CURRENT TOOLS AND NEW TRENDS IN ENTERPRISE PERFORMANCE MEASUREMENT

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Abstract

This article deals with the issue of an enterprise business performance measurement, as the topic discussed quite frequently in the recent times. Evaluation of enterprise success in a simple and quick way is one of the most important requirements set by owners and investors. The article covers tools used for the enterprise performance measurement divided into three basic development phases. Enterprise performance measurement is commonly used in practice and is quite reasonable, however it does not allow for a conclusive analysis of causal relationships. Therefore it is necessary to involve new methods and models that assess the company performance not only from the quantitative point of view, but also with regard to quality. In the article conclusion the individual approaches to enterprise performance measurement are subject to comparison and their general characteristics as well as possibilities for use considering their advantages/disadvantages are mentioned.

Introduction

Under the current economic conditions enterprise managements must quite often deal with the question how to set the criteria of success, i.e. how to set the required goals. The basic goal of a vast majority of enterprises in a long-term perspective is the market value maximization. Constant changes bringing new obstacles on the one hand and new opportunities on the other hand are quite characteristic for the current economic development. Significant changes in the business environment are notably related to a phenomenon called "globalization". Under these conditions the enterprises realize their activities without any protection against competitors. In order to grow even further or at least to survive they must flexibly respond and adapt their activities to the tough conditions of the competitive environment. The faster the enterprise registers, analyzes and reacts to the change, the more successful it is in the market. These changes bring a completely new view on the assessment of enterprise success and raise questions about what indicators and methods may be applied to measure the enterprise performance. Financial performance of an enterprise is one of the important indicators to measure the enterprise competitive position and to determine how attractive it actually is in the eyes of potential investors. Therefore the company performance/efficiency shall be not only measured from the quantitative point of view, but also with regard to quality. Economists from all over the world have been dealing with this question on everyday basis. There are many approaches and methodologies for business performance measurement. We can perceive business performance measurement both from financial or non-financial perspectives.

Until recently the classical financial approach to business performance measurement prevailed in the Czech Republic. Nowadays especially large international concerns are more open to new methods and start to apply them in economic practice to evaluate their efficiency. Gradually we can see a move towards evaluation of business performance and efficiency using indicators considering the creation of value for owners. Therefore the business performance measurement newly incorporates both financial and non-financial criteria. Vocational economic papers describe multiple methods and models that may be used to measure business performance of enterprises. In practice some of these methods are applied more and some less.

1 Enterprise performance

The “enterprise performance” term has been used quite frequently recently, however, a clear definition is missing. The term is mainly used to describe the key essence of the enterprise existence, its success and ability to survive. The purpose of the enterprise performance measurement is to evaluate the state of the enterprise, which is considered as important for later decision-making by owners and management. Moreover it is a necessary presumption for further successful management of the enterprise. Performance is often equated to efficiency which is the ability of an enterprise to achieve certain results. In this regard it is possible to define the company performance as the ability to make the best of its resources and to increase its value on a permanent basis. Another possible definition is offered by Solař and Bartoš [8, p. 19] “enterprise performance is defined as the level of achievement of predefined results by individuals, groups, organization and its processes”. Another definition by Neumaierová and Neumaier [4, p. 24] may be applied as well, saying that “enterprise performance is generally connected with the growth of market value, i.e. the effort for the most efficient use of own as well as foreign capital aimed at the maximization of the market value in the long-term perspective. This is closely connected with profit generation or at least creation of conditions for generation of profit in future”. From these definitions it is obvious that each enterprise should strive after the most efficient utilization of its own as well as foreign resources. There is no conflict between the above mentioned definitions, however, each of them sees the company performance and efficiency from a different perspective.

While measuring the business performance, the purpose must be clearly defined - this means it must be clear who will make use of the results measured. Different requirements will be set by owners, managers, creditors, banks, investment companies, financial authorities or rating companies. Also the time factor is very important (the period the measured results relate to). We can measure the business performance in the past, assess the current performance or focus on the expected future development of the company. Another question, as mentioned by Neumaierová [5, p. 13], is “for whom the value is created (maximized) by the company” – whether for the owners of capital, shareholders or other parties concerned (stakeholders). The stakeholder group includes a) internal stakeholders represented by providers of capital - owners, creditors, employees and managers; b) external stakeholders represented by suppliers, customers, municipality, government etc. The answer to this question can be found in what was said by Brealey [1, p. 13] “image the company net income as a cake with many people claiming their stake (piece of cake). These people are managers, employees, creditors as well as other shareholders who provided their money to the company. All these entities, claiming their piece of cake, are mutually interconnected by various contracts, stipulations as well as gentlemen’s agreements”. Another question would be “who is concerned in the results of the company performance?” The circuit of evaluating entities is quite wide. Internal entities cover owners, management, employees or trade unions. Entities from outside of the company are investors, customers, banks, business partners, government as well as general public. Each of these entities judges the results on the basis of its own criteria so the views of individual economic entities may differ significantly. Owners and investors for instance strive after appreciation of their capital invested in the company. From the investment point of view it is necessary for them to know that their investments are treated in their interest. On the other hand for the management it is important that the company prospers, has stable stake in the market as well as liquid and profitable operation. Employees are especially concerned about optimum salaries, keeping their jobs in the company, as well as about social benefits the company offers. For customers it is important that the company estimates their needs and requirements correctly, offers them premium product, on time and at reasonable price. Suppliers require the company to pay their receivables on time and therefore they especially check the level of indebtedness, liquidity and solvency. Business partners require from the company to meet its obligations towards them on time as their existence depends on the company vitality. And finally the government is mainly concerned with the information regarding payments of taxes and proper utilization of subsidies, if any. [3], [5], [6], [10]

1.1 History of methods used for business performance measurement

The importance of the value-based management conception has been growing recently, especially because of the worldwide globalization and the related interconnection of markets. The value-based management may be easily labeled as the new managerial paradigm. From the accounting assessment point of view only those companies that generate profit are considered as being successful. This perspective is however – from the value-based management point of view – quite deficient, as it is important to earn such profit so that - according to Neumaierová [5, p. 12] – "the following statement applies: return on capital invested by owners > alternative costs of own capital".

Tab. 1: *Development of the business financial performance indicators by generations*

Generation	**Gen 1**	**Gen 2**	**Gen 3**	**Gen 4**	**Gen 5**
Main target	Profit margin	Profit growth	Return on capital invested	Creation of value for owners	Long-term strategic management
Indicators used	Profit/sales	Profit maximization	ROA, ROE, ROI	EVA, MVA, CFROI, SVA	Market value maximization

Abbreviations:
ROA – return on assets, ROE – return on equity, ROI – return on investment, EVA – economic value added, MVA – market value added, CFROI – cash flow return on investment, SVA – shareholder value added

Source: [7, p. 14] + own resources

The value-based management conception has its roots at American business schools in the eighties of the 20th century. The main reason for more extensive application of the value-based management conception was – as far as the related literature says – boom in the field of business consolidations and acquisitions realized in USA, especially in the late eighties and at the beginning of the nineties of the 20th century. The aim of these consolidations and acquisitions was to come up with such strategies, the realization of which would improve the value of the company in order to avoid consolidation/merger with other businesses. The primary goal of an enterprise is to maximize the wealth of shareholders, which means that the financial managers must strive after maximization of the enterprise market value. This goes hand in hand with the commitment of the management to duly consider the positive as well as negative (risk) factors connected with each individual decision to be made. But how can the financial managers recognize whether their decisions are good or bad? This is assured by the market itself – it sends the required signal. Shareholders who are not satisfied with the management actions may sell their shares. If this is the case of multiple shareholders, the stock value will go down. This would be a clear signal for the management pointing to inadequate decision-making and a kind of remainder of the main purpose of their employment. Until now many criteria were developed to express the level of business performance/efficiency. These criteria are based on theoretic knowledge, but also on practical experience. While looking at the history of business performance measurement indicators, we can se a clear development and changes of opinions in individual generations. This development of opinions is clearly shown in Table 1. [1], [5]

From Table 1 it is obvious that the first and the second generations are only aimed at the evaluation of profit, sales and margin of profit. The next two generations are a bit more focused on indicators such as return on capital employed, investments or currently preferred indicator referred to as EVA (economic value added). The move from the traditional financial indicators to modern indicators used for the business performance measurement is obvious. The last, fifth generation is focused on the strategic system of business performance measurement that does not assess the company efficiency using the financial indicators only, but uses some non-financial indicators as well.

1.1.1 Traditional approach to business performance measurement

Financial indicators represent a solid basis for the traditional approach to the business performance measurement. Financial analysis dates back to the times when the history of money started. The United States of America made the biggest contribution to the development of the modern financial analysis. In continental Europe, especially in the German-speaking countries, the term “balance analysis” appeared first. Even here the balance analysis had been gradually renamed to "financial analysis". The traditional indicators especially reflect the performance of the business process implementation and measure the efficiency of the company capital. Amongst the traditional indicators of the company financial performance belong the indicators of the absolute value of profit that may be expressed in multiple ways, such as net profit, pretax profit etc. Also the indicators of cash flows are widely used (cash flow from operational, financial or investment activities or total cash flow of the company). Other traditional indicators are the indicators of the rate of return, expressing the efficiency of the resources spent, such as return on sales, return on assets, return on equity etc.

The essence of the financial analysis is a comparison of the data collected. The resulting information is used for the assessment of the general financial situation of the company, helping to reveal the company strengths and weaknesses. In the literature and in practice we see multiple methods and approaches to financial analysis. The disadvantage is that neither procedures nor the terminology of financial analysis are legislatively stipulated and therefore in some cases it may be quite difficult to compare not only different companies, but sometimes even the individual stages in the history of a single company. Most of the traditional indicators make use of information from financial statements as input data for financial analysis. This is often criticized as these data are not adjusted by risk and inflation factors, ignore the current value of money as well as the opportunity costs.

Another problem of the traditional indicators used for the business performance measurement is the fact that they cannot do without additional information. This information relates to the development of liquidity, solvency, indebtedness, structure of assets or financial structure. This additional information is also taken from the financial analysis of the company. Despite the fact that there are many critical comments against the financial analysis, it is still considered as one of the most important tools of financial management. Financial analysis evaluates the past and current development of the company operation from various points of view thus giving some solid resource data for future decision-making. [7], [10]

1.1.2 Modern approach to business performance measurement

Based on the criticism of the traditional indicators, new approaches to business performance measurement were developed. Traditional indicators measure the business performance on the basis of accounting data. This is the reason why companies have recently preferred to measure their performance from the market value growth perspective. Because of the criticism of traditional indicators new approaches has been introduced more widely to the business practice by companies willing to measure and manage their business performance. As stated by Mařík and Maříková [3, p. 12], modern indicators for business performance measurement should meet the following criteria: a) to have as close relation to stock value as possible, whereas this relation should be demonstrable by statistical calculations; b) to require the widest possible use of information and data from the company accounting system, including indicators from the financial statements of the company. The purpose of this requirement is to reduce the labor input needed for the calculations and also to improve the level of communicativeness in practice; c) to overcome the existing objections against accounting indicators of financial efficiency. Especially it is necessary to include the calculation of risks and consider the amount of locked-up capital; d) to allow for the business performance measurement together with the company valuation. The above mentioned requirements for modern indicators used for the business performance measurement should be completed by another two important aspects. As stated by Pavelková and Knápková [7, p. 43]: a) the indicators should facilitate clear and transparent identification of their links to all levels of management; b) the indicators should support value-based management.

It is quite difficult to find the business performance measurement indicators that would meet all the above mentioned requirements. The modern financial indicators used for business performance measurement cover the economic value added, market value added, shareholder value added and cash flow return on investment. [7], [10]

1.1.3 Complex management methods

In the current turbulent environment that brings constant changes, companies must respond flexibly. In order to be competitive and survive, the financial indicators are not enough. Companies must focus on non-financial areas of their operation too (efficiency measurement of products, processes, customers etc.). These methods and models are aimed at history, present time and especially at future. The individual methods and models may be used independently or combine them, as deemed necessary.

Complex approaches to business performance measurement have been widely extended over the last 20 years. Non-financial indicators have started to be introduced because the traditional financial indicators give historical data only and nothing for instance about the value for customers, level of customer satisfaction or level of innovation. Due to these reasons the non-financial indicators have started to be used more widely, as they also give information about attractiveness of products, satisfaction of customers, potential for technical innovations, improvement of employees' qualification etc. Companies that want to be successful and have some competitive advantage must include in their business performance measurement both financial and non-financial indicators and criteria that are compliant with the company strategy.

From complex approaches to business performance measurement we can mention the fundamental managerial conception MBO (Management by Objectives) developed by P. D.

Drucker. This method is based on setting and mutual acknowledgement of goals and the subsequent assessment of the level of their achievement. The goals must be set in all areas of activities and each decision made must be in full compliance with the overall goal. Another well-known method is BSC (Balanced Scorecard) developed in 1992 by R. S. Kaplan and D. P. Norton [2]. The main essence of BSC is setting goals, indicators and intentions on the basis of company vision and strategy. The indicators are then viewed from four basic perspectives: financial, customer, internal business processes and learning & growth. For practical use there are many complex approaches available. One of them is TQM (Total Quality Management) developed in the sixties of 20th century in Japanese companies. This model is aimed at the quality management. In order to implement TQM successfully, it is important to determine and understand customer requirements and to implement such measures so that the production will run without any defects. Also stimulation program must be implemented to motivate the employees for achievement of the quality goals. Model Excellence was developed by the European Foundation for Quality Management (EFQM). This model is widely extended in Europe. It applies the principles of TQM and is suitable for all types of organizations disregarding their size and engagement. Benchmarking allows companies to compare their own results with the results of competitors. This method helps to learn from the best in the relevant field and to improve the business performance and competitiveness. It is possible to compare companies from the same branch but also companies from different branches. Target Costing conception comes from Japan. It was first applied in 1970 in Toyota (where it has been being successfully used until now). The essence of this conception is a detailed market research on the basis of which the company attempts to develop products at costs considered by the customer as reasonable. The sustainable development method is characterized as the development that facilitates meeting requirements of the existing society without compromising/limiting the possibility of meeting requirements of future generations. The sustainable development covers long-term and global perspectives and incorporates four dimensions (human, institutional, economic and environmental). KPI (Key Performance Indicators) is the system aimed at the monitoring of business performance by means of so called key performance indicators. It makes use of economic indicators, quality indicators, indicators aimed at efficiency of processes, IT services, inventories but also combined indicators. Selection of suitable indicators for KPI system differs in individual companies based on specific branch the company operates in.

In theory as well as in practice we can find even more methods and models used for business performance management and measurement. Because of the limited space we neither can mention nor briefly characterize all of them. [2], [8], [9]

2 Assessment of methods used for business performance measurement

Three basic approaches may be used to assess the company business performance. Each indicator, method or model has its advantages and disadvantages. It depends on each individual company what methods and models will be used to measure its business performance. Recently complex methods were developed to measure the business performance and efficiency. They are no longer tools for evaluation only, as they are used for management purposes as well. Some of the oldest but still used are classical indicators of financial analysis. Their main disadvantage is a time delay – they inform us about activities that happened in the past. Modern approaches used for the business performance measurement are mainly based on the principle of business value creation. The main disadvantage of these modern approaches is rather a demanding way of obtaining the input data and difficult determination of the costs of equity. In order to eliminate the above mentioned disadvantages of both approaches, complex methods and models are introduced that evaluate the total efficiency of a company and are not exclusively focused on financial indicators, but on some non-financial indicators too. The aim of these complex methods and models is not only to measure the business performance, but also to manage the company. The assessment of the development of approaches to measurement of business performance/efficiency including main advantages/disadvantages is shown in Table 2.

Tab. 2: *Assessment of methods and models for performance measurement*

	Traditional approach (financial analysis)	**Modern approach (EVA, MVA, CFROI)**	**Complex managerial models (BSC, TQM, EFQM, Six Sigma, benchmarking and more)**
Characteristics and application	often used for the determination of positive and negative trends in the company	methods drafted on the basis of the value based management conception	used for the assessment of the overall business performance
	provides feedback to strategic management	may be used even for some complex managerial models	focused on financial as well as non-financial indicators
	the indicators measured are used for the assessment of the development of economical flows, revenues etc.		they not only measure the business performance of the company, but are often used for the management of factors affecting the performance
	works mainly with data from the financial accounting		
Advantages	simplicity	easy and comprehensible expression of the company success	used for the assessment of the overall business performance
	easy-to-understand	the value is acknowledged by the market	they are used for strategic management
	elimination of subjectivity at selection of indicators	may be used for interconnection between operational and strategic management	they discover causes, relations and effects
Disadvantages	it is based on the accounting system which - on the other hand - is based on the accrual principle	complicated calculation of indicators	their implementation is rather time-consuming
	it does not take changes of assets market prices into account	quite demanding acquisition of input data	their implementation is rather expensive
	the information about the root cause of the problems is missing	it is not always clear and obvious what is the result of the managerial work and what is caused by other circumstances	problems may occur with the strategy formulation and its translation into operational management conception

Source: Own resources

Conclusion

The business performance measurement using financial indicators has been quite commonly used in practice and is well-founded without any doubts, however it often does not allow to clearly analyze the related causal relationships. An enterprise must be tracked and assessed in a systematic manner. Recently the reputation of companies is not a result of good products only, but other aspects are assessed as well, such as environmental footprint, care of customers, employees etc. Financial indicators are not sufficient as they do not contain the qualitative aspects of individual elements of the company system and their mutual relations.

There is a conflict between the need of the company to be competitive in the long-term perspective and rather inflexible model of financial accounting created space for introduction of new methods and models. Financial indicators are no longer considered as the only adequate tool for setting the strategies in the information age enterprises. Companies must select such strategies that bring their investments in customers, suppliers, processes, technologies and innovations bring some added value. The methods for strategic management of business performance are comprehensibly focused on risky areas of the company. The application of suitable indicators for business performance measurement leads to improvement of competitiveness. On the other hand better competitiveness means benefits not only for the owner, but also for employees, customers, suppliers and the government.

Finally we can only add that the utilization of suitable indicators and appropriate strategy leads to improvement of business efficiency and thus also to its competitiveness.

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SOUČASNÉ NÁSTROJE A NOVÉ TRENDY V MĚŘENÍ VÝKONNOSTI PODNIKU

Článek se zaměřuje na problematiku hodnocení úspěšnosti podniku, která se v posledních letech stává velmi diskutovanou otázkou. Zhodnocení ekonomické výkonnosti podniku jednoduchým a rychlým způsobem je jedním z nejdůležitějších požadavků vlastníků a investorů. V článku jsou uvedeny nástroje používané pro měření výkonnosti podniku, a jsou rozděleny do tří základních vývojových etap. Hodnocení výkonnosti podniku pomocí finančních ukazatelů je v praxi běžně využíváno a má své opodstatnění, ale neumožňuje jednoznačnou analýzu příčinných vztahů. Proto je nutné využívat nové metody a modely, které hodnotí výkonnost podniku nejen z pohledu kvantitativního, ale i kvalitativního. V závěru článku je uvedeno porovnání přístupů k měření výkonnosti podniku s uvedením jejich obecné charakteristiky a s možnostmi jejich využití a s uvedením jejich výhod a nevýhod.

GEGENWÄRTIGE INSTRUMENTE UND TRENDS IN DER MESSUNG DER LEISTUNGSFÄHIGKEIT EINES BETRIEBS

Dieser Artikel konzentriert sich auf die Problematik der Bewertung des Erfolgs eines Unternehmens. Diese Problematik wird in den letzten Jahren einer immer mehr diskutiert. Die Bewertung der ökonomischen Leistungsfähigkeit eines Betriebs mittels einer einfachen und schnellen Methode ist eine der wichtigsten Anforderungen aller Firmenbesitzer und Investoren. Im Artikel werden die bei der Leistungsfähigkeitsmessung angewandten Instrumente angeführt und in drei Entwicklungsetappen eingeteilt. Die Bewertung der Leistungsfähigkeit eines Betriebs mit Hilfe von Finanzindikatoren wird in der Praxis immer wieder genutzt und hat ihre Berechtigung; aber sie ermöglicht keine eindeutige Analyse der ursächlichen Beziehungen. Daher ist es notwendig, neue Methoden und Modelle zu verwenden, welche die Leistungsfähigkeit eines Betriebs nicht in quantitativer, sondern auch in qualitativer Hinsicht bewertet. Den Schluss des Artikels bildet ein Vergleich zwischen Ansätzen zur Messung der Leistungsfähigkeit eines Betriebs mit deren allgemeinen Charakteristiken, Vorteilen und Nachteilen sowie mit den Möglichkeiten von deren Nutzung.

WSPÓŁCZESNE INSTRUMENTY I NOWE TRENDY DOTYCZĄCE POMIARU EFEKTYWNOŚCI PRZEDSIĘBIORSTWA

Artykuł dotyczy kwestii oceny sukcesu odnoszonego przez przedsiębiorstwo, która jest w ostatnich latach coraz bardziej dyskutowanym zagadnieniem. Proste i szybkie dokonywanie oceny efektywności ekonomicznej przedsiębiorstwa jest jednym z najważniejszych wymagań stawianych przez wszystkich właścicieli i inwestorów. W artykule przedstawiono instrumenty stosowane do pomiaru efektywności przedsiębiorstwa, które podzielono na trzy podstawowe etapy rozwoju. Ocena efektywności przedsiębiorstwa przy pomocy wskaźników finansowych jest w praktyce często wykorzystywana i ma swoje uzasadnienie, nie umożliwia jednak jednoznacznej analizy zależności przyczynowo-skutkowych. Dlatego należy wykorzystywać nowe metody i modele, które oceniają efektywność przedsiębiorstwa nie tylko pod względem ilościowym, ale też jakościowym. W zakończeniu artykułu przedstawiono porównanie podejść do pomiaru efektywności przedsiębiorstwa z podaniem ich ogólnej charakterystyki, z możliwościami ich wykorzystania oraz wskazaniem ich zalet i wad.