveness and economic efficiency (Böcskei and Fekete, 2012; Nelly, Gregory and Platts; 1995, Rolstadls, 1995). Those can be supplemented by other factors such as: value creating, quality, productivity, innovation, changing ability, etc.

Whichever definition we are looking at, one thing is certain: the performance itself doesn't exist, there has to be always something to be benchmarked. Business performance is, and it should always be interpreted depending on the organizations goals and strategies.

2. Business performance measurement systems

What does the „business performance measurement system" really mean?

According to Atkinson (1998): "Strategic performance measurement defines the focus and scope of management accounting […] The process of strategic performance measurement begins with the organization's owners specifying the organisation's primary objectives […] Organization planners undertake strategic planning exercises to identify how they will pursue the organisation's primary objectives […] The chosen strategic plan results in a set of formal and informal contracts between the organisation and its stakeholders […] The give and take between the organisation and its critical stakeholders will define the organisation's secondary objectives. Secondary objectives derive their importance from their presumed effect on the achievement level of primary objectives. Secondary objectives are critical because they are the variables that the organisation's employees use to promote success – defined as desired performance on the organisation's primary objective […] As employees monitor the level of achieved primary and secondary objectives, they can use the resulting data to revise their beliefs about, or model of, the relationship between the secondary objectives and the organisation's primary objective –a process of organisational learning […] The final step in strategic performance measurement is to tie incentive pay to performance measurement results".

In Gates (1999) opinion: "A strategic performance measurement system translates business strategies into deliverable results. Combine financial, strategic and operating measures to gauge how well a company meets its targets".

According to Ittner, Larcker and Randall (2003):"A strategic performance measurement system: (1) provides information that allows the firm to identify the strategies offering the highest potential for achieving the firm's objectives, and (2) aligns management processes, such as target setting, decision-making, and performance evaluation, with the achievement of the chosen strategic objectives".

In Neely's opinion (1998): "A performance measurement system enables informed decisions to be made and actions to be taken because it quantifies the efficiency and effectiveness of past actions through the acquisition, collation, sorting, analysis, interpretation, and dissemination of appropriate data." Organizations measure their performance in order to check their position (as a means to establish position, compare position or benchmarking, monitor progress), communicate their position (as a means to communicate performance internally and with the regulator), confirm priorities (as a means to manage performance, cost and control, focus investment and actions), and compel progress (as a means of motivation and rewards).

It can be seen that the approaches of business performance measurement systems are different. The experts and other representatives of various interests are seeing quite different this concept. However, they agree about some things like: the performance measurement system is used to measure the performance, depending on the objective and clearly defined goals, implementation of strategies, processes and actions, and evaluation of results.

According to the reference literature, we can conclude that there is no shortage of business performance measurement methods. The performance measurement area has quickly changed and significantly improved in recent years. The beginning of the performance measurement can be put to the first accounting activities. Over the years the performance measurement has been equal to the accounting records. According to these accounting reports, several profitability-, efficiency-, and financial ratios can be calculated, as a measure of the companies' performance (Fenyves andTarnóczi, 2011).

Over the years, more and more performance measurement indicators appear, such as ROE – Return on Equity, ROA – Return on Assets, ROI – Return on Investment, etc. The increasing competition and the need for information, made the traditional performance measurement necessary to be changed. This mean that, compared to the previous practice, new approaches have appeared. The traditional performance measurement indicators did not satisfy the requirements (the 1980s). If we look at the countless new measurement frameworks and methods like Skandia Navigator, Intangible Assets Monitor (IAM), Tableau de Bord, performance prism, economic value added, the activity based cost, Balanced Scorecard, Data Envelopment Analysis (DEA), etc., we can see that scientific literature and experts attributed an increasing importance to this area.

It does not exist and it cannot be said to none of the existing performance measurement method or system that it is the best, that should be applied by everyone. The business conditions, the nature of the activities are so various, that for each company is necessary to select individual, to „customize" the proper performance measurement method, or system. The same method, system or ratios for the companies from different sectors of economy cannot be used. The characteristics of the manufacturing, providing services, agricultural or trading enterprises are different. In every case there must be analyzed the entrepreneurial activity, the activity specific characteristics, the strategies, processes, and so should be selected the appropriate performance measurement system.

3. Application of business performance measurement methods, depending on corporate activity

3.1. "Traditional" performance measurement

Each strategy, objectives and applied methods of companies, regardless of their activity, are based on their financial background. All the actions incurred to achieve the objectives always have financial implications as well. Without an adequate financing, the strategies, the achievement of the objectives cannot be implemented. Therefore, prior to setting the strategies and the goals, some important issues must be determined such as: the financial possibilities that the company has and will have, what and how much investment would they need in order to implement the tasks. It is necessary to check and analyze the financial situation and the continuous monitoring.

In view of the importance of financial background, we can say that, in business performance measurement, the financial performance and its measurement constitute the starting point. The financial situation directly affects both the activity of the company's in each sector, and the quality and quantity of their activities in the way to achieve the goals.

There are a lot of good indicators to measure and to make complex analysis of the financial situation. They are the so called „traditional" performance measurement methods and indicators. Those indicators are calculated from the accounting records and reports.

The most common used indicators of financial performance measures are as follows:

- Profitability ratios: measure a company's ability to generate earnings relative to sales, assets and equity. The best known ratios: ROE – return of equity, ROA – return on assets, ROI – return on investment, ROCE - return on capital employed, gross profit margin, net profit margin, etc. All these ratios indicate how well a company is performing at generating profits or revenues relative to a certain metric.
- Efficiency ratios: measure how well the companies use their assets to generate income. These includes: total assets turnover ratio, rotation time, accounts receivable turnover ratio, inventory turnover, etc.
- Financial ratios: shows the company's financial situation. Financial ratios: liquidity ratios, indebtedness level, net working capital ratio, etc.

As we have seen above, the financial background ensures primarily the opportunity to have the actions necessary to achieve the goals. In a well-development performance measurement system, it is essential the so called „traditional" performance measurement using the accounting reports and records. This should be complemented, „dressed up" with other performance measurement methods, methods which were developed taking in to account the changed social and economic circumstances.

3.2. „New" performance measurement methods:

Johnson and Kaplan (1987) showed that the traditional performance measurement indicators do not reflect the changes that appeared in the competitive conditions and strategies of the modern organizations.

The accounting information cannot emphasize those primary parts, which lead to favourable or unfavourable future financial results. One of the main problems with the accounting information is that the economic events time horizon is not extended to their financial consequences (Rappaport, 1983; Kaplan, 1984; Dearden, 1987).

In the middle of the 1980s appeared the theories and empirical studies that have shown that the long-term success and survival of companies cannot be confined only to maximize the shareholder value. The companies have a number of stakeholders and it is necessary to create value for them too (Donaldson and Preston, 1995; Clarkson, 1995).

The stakeholder conception theory is closely related to the social changes that are determined ones about the image of business organizations. The approach which considered important only the owner's demands was gradually pushed into the background and other social views, came to foreground. It is generally defined as „stakeholder is who can influence the organization aim-attainment leads, or who is involved in" (Freeman and Reed, 1983).

The newest performance measurement method developed in the spirit of value-added approach is the **Performance prism** (Neely et al., 2002). The performance prism authors (NEELY et al., 2004) offer a thorough guide built on the stakeholder approach, to what, why and how it should be measured in order to manage and improve the organization. According to authors (Andy Neely, Chris Adams and Mike Kennerley): „the performance prism is built on three fundamental assumptions: first, it is not acceptable any more for companies to focus on only one or two stakeholder's (typically the owners and customers) interests; secondly, an organization can provide value for all their stakeholders, if the strategies, processes and capabilities are integrated with each other; thirdly, the organizations and the stakeholders should recognize the nature of mutual relations; all stakeholders must also contribute to the functioning of the organization, in addition to have expectations from it…" (Neely et al., , 2004).

The three dimensional model has been designed to be sufficiently flexible to all the needs of the organizations. The bottom of the prism is the **Stakeholder's Contribution**, and on the top is the **Stakeholder's Satisfaction**. The sides of the prism are: **strategies, processes and capabilities**.

In addition to the „value-added" theories, many new methods focus on „invisible capital" (**Intangible Assets monitor, IAM)**, on human knowledge and skills, on „intellectual capital" (**Skandia Navigator, Wissensbilanz**), they put the so called intangible assets in the foreground.

Beyond a doubt, the most widely used performance measurement system is the **Balanced Scorecard System (BSC)**, developed by Kaplan and Norton (1992). The Balanced Scorecard (BSC) translates the vision of the organization and strategy in comprehensive balanced scorecards, which also have a performance appraisal and management system. The focus is still to achieve the long-term financial goals, but includes also the other factors needs in order to achieve the financial goals. The BSC works with four equivalent criteria: financial performance, customers, operational processes, and learning and development. The system puts more and more emphasis on the management of non-material resources.

In France the **Tableau de Bord** (TdB) system is widely used. The meaning is „dashboard". Like the Balanced ScoreCard, here is also important the connection with the corporate strategy and the exploration of the cause and effect relationship. The steps are determined by the so-called OVAR method: O - Objectifs, VA - Variable d'action, R – Responsable, being followed by „dashboard".

A new non-parametric deterministic method, the **DEA (Data Envelopment Analysis**) is increasingly gaining ground. This method is still less used in profit-oriented business, mostly we can see examples in the service sector (Fenyves, 2014). The DEA creates relative efficiency scores, while taking into account a number of inputs and outputs. There is no need to specify a specific function for input and output characteristics. The DEA efficiency or inefficiency is characterized by a value between 0 and 1(Mohamad and Said, 2013).

3.3 Business performance measurement methods, depending on corporate activity

Studying the economic sectors and the activities of the companies, four groups were distinguished, based on the most efficient performance measurement methods recommended:

1. Manufacturing companies (including all areas of industry, manufacturing, engineering, construction, the agriculture, mining and other natural resource industries); the following factors have a key role in their activities: productivity, value added, capacity utilization, production costs, quality, investment, innovation, labour involved in production (as a stakeholder).
2. Trading companies; the following factors have a key role in their activities: inventory management, stock turnover, sales activity, customer/supplier relationships (as stakeholders).
3. Service companies; the following factors have a key role in their activities: value added, customers, partners (as stakeholders), employees (as stakeholders), customer satisfaction, loyalty, marketing.
4. Research and development area; the following factors have a key role in their activities: innovation, intellectual capital, number of patents, finances.

These areas, and activities are very different from each other. Some of the performance measurement ratios have a key role in certain activities, and those can have insignificant or meaningless role in other activities. We are justified, that the companies must select such a business performance measurement

system that corresponds to their specific nature and properties and they should develop the ratios system in accordance to their strategies and goals.
The indicators should be applied to the organizational mission and goals, to reflect the company's external competitive environment, the customer's requirements and internal targets (Kennerley, – Neely, 2003).
With this in mind, the Table nr. 1 provides a guide, to the most recommended performance measurement systems and ratios, based on the activities of the companies.

4. Conclusions

Regular performance measurement assessment and taking into account the stakeholders demands directly affect the company's position and its long term goals achievement. Various studies show that managers give importance to performance measurement, but in many cases, the quantity of the information and the collected data leads to the expense of quality. The inadequate indicators and systems lead to erroneous assessments.
Based on the accounting information and reports, we can evaluate the financial implications of our actions, the current financial situation and outline the future financial options. Together with the customers' demands and judgments, as well as our knowledge and capabilities, we can develop the strategies to achieve the goals. Accordingly, both the selection of performance measurement method, evaluation and measurement of key performance indicators can provide support for survival and success.

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Table 1.
Business performance measurement depending on companies' activity

Manufacturing activity **Trading activity** **Service activity** **Research and development**	**Financial performance ratios** liquidity ratios, indebtedness level, net working capital ratio, ROE, ROA, ROI, etc.
	Key performance ratios
Manufacturing activity	Productivity, gross/net production value, value added, capacity utilization, production costs, total assets turnover ratio, customer complaints, etc.
Trading activity	Stocks turnover ratio, price elasticity, stock efficiency, customer complaints, number of employees, wage efficiency, etc.
Service activity	Customer complaints, productivity, value added, efficiency ratios (assets, wage, capital), number of completed service hours, number of events, etc.
Research and development	Publications, patents number, collaborations, number of researchers, investment efficiency, etc.
	Performance measurement systems
Manufacturing activity	Tableau de Bord, Skandia Navigator, Balanced Scorecard, Wissensbilanz, Data Envelopment Analysis
Trading activity	Performance prism, Balanced Scorecard, Tableau de Bord, Wissensbilanz, Data Envelopment Analysis
Service activity	Performance prism, Balanced Scorecard, Data Envelopment Analysis, Wissensbilanz, Skandia Navigator
Research and development	Intangible Assets Monitor, Wissensbilanz, Skandia Navigator, Balanced Scorecard

Source: own editing