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HISTORICAL OVERVIEW OF THE LITERATURE ON BUSINESS PERFORMANCE MEASUREMENT FROM THE BEGINNING TO THE PRESENT

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Abstract: *The paper summarizes the concept of business performance and the performance measurement. The concept of business performance has changed a lot over the past decades. The managers have understood that in order to achieve organizational goals, more emphasis should be placed outside the owners, on other market participants, on the stakeholders (eg: customers, clients, employees, suppliers and other partners, local communities, …). The '90s are also called „The performance measurement revolution", because a lot of new performance measurement methods, systems appeared. The performance measurements have the prominent role: to collect information about where we are going to achieve the goals, if needed for intervention.*

Keywords: *effectiveness, efficiency, business performance, performance measurement*
(JEL code: B40)

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 may be psyhical, 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 economic activities, performance is a crucial issue. The economic (business) performance is affected by many factors, and different economic actors are interpreted differently the concept of business performance (according to their expectations).

In the 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), physics (J. JUHÁSZ et al., 2001) too (SAJTOS, 2004).

According to the **Hungarian Concise Dictionary** (1985), the performance is „the measurable result of an activity".

According to the **Hungarian Science and Every Day Language Concise Dictionary** (*www.meszotar.hu*), the performance is: „How the business effectively implements the action program in the business life, according to the previous formulated plans, which leads to business effectiveness". We can see that in this case, the performance means to achieve the goals, and if those are realized, it will mean the effectiveness too. In my opinion, achievement of the goals, may not always be effectiveness. For that purpose the company should use resources, and their efficiency shows how really effectiveness were they. Efficiency is the first step to effectiveness.

According to the **Romanian Concise Dictionary** (DEX, 1998): „outstanding achievement in a particular area of activity". This definition suggests that the given company achieves good performance, who would reach better results than the other competitor companies.

1.1 The concept of business performance in the international literature

There are a number of interpretations for the concept of **BUSINESS PERFORMANCE**. Most definitions focus around the **efficiency** and **effectiveness**. However, other frequent terms used to define the business performance, don't always have the same content: **productivity**, **efficiency**, **economic efficiency**, **profitability** and **effectiveness**.

According to the Organisation for Economic Co-operation and Development (OCED), the **productivity** term is defined as follows: the productivity is the quotient resulted by the output and the input of a component. But there are discussions about the output and the input definitions too. The basic concept of productivity measurement methods and developments are binds to SOLOW (1957), ABRAMOVITZ (1962) and JORGENSON – GRILICHES (1967).

By PRITCHARD (1990), the **efficiency** is the ratio of the output and the input. The **effectiveness** is the ratio of the actual output and the expected or a standard output.

According to SAMUELSON and NORDHAUS (2005) the **productivity** is equal to the costs per unit of the output, or otherwise the efficiency of resource used.

The **effectiveness** of the operation means that you can do similar activities better than the competitors. The effectiveness of the operation includes the efficiency, but it is not limited to it. The effectiveness provides a better utilization of the resources (PORTER, 1998).

During the calculation of **profitability,** certain categories of income are compared to a reference base (balance sheet value or income value). This can signal a change in the level of profitability, enabling for comparison with other companies (KOROM, 2008).

NELLY, GREGORY and PLATTS (1995) defined the **performance** with two dimensions:

- Effectiveness, compliance to the organization goals
- Efficiency, expresses the economic efficiency of the resources used to reach the goals.

SINK (1985) as well as SINK and TUTTLE (1989) supplemented the concept of effectiveness and economic efficiency by additional elements: quality, productivity, quality of work, innovation and profitability, as the ultimate goal of every organization.

In ROLSTADLS's (1995) opinion, the business performance has three dimensions: the effectiveness which shows the consumer needs satisfaction degree, the economic efficiency shows how efficiently the company uses its resourses, and the changing ability indicates how much the company is prepared for the future.

The absence of international consensus is indicated by two French authors JACOT and MICAELLI (1996) for performance interpretation, showing the difficulties in coordination with the English terminology. The categories they propose are:

- The efficiency of the assets used („effectivité"),
- The relationship between the assets used and the results obtained („efficience"),
- The relationship between the used assets, the results obtained and the predetermined goals („efficacité").

According to LEBAS (1995), the content in English and French is the same: „efficacité" can be determined by conforming with the goals and „efficience" can be determined by studying the resources used.

In RAPPAPORT's (1998) opinion, business performance has a value-creating interpretation: „The only social responsability for business enterprises in the private property appreciated economic markets is: to create value for shareholders with lawful and fair tools". He is the main representative of the shareholders' value creation aspect. It is clear that shareholders' value can be created only with effectiveness and efficiency.

We can meet the performance value based approach in LORINO works (1995, 1997) too. According to the author:

- business performance can be considered only that which contributes to the value/cost ratio improvement (LORINO, 1997),
- business performance can be considered only that which contributes to the achievement of strategic objectives (LORINO, 1997).

Lorino indicates that the enterpriese's goals are the value creation. Because it is about business performance, Lorino's insights should be clarified: businesses can aim to create value, but only shareholders' value! The other value creation is only the road leading towards the target.

1.2 The concept of business performance in the Romanian literature

Many people deal with the issue of business performance also in the Romanian literature:

Business performance is defined by RISTEA (2003) using three factors: efficiency + economic efficiency + effectiveness.

According to NICULESCU and LAVALETTE (1999) business performance shows the company's competitive position reached with productivity and efficiency, and that will ensure long-term survival.

In VERBONCU and ZALMAN's (2005) view, the performance is determined by the whole coordinated activity of the enterprise.

According to ALBU and ALBU (2005), performance is an abstract expression, and its definition is linked to other concepts: efficiency, economic efficiency and value.

1.3. The concept of business performance in the Hungarian literature

According to KOROM (2007) performance means: the difference between the starting point and the target point in the dimensions of capabilities, opportunities, organization, activities, space and time.

According to BÖCSKEI and FEKETE (2012), business performance is determined by the economic efficiency. And generally, the economic efficiency will lead to efficiency. But, in certain cases, the economic efficiency is not connected to efficiency: it is possible that some economic efficiency companies do not reach their goals, because there is no demand for their product. However, it is also possible for an economically inefficient company to achieve its goals (BÖCSKEI, 2012).

SZŰTS (1983) interprets the efficiency of business performance with two components: **achievement of the goals** like the quality component, and the **ratio of the results-expenses** like the quantitative component. In his view, the activity has efficiency if the goals are reached.

Similar ideas are formulated by DOBÁK et al (1996) in relation to business performance. The effectiveness of the organization suggests that the organization follows the correct goals, and the organizational efficiency indicates its ability to achieve its objectives and the available resources are used efficiently.

WIMMER (2000, 2002) connects the business performance with the organizations capability of value creating. It is important to create value, but not only shareholder value. The consumer value creation will lead to increase in the shareholder value.

In my opinion, the value creation is a tool to achieve the objectives. If we create value, we can get to the goals. Basically, all business purpose has a financial nature: to reach higher profits.

In our opinion, the business performance express how much we reached the beforehand exactly determined goals (the level of the goals achievement).

2. Performance measurement processes, models

2.1. The concept of business performance, historical overview

It is worth mentioning a few well-known words about performance measurement:

The most known word about the busines performance are linked to the name of Lord Kevin: „When you can measure what you are speaking about, and express it in numbers, you know something about it ... otherwise your knowledge is of a meager and unsatisfactory kind...". (NEELY et al., 1995)

According to NEELY et al (2002), the role of performance measurement is: „to support the well-informed decisions and actions, by providing with appropriate data collection, processing, organizing, analyzing and interpreting quantify the efficiency and effectiveness of past actions".

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 (about the years of 1300-1400 at Genoa; the first accounting balance was prepared at 1511 – by the Fugger family from Venice; we can speak about financial and management accounting about the end of the XIXth century). Over the years the performance measurement was equal to the accounting records. Over time, more and more performance measurement indicators appear, such as ROE – Return on Equity, ROA – Return on Assets, ROI – Return on Investment. The increasing competition and the need for information, made it necessary to change the traditional performance measurement. This meant 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 the Balanced Scorecard, performance prism, economic value added, etc., we can see that the scientific literature and experts attributed an increasing importance to this area.

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 (JOHNSON, – KAPLAN, 1987).

The accounting information cannot emphasize those microelements, which leads to favorable or unfavorable future financial results. One of the main problems whith the accounting information is that the economic events time horizont is not extended to their financial consequences (HOPWOOD, 1972; RAPPAPORT, 1983; KAPLAN, 1984; DEARDEN, 1987).

The '90s began with radical changes in the performance measurement. Those views come to the forefront, according to which, the main goals of the stategic planning of the companies is the **value creation**. Value creation is primarily for the shareholders, but also to the other stakeholders, too. Based on the principle of the value maximization, managers should focus all their decisions to increase the value of the company (RAPPAPORT, 1981).

- The value creation, as the main objective, is achieved through the value creation factors. Every company must identify their own value creation factors. However, the list of value creation factors may change over the time, so this should be reviewed periodically (PORTER, 1985).
- According to RAPPAPORT, it is not possible to define a generally applicable „shareholder value mesh" to all companies, but he recommended a seven-factor model based to requirements of yield growth–risk, can be determined the value of the companies (RAPPAPORT, 2002).

In the European practice, the concept of value creation is also adopted, but the shareholder value approach is not so emphasized such as in the Anglo-Saxon countries. One of the reasons is the tradition for indicators based on accounting information.

In the middle of the 1980s appear the theories and empirical studies that have shown that the long-term succes 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 – PRESTON, 1995; CLARKSON, 1995).

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

Within a few years, so the beginnings of the 1990s came with new performance measurement systems. An efficiency performance measurement system must based on relevant indicators, and must be related to the company's strategy (DRUCKER, 1990). The performance measurement must incorporate financial and non financial indicators too, because the companies have not only financial goals (KAPLAN, 1984). 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).

The '90s are also called: **„the performance measurement's revolution"**: between 1994 and 1996 were published 3.615 articles about performance measurement topics (NEELY, 1999). Several authors have developed and introduced new performance measurement system or method.

Performance measurement is the process of measuring the efficiency and effectiveness of an activity (NEELY et al. 1995). Its aim is to support the decisions and actions by collecting, processing and interpreting the information. Performance measurements quantify the efficiency and effectiveness of past decisions. Effectiveness means to achieve the objects, and the economic efficiency means the quality of resource used (WIMMER, 2004).

2.2. Performance measurement processes, models

Management by Objectives (MBO) was first popularized by DRUCKER (1954) in his book The practice of management. The essence of MBO is participative goal setting, choosing course of actions and decision making. An important part of MBO is the measurement and the comparison of the employee's actual performance with the standards set. The purpose is to increase the organization's performance through a set of sub-goals continuous reach them.

The late 1950s also popularized the **Hoshin management system**: it is a Far-Eastern method, the method focuses on systematic review, on cyclicity, which can be symbolized by PDCA (Plan, Do, Check, Act) cycle (SHIBA, et al. 1995, MULLIGAN, et al. 1996, WITCHER – BUTTERWORTH, 1999).

Beginning with the 1980-1990s, many well proven methods were published and spread.

The **Skandia Navigator** method was developed by Swedish Skandia insurance and financial service company in the first half of the 1990s, first putting focus on the measure of intellectual capital. The model was developed by Leif Edvinsson. The model focuses on the people. The explanation for this is the recognition that behind every change, learning or development is the person. No organization would be able to comply with the outside world, to environment, to customers' changing needs, if the employees were not able or willing to change. The model uses five factors: people, customers, finances, processes, innovation and development. They use different scales for each factor, and the purpose is to monitorise the changes. So, they produced 91 intellectual capital indicators and also used 73 traditional indicators (BÍRÓ, 2007).

The **Intangible Assets monitor, IAM** model was development by KARL ERIK SVEIBY, in the second half of the 1990s. It is an attempt to measure the „invisible capital" of the organization. The „invisible capital" is defined by three elements:

1. organization capital – internal structure
2. client capital – external structure
3. human/knowledge capital – skills

The model offers different indicators to measure the elements' efficiency and stability. The companies can choose the best indicators which can be applied for their companies.

The **Performance measurement and management model** developed by KURSTEDT, SINK and TUTTLE helps us to realize the true importance of measurement in the development processes. The model defines performance as a complex interrelationship of seven criteria: effectiveness, efficiency, quality, productivity, quality of work life, innovation, and profitability. According to Performance Centre: „using the measurement, can be describe the gap that is between, which we have now and what we want...".

At the end of the 20th century, appeared the so-called „self-assessment models", such as the **EFQM** model **(European Foundation for Quality Management)**, which also contributed to the changes in performance measurement approach.

In the middle of the '90s in Scandinavia, Denmark, Sweden, and Iceland, but in Austria, Germany and Spain too, spread the techniques as „**Wissensbilanz**". The „Wissensbilanz" is focused at the companies knownledge strategic point of view. The „Wissensbilanz" model deals whith the strategic importance of the knowledge, skills and value creating power of companies (LERNER, 2007).

In France the **Tableau de Bord** (TdB) system is widely used. The meaning is „dashboard". Like the Balanced ScoreCard, the connection with the corporate strategy is important 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, those are followed by „dashboard".

A new performance measurement system is developed in 1991 by LYNCH and CROSS, named **Performance Pyramid System (PPS)**. It is a system with different performance variables, which are supervised by different organizational levels. The strategic objectives flow down over the organization, while it is present an upward information process. The four level of PPS are: the corporate vision, the corporate units accountability, the competition dimension, special actions criterion. With this pyramid can be described how the objectives are communicated down to the operational level, and the indicators will return to higher levels. The use of the PPS also defines the context of feedback. In this context, the PPS is used specifically to monitor the organization's performance (LYNCH – CROSS, 1991).

Without doubt, the most widely used performance measurement system is the **Balanced Scorecard System**. It was originated by Robert Kaplan and David Norton as a performance measurement framework that added strategic non-financial performance measures to traditional financial metrics. Accordind to those two authors, the managers are aware of the impact of performance measurement, yet rarely considered the measurement system as an integral part of their strategy (KAPLAN – NORTON, 1993).

The Balanced Scorecard (BSC) translates the organization's vision and strategy in a comprehensive balanced scorecards, which also has a performance appraisal and management system. The focus is still to achieve the long-term financial goals, but includes also the other factors needs 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. The

Balanced Scorecard System keeps the focus on financial ratios. However, only the financial approach itself, is not capable to evaluate successfully the organization's activities. So, the traditional indicators were complemented with indicators that provide informations about the factors that affect the performance. The BSC indicators must be derived from the company's well-established vision and strategy. Using the BSC, the managers could understand how the company can create value in the future for consumers. So, the BSC system defines the value creating activities which are in the focus of organizations, and reveal the factors that contribute most to the achievement of long-term financial success and competitiveness. The BSC is based on indicators which are at all levels of the organization and they are part of an information system accessible to all employees. The BSC is not only a system with financial and non-financial indicators. The indicators are derived from the organization's mission and strategy in a top-down process of the organization, so, the system is a conversion of the missions and strategys into goals and indicators. The system is a balanced scorecard, because it both contain the indicators about the past performance and the factors which influenced it the most (SZÍVÓS, 2007).

„The Balanced Scorecard is more than a simple set of financial and non-financial indicators. The BSC is a translation of the organizational strategys to such indicators, which can determine as well the long-term goals such as the mechanisms for achieving those goals" (SZÍVÓS, 2007).

The performance prism authors (NEELY et al., 2004) offers a thourough 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: „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 stakeholders (typically the owners and customers) interests; secondly, an organization can provide value for all of 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 the organization…" (NEELY et al., 2004).

The three dimensional model has been designed to be sufficiently flexible to all needs of organizations. The bottom of the prism is the **Stakeholder Contribution**, and on the top is the **Stakeholders Satisfaction**. The sides of the prism are: **stategies, processes and capabilities**. The performance prism system captures the performance concept by five logically interrelated points of view. For long-term success it is essential to have a clear overview of the organization's most important stakeholders' expectations and needs. The basic assumption of the model is that not only the owners and the customers are important to organization, the other stakeholders are very important too. The stakeholders are: investors, customers, agents, employees, suppliers, regulators, communities, interest groups, strategic partners and allies.

Another new instrument is **benchmarking**. Benchmarking is the process of comparing one's business processes and performance metrics to industry bests or best practices from other companies. Dimensions typically measured are quality, time and cost. In the process of best practice benchmarking, management identifies the best firms in their industry, or in another industry where similar processes exist, and compares the results and processes of those studied to one's own results and processes. In this way, they learn how well the tragets perform and, more importantly, the business processes that explain why these firms are successful (*http://en.wikipedia.org/wiki/Benchmarking*).

Performance evaluation is an important, ongoing development tool, which helps to remain competitive and plays an essential role in the company's growth. Performance evaluation and benchmarking actually strengthen continous development of any business unit, to ensure their survival. Through performance evaluation, the companies can reveal the strengths and weaknesses of the business activities, and they can prepeare better to meet the customer's needs and determine the opportunities that will help their development (ZHU, 2009).

We can distinguish parametric and non-parametric, deterministic and stochastic methods among the methods used in the performance evaluation. Taking into account the economic characteristics of the production, it is obvious that the non-parametric methods are the most flexible, while the stochastic methods are more flexible for the data quality's assumptions (FENYES, 2014).

A new non-parametric deterministic method, the **DEA (Data Envelopment Analysis**) is inncreasingly gain ground. This method is still less used in profit-oriented business, mostly we can see exemples in the service sector.

The DEA creates relative efficiency scores, while taking into account a number of inputs and outputs. There is not 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 - SAID, 2013).

The DEA model – building on the earlier work of FARELL (1957) – was presented by CHARNES, COOPER and RHODES in 1978 (CHARNES et al., 1978). Farell recommended to use an activity analysis method to correct the traditional performance indicators deficiencies. The main problem was to create a general used performance measurement tool which allows us to measure, using multiple inputs and outputs (FARELL, 1957). CHARNES et al. (1978) described the DEA method, like a mathematical programming model, which – using practical informations - ensure new options, to do empirical estimates, taking into account certain relations. The DEA creates a borderline based on the input and output data. The studied units will be compared with this borderline and a relative performance point will determined (CHARNES et al., 1995). The detailed mathematical programming model is described in each of the referenced books. According to COOPER et al (2007) the DEA is a performance evaluation model, which calculates efficiency points with the so called Decison Making Units – DMU. The DEA method instead of central tendencies, focuses on the limit values. Researchers from different research areas quickly realised that the DEA is an excellent method for modeling the operational processes in all areas of the economy, such as the profit oriented sector and the non profit oriented sector, too (COOPER et al., 2007).

The international literature on DEA – from its birth in 1978 – has a very long history. TAVARES (2002) collected between 1978 and 2001 more than 3000 publications about DEA, EMROUZNEJAD et al (2008) in their publication about the DEA's 30 year old history, mentioned more that 4000 publications. The number of publications about the DEA increased year after year, a lesser extent at first, but from the middle of '90s, an average of 200-250 articles have been appeared annually. In 2004 close to 400 articles appeared (FENYVES, 2014).

In foreign practice, we can see countless examples of DEA successful application: in the United Kingdom, the effectiveness of the public schools performance, in the United States comparing the efficiency of the heath institutions, in the Far East optimization of activities for the police, fire stations, hospitals, libraries, services (SOMOGYI, 2013).

The DEA is less used in Hungary by profit-oriented companies. Here dominate the applications in services areas, but today we can find some applications for profit-oriented companies too (FENYVES, 2014). We can see positive exemples for using DEA method in logistic areas too (MARKOVITS – SOMOGYI – BOKOR, 2010).

A fair number of writings from Romanian literature deal with the use of DEA method for profit-oriented companies. We can mention the studies made by CIOANGA and LUCA in the agriculture (CIOANGA – LUCA, 2008), the successful application of DEA method in the banking sector (MUNTEANU et al., 2013), as well as measuring the sports club managers' performance with this method (JURUBESCU, 2009).

3. Conclusions

The literature on this topic is very rich and comprehensive. Experts see and interpret the concept of the business performance differently.

My opinion is that business performance must be connected to the organizational goals. Performance can be interpreted only as function of the goals. There is no performance if the goals are not determined. Those companies are performing who reach their goals. If the companies reach or don't reach the goals, we can speak about the level of performance. The performance doesn't exist in itself, only if it is referenced to something. Of course, in the business world, the objectives can be achieved only with efficiency, effectiveness, and economic efficiency. But those are already the processes' quality characteristics.

The goals can be short or long-time goals, which can be achieved in one or more phases. We think that, the business performance measurement method should be chosen according to the tools and actions that we use to achieve the goals. Performance measurement is extremely important, because in this way we can compare the results achieved and the predetermined goals.

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