A LITERATURE REVIEW OF BUSINESS PERFORMANCE MEASUREMENT

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ABSTRACT

The paper is aimed at a critical review of the literature dealing with the measurement of business performance.

Because, nowadays the importance of implementing modern and effective management methods to maintain competitive advantage in almost all business sectors is emphasised, given the increasing competitive pressure. The measurement of business performance is also an important aspect of management and decision-making in organisations. Various indicators are currently being investigated to show the importance of modern approaches and effective measurement systems. This paper aims to identify a list of these modern methods, their bottlenecks and point out the possibility of introducing new and better indicators for performance measurement.

The aim of this work is thus to create a critical review of the literature, especially about the latest findings of research articles on the selected topic. The purpose of this article is then to point out the limits of the current state of literature in the field of modern methods to measure business performance and highlight possible research gaps arising from the review in this area.

Keywords: literature review, business performance, performance measurement methods

JEL Code: G30, M21

1 INTRODUCTION

Nowadays, many factors influence the performance of a company. In the past, performance was measured only by accounting or financial ratios. While these financial indicators can be used to measure the performance of a company and to assess its current situation, nowadays it is no longer possible to view the performance of a company solely from this financial perspective. However, this does not mean that this approach is no longer used. Financial ratios are still important for business management today, but they are insufficient if taken in isolation. It is also necessary to look at the company from many other perspectives, including, for example, customer or employee satisfaction. The interconnectedness of the company's strategy with all activities in the company is also an important aspect. Strategy can be seen as the

https://doi.org/10.11118/978-80-7509-990-7-0137

readiness of the business for the future and the basis for future decision-making. It must be based on the needs of the business and respond to external changes.

There is also huge competition across sectors in the market today. Therefore, it is imperative that every business keeps an eye on the needs of its customers and tries to offer them a different product to improve its position in the market. So one of the key factors is the needs of the customer. However, before a business can reach the customer with a service, the employee is also at the forefront and has a significant role in creating the product that leads to satisfying the customer's needs. A company should therefore also be concerned about the satisfaction of its employees because there is also a lot of competition in the labour market today. If a company has a satisfied employee, this individual can contribute to a satisfied customer. Other factors are technology and improving processes during production and its efficiency.

There are now many modern methods for monitoring and measuring business performance that look at performance from perspectives other than financial, as was previously the case. Each of these methods looks at business performance in a slightly different way and uses different indicators to measure and manage the business. However, the basic point remains the same.

"If you can´t measure it, you can´t manage it."
Peter. F. Drucker

2 A LITERATURE REVIEW

This chapter aims to demonstrate in one place the definition of the basic knowledge for a comprehensive picture of the current situation of literary mapping in the given topic.

1.1 Business Performance

In the context of business performance and its subsequent measurement, it is important to analyse the different terms used.

In economics, there is a drive towards a unified definition of the term enterprise. Wöhe (2013) defines an enterprise as an economic unit engaged in the production and sale of goods and services to make a profit. The concept of the enterprise was also defined in the Commercial Code (Act No. 513/1991 Coll.), which was replaced in 2014 by the Business Corporations Act (Act No. 90/2012 Coll.) and the New Civil Code (Act No. 89/2012 Coll.), where the enterprise is defined as a business corporation, in other words, a form of company or cooperative

The word performance has recently been used in almost everyday operations, across all disciplines. In this article, the definition of business performance will be important.

Many authors agree that corporate performance has long been a highly debated topic in finance and also represents an area suitable for further research. As a result of the multiplicity of authors dealing with the topic, there is a diversity of definitions of the very concept of enterprise performance. For this reason, business performance can be assessed from many perspectives and can therefore be considered a multidimensional concept. The large number of authors also causes disagreements in the determination of these parameters. Allen and Tommasi (2001) distinguish five dimensions of performance: efficiency, effectiveness, economy, consistency, and quality. Other authors include fairness and stability among the dimensions. However, most authors agree on the importance of the three core dimensions, namely efficiency, effectiveness, and economy. According to Bouckaert and Halligan (2008), these three dimensions are also known as the 3E model. Again, in the scientific literature, these three concepts are perceived in different ways. King (2006) sees efficiency as the ratio of inputs to outputs of a firm at which maximum volume and quality are achieved using low costs. Efficiency also generally seeks to answer the question of whether we are doing the right things. Effectiveness, on the other hand, expresses the degree to which effects are achieved in line with objectives. Here the question of whether we are doing things right is addressed. According to Bouckaert and Halligan (2008), efficiency and effectiveness are key determinants of overall organizational performance.

Now to the actual definitions of business performance. Drucker (1992) perceives business performance as "the final test of any organisation", Hindls, Holman and Hronová (2003) as "the ability of a business to capitalise its capital", Nenadál (2004) as "the degree of results achieved by individuals, groups, organisations and other processes" and Kislinger (2011) perceives business performance as "the ability of a business entity to achieve results over a certain period that are comparable based on certain given criteria with the results of other entities".

Business performance can be simplistically described as all the activities in a business that must be interrelated for the business to be efficient and prosperous, to have a tendency for future development and to be able to respond seamlessly to constantly changing business sub-conditions. This is the only way the enterprise can maintain its competitive advantage. Every enterprise should strive to continuously improve the level of performance of its business and constantly monitor, measure and evaluate this level. Because nowadays every enterprise is in a very strong competitive environment. According to Taouab and Issor (2019), firm performance is a key factor in the economic, social and political development of countries.

"do the right things" & "do the things right"
Peter. F. Drucker

Due to the variety of perceptions of individual authors, firm performance can be categorised according to different aspects of functioning within the firm. Thus, according to Kaplan and Norton (1992), Slack, Chambers, and Johnston (2001), Becker, Huselid, and Ulrich (2001), and Kotler and Caslione (2009), we distinguish, for example: financial performance, economic performance, operational performance, human resource performance, social performance, environmental performance, or sustainable performance.

Some authors view the financial and economic performance of the firm as one concept. In the following section, we will deal with the economic performance of the enterprise perceived in this way. However, the current turbulent competitive environment shows that evaluating businesses only in terms of financial and economic performance does not lead to long-term sustainability. It is these other important aspects of business that should be included in the evaluation of overall business performance.

Brooks and Oikonomou (2018) reviewed, for example, the literature on the impact of ESG (environmental, social, and governance) on business performance, reporting a statistically moderately significant positive relationship between CSR (Corporate Social Performance) and business performance. Drempetic, Klein, and Zwergel (2020) add that ESG scores are also influenced by the size of the firm, which is rather due to the better ability of these enterprises to report their data.

According to Marler and Boudreau (2017), HR Analytics has also been developed in recent years, using technology to describe and analyse data related to HR, human capital management, and showing a positive relationship in the context of business performance

2.1 Business Performance Measurement

Business performance can be measured by various methods. For example, as Synek (2008) points out, in practice, non-financial measures of performance are increasingly used alongside financial measures. It is no longer sufficient to look only at hard financial measures quantifiable from mandatorily published financial statements. Nowadays, there is an increasing emphasis on soft metrics - human potential, customer and employee satisfaction, or innovation and quality. The methods can therefore be divided into traditional and modern. In traditional approaches, measurement focuses only on the past or present of the company. Traditional approaches rely mainly on financial indicators. The conventional approach is therefore to perform a complete financial analysis of the enterprise. However, this approach currently distorts the telling power in assessing the long-term competitiveness of the enterprise. At the same time, they cannot be omitted as they form the basic framework for assessing the financial situation of an enterprise. Modern approaches to business management through the use of non-financial indicators eliminate the non-deficiencies of financial measures. In recent years, they have brought a completely new perspective to the measurement and evaluation of enterprise performance. However, it is essential to select meaningful indicators that reflect the needs of the enterprise. These modern approaches include benchmarking, the EFQM Model of Excellence, Six Sigma or the comprehensive approach using the Balanced Scorecard concept. Solař, Bartoš (2006)

In the following, these selected methods will be briefly characterised and presented.

2.1.1 Benchmarking

Benchmarking is the process by which a company measures its performance against companies that represent either the world‘s top performers or the company‘s main competitors. A natural part of benchmarking is benchlearning, or learning from better practice. Nenadál (2004)

Benchmarking can be divided into two basic types, namely internal and external, depending on where it is used.

Internal benchmarking is implemented within an organization and compares the different organizational units with each other. The advantage of this benchmarking is the effective reduction of differences in the performance of these individual centres or organisational units. The disadvantage is that it is more likely to be used in large enterprises where individual centres are more likely to perform similar activities but in different locations. This is almost unattainable for small or medium-sized enterprises.

External benchmarking is a situation where an enterprise is compared with another organisation. In contrast, this type of benchmarking is largely an option for SMEs. However, the problem is to find a suitable organisation to benchmark against, if it is usually a direct competitor. The advantage, however, is that there is an opportunity to learn and improve your processes based on information from a truly best-in-class company. Nenadál, Vykydal and Halfarová (2011)

In terms of the nature of the chosen object, benchmarking can be further divided into several types, which are executive, functional, process or strategic benchmarking.

2.1.2 EFQM Excellence Model

This model represents a comprehensive analysis of the company within all its processes. Through the EFQM model, a company can identify areas for improvement or weaknesses in the business. The EFQM model is internationally recognised as the most comprehensive management tool. Today, it is the most demanding but at the same time the most sophisticated methodological material for the development of management systems in the world. The model covers a total of 9 areas of business management, where five criteria create the prerequisite for good business results and the other four criteria assess the results and objectives of the company. These criteria are leadership, strategy, people, partnerships and resources, processes, customers, people results, company results and key economic results. Each criterion is scored to give the business a view of the results it should be achieving.

The model is used as a means of self-assessment for the company and is used as a basis for strategic planning. The EFQM model is based on an assessment of the tendency to improve in terms of profit, customer orientation, a clearly defined strategy, the development of human potential, innovation, improving relationships with partners and access to employees or customers. Nenadál (2004)

2.1.3 Balanced Scorecard

The most well-known representative of complex performance measures today is the Balanced Scorecard method, introduced in the 1990s by Robert Kaplan and David Norton. It was founded precisely as a modern approach to measuring business performance, in response to criticism of one-sided indicators that were more oriented towards the past and the financial concept of these indicators in the form of hard factors. In today's information era, these financial measures are no longer sufficient. It is now important for a company to focus on soft factors along with hard data, which can include, for example, employee qualifications or customer relations. This concept therefore replaces traditional financial measures focusing on the past but adds new measures. The Balanced Scorecard is therefore a system of balanced scorecards that focuses on measuring performance, but at the same time anchoring it within the entire corporate management system and also seeks to link corporate strategy with operational activities. Kaplan and Norton (2005)

The Balanced Scorecard is nowadays often used, among other things, as a strategic business management system. Thus, it is used in enterprises to manage long-term strategy and provides managers with some framework for implementing critical managerial processes. These processes can include transforming vision and strategy into their goals, communicating these plans and metrics, or improving feedback and learning capabilities. Kaplan and Norton (2005)

The Balanced Scorecard concept adds new measures of financial performance called drivers that can inform changes before they are reflected in lagging indicators. Therefore, these momentum measures are referred to as future performance measures. They can be used by a business to measure how it is creating value for its customers, or the extent to which it needs to improve the skills of its workforce or the quality of its systems. Kaplan and Norton (2005)

2.1.4 Six sigma

This model focuses on the analysis of qualitative problems and their elimination. It is mainly concerned with increasing customer benefit and improving business results. The main aspect here is the approach to improving product quality through teamwork.

Six Sigma aims at identifying and eliminating the causes of errors in the production and business process and then meeting all customer requirements in all important processes. The process of this method starts with the customers and the aim is to satisfy all their requirements to the maximum. There is a strong emphasis on documenting the execution of the work and examining the work among employees on the job site. Thus, this model can be seen as a comprehensive methodology for measuring the performance of processes in a company and their post-intentional improvement. To implement the model in the management of an enterprise, the enterprise needs to meet the following prerequisites: continuous improvement of processes, all activities composed of processes, support of top management, setting priorities, expanding the competence of employees, promoting teamwork, continuous assessment of process performance, determining the subject and method of measurement, and determining work teams

In this method, we encounter the concept of the "magic triangle", which represents the central requirements of competitors, which are quality, time, cost and innovation. If a business can master this magic triangle, it could become better and faster than its competitors. Töpfer (2008)

2.1.5 EVA – Economic Value Added

One of these modern approaches works with economic value added, which shows the efficiency of a company using its capital and the excess of the company‘s profit over the weighted average cost of capital. The higher its value, the higher the value is for the efficiency of the company‘s use of capital. The high values of this indicator indicate a high level of capital gain.

Based on the Economic Value Added, a corporate Value Based Management system is developed. This enterprise management system is based on maximizing the economic value added. The goal of all decisions in the enterprise is then to increase value for shareholders and owners. This management system was developed in the context of the increasing globalisation of markets and is different from the other approaches. It can be seen as one of the latest trends in approaches to assessing the economic efficiency of companies. The globalisation of markets is linked to the new attractiveness of the importance of international investors, whose pressure to defend their interests is greater than that of private investors. Voříšek (2008)

2.1.6 Other methods

However, many other approaches are found in practice. Selecting the appropriate indicator to measure business performance is therefore not straightforward. New concepts for measuring and evaluating non-financial indicators are emerging, which is gradually influencing the traditional methods of measuring business performance. In practice, there is not yet a uniform approach in the field of implementation of these methods and their application in individual enterprises is different. This subsequently leads to problems in the field of inter-company comparison.

Chenhall and Langfield-Smith (2007) also state the necessity of choosing the appropriate method of performance measurement in relation to different disciplines in the company, such as marketing or human resource management, where it is necessary to use non-financial indicators rather than traditional financial indicators. Within marketing or human resources, customer loyalty or satisfaction are important aspects. Thus, managers from the functions in question are trying to develop metrics that are more relevant to their areas of management. In marketing, there are several different areas of research on performance measurement. Customer loyalty then emerges as a more influential factor than, for example, market share.

In conclusion, it is useful to add a final perspective to the methods given. It was mentioned in the introduction that the concept of performance is to some extent also linked to the concept of efficiency. It is therefore important to mention the method of measuring efficiency, which is a key task for management. Kao (2014) mentions the DEA (Data Envelopment Analysis) or modified NDEA method for measuring the effectiveness of systems, which takes into account the effectiveness of the individual processes within the system. This approach

Methods	Concepts	Tools
profit-based - EBIT, EBITDA	BSC - Balanced Scorecard	Financial analysis
cash flow based	EFQM Model excellence	PESTLE analysis
market data based - EPS	Six Sigma	SWOT analysis
based on sub-areas - profitability, activity, liquidity, debt, productivity	TQM - total quality management	Benchmarking
EVA - economic value added	VBM - Value-based management	Controlling
SVA - shareholder value added	JIT - just in time	Financial planning
DCF - discounted cash flow	ABC - activity based cost	KPIs
MVA - market value added	Lean management	Activity-based costing
Other..	Performance Prism	Risk management
	Other..	Other..

Tab. 1 Methods, concepts and tools used to measure business performance
Source: own processing

allows identifying the causes of inefficiencies and provides a detailed view of system performance. DEA analysis also allows the comparison of the performance of different enterprises from an efficiency perspective and identifies those that perform best. It therefore also serves in the context of benchmarking

The following is a listing of the existing range of concepts, methods and tools used to measure enterprise performance.

3 BARRIERS TO CURRENTLY USED METHODS

Measuring business performance is a key part of business management, but there are various shortcomings and limitations of the methods used for this purpose:

Financial indicators versus non-financial indicators: traditional performance measurement methods often depend on financial indicators such as profit, sales, return on investment (ROI), and others. These indicators may inaccurately reflect the true state and potential of the business, as they ignore important non-financial aspects such as customer satisfaction, product quality, innovation capabilities, or company culture.

Short-term versus long-term performance: many methods focus on short-term results, which can lead to ignoring long-term goals and strategies. This focus can encourage decisions that are beneficial in the short term but detrimental to the long-term sustainability and growth of the business.

Relativity and context dependency: Performance measurement often depends on comparisons with competitors or industry standards. This approach can be problematic because it ignores the unique context and strategy of each business. It also does not take into account different market conditions or economic cycles.

Complexity and clarity: Some advanced methods may be too complex and difficult to understand for all employees. This can lead to problems with internal communication and clarity of corporate objectives.

Subjectivity and manipulation: Methods that involve subjective evaluations, such as employee performance evaluations, may be prone to bias and manipulation. In addition, financial ratios can be influenced by accounting practices and creative interpretations.

Change and adaptability: The corporate environment is constantly changing, requiring flexible and adaptable methods of measuring performance. However, many traditional methods may be too rigid and inadequate for today‘s dynamic conditions.

As mentioned above, the Balanced Scorecard concept is considered to be the most comprehensive method. Hoque and James (2000) also confirmed a positive correlation between the use of BSC and firm performance. But this method also has its barriers, which have been mentioned by its authors. These barriers are the unfeasible vision and strategy, the non-connection of the strategy with the objectives of individuals, the non-connection of the strategy with the allocation of resources and only tactical feedback. However, the non-sufficiency of human resources can be considered as the main factor limiting the implementation and use of this method. The problem in most cases is more accurately a non-sufficiency of qualified people. Another serious shortcoming is the poor weighting of indicators and metrics. Kaplan and Norton (2005)

Even though the BSC method is the most widely used, mainly because of its simplicity, 80% of companies make mistakes with this method. An interesting perspective on these mistakes is provided by, for example, Mr Bernard Marr, one of the world‘s most respected experts in the areas of strategy, business performance and AI in business, who has worked with many global organisations including Amazon, Google, Microsoft, Astra Zeneca, NATO, Toyota, The Royal Air Force, Shell, the United Nations, Walmart and many others.

These errors include, for example, the flaw in the development of the balanced scorecard, where in most corporate enterprises only two or three people compile the scorecard. The system is then biased and has no real reporting capacity. The management should sit down with each key person in the company and talk to them about their strategic objectives, and then develop the system together so that everyone contributes equally. Another mistake occurs when the enterprise chooses what indicators to measure instead of what it should do. The business then measures everything that moves, everything that the competition measures, and not what matters. It therefore does not have well-established KPIs. It measures everything easy to measure and easy to get data for, instead of what it needs to track. The business must start by defining its strategic objectives and designing a clear strategy map from which it will know the purpose of the business and derive the right metrics. If the business has a strategic goal, it should develop a key performance question and then by answering that question it will get an insight into how well it is meeting that goal, and only then will the information need to be formulated according to that question. Another error is caused by looking at the Balanced Scorecard method as a four-perspective framework, where the company starts filling in the individual squares instead of thinking about what its business strategy is and what it needs, what it wants to achieve in terms of financial perspective, what it wants to sell to customers, what its value proposition is and what are the basic factors that will allow us to cover the entire strategy of the company. With this perspective, the framework can have five or six perspectives. Following just looking at the method as a four-perspective framework, we need to first identify a strategic map to understand the cause-and-effect relationship as mentioned earlier. It is often stated that authors Kaplan and Norton would start with this third book first, as this understanding is essential for the next steps. This visual map then gives a clearer overview of the whole enterprise and goes well with communication. It is a complete mistake to adopt this balanced system from someone else who has already worked out their structure. This is tempting, but every business is different and focuses on different clients etc. Thus, it is logical that it will have other appropriate indicators. Many businesses also create a strategy that looks good. However, if a business does not make sure that it has a clear action plan and projects that will enable it to meet its strategic objectives, it will have non-existent strategic plans and fail to implement them in the long run. Balanced scorecards should propose actions and initiatives for each strategic objective. A clear catch is if the business does not regularly communicate internally. If a business measures KPIs, has strategic goals and tracks measured metrics and indicators, it has the ideal foundation and data to understand, analyze and communicate all of this. It should engage people across the business to get information on how well the targets are being met throughout the year. Further, these metrics should be regularly reviewed and monitored monthly. Discuss together what the business is doing well, why things need to change and how to do things in the future, for example using dashboards. Instead of management just being overwhelmed with data that no one else understands and tracking the past instead of focusing on how to support future developments. The final shortcoming is that the business does not revise its strategy even though its business, environment, competitors or products change. It is necessary to check strategic goals to see if they need updating and are still true (Marr, 2020).

Even the simple benchmarking method has its reasons for not being extended. The negative side of this method is, for example, overestimation of the company‘s results, management‘s rejection of external information and the fact that management often fails to admit its shortcomings.

Another significant barrier to all modern indicators for measuring the performance of an enterprise is the fact that these methods were developed mainly in 1986–1993, so they can no longer be considered completely modern, given the turbulent development of the economic environment.

Ittner and Larcker (2003) also point out the numerous errors that companies commit when trying to measure non-financial performance indicators. These errors again include incorrect setting of objectives, misidentification of appropriate non-financial indicators for the firm, or erroneous measurements.

Tangen (2004) points out that many businesses still rely on traditional financial performance indicators and fail to recognise the importance of non-financial measures.

It is important to note that no one method can perfectly measure the performance of an enterprise, and therefore it is often recommended to use a combination of them for a more comprehensive and balanced assessment. According to Taouab and Issor (2019), finding the ideal concept for managing and measuring business performance is a complex problem.

4 RESULTS

Measuring business performance is a complex process that includes various aspects such as financial indicators, resource efficiency and market competitiveness. A key element is the financial health and stability of the business. Financial analysis tools have long been used to assess financial performance. These traditional financial ratios are still widely used, but their limitations in capturing the complexity of modern business operations are increasingly being discussed in the context of the growing tendency towards a competitive environment. Thus, non-financial indicators have become important in recent years, seeking to eliminate the shortcomings of financial ones.

The weakness in modern indicators for measuring corporate performance lies in the need for more comprehensive and modern measures to match the evolving business environment.

5 DISCUSSION AND CONCLUSIONS

This paper has attempted to review the literature on measuring sub-enterprise performance.

Enterprise performance measurement is a critical aspect of management and decision-making in any enterprise. Various publications have examined different dimensions and indicators of measuring the performance of a sub-enterprise and have shed light on the importance of modern approaches and effective measurement systems. At the same time, their barriers have been pointed out.

The current state of the literature provides valuable insights into the development and importance of modern indicators for measuring enterprise performance. Overall, the literature reflects the developments in the field of enterprise performance measurement and highlights the need for modern indicators, effective measurement systems and linking the necessary aspects to enhance organizational performance.

A multifaceted approach is needed to address the shortcomings in modern indicators for measuring enterprise performance. The current literature review, within the framework of the obsolescence of the so-called “modern” approaches, constantly opens up space for further investigation and research in the field.

Acknowledgements
This article contributes to the framework of the specific research project “Development Trends of Selected Aspects of Corporate Financial Management”, under the registration number FP-S-22-7935, Faculty of Business, Brno University of Technology.

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