

GCPMED 2020

Global Challenges and Prospects of the Modern Economic Development

EVALUATION OF ENTERPRISE ACTIVITIES: THE CHOICE OF INDICATORS

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Abstract

The current systems for assessing the efficiency of business activities do not satisfy either the enterprise's management or state regulatory authorities. Most enterprises periodically review their own performance evaluation systems. The problem is that there are too many or not enough benchmarks. The authors of the article say that these problems can be solved using a balanced scorecard, but its application requires adaptation to the specifics of individual enterprises. Thus, large enterprises with a complex management structure need a large number of evaluation indicators. For small enterprises with a relatively simple management structure, performance indicators are used to assess past functioning to predict future performance, as well as to motivate and reward employees. The authors believe that the modern concept is based on the evaluation of future cash flows and their discounting to the current value. They say that an enterprise is seen as an asset that can generate cash flows both today and in the future. However, future cash flows cannot be accurately measured, and it is impossible to assess the long-term sustainability and efficiency of the enterprise. Without this efficiency cash flows will decrease or dry up. The authors say that it is possible to assess current cash flows (financial results), factors that affect future cash flows (non-financial indicators), and give a rough estimation of the future cash flows themselves.

2357-1330 © 2021 Published by European Publisher.

Keywords: Benchmarks, enterprise, financial statements, market, profit



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1. Introduction

Past financial statements do not provide comprehensive information about the factors that actually cause an increase in sales volume, market share, and profit. One of the ways to search for criteria for evaluating the efficiency of business activities is to select non-financial indicators that will allow forecasting future financial results (Abdel-Maksoud et al., 2016; Ravelomanantsoa et al., 2018). Successful scientific and technical developments, innovations in customer service, staff development, and so on are considered as such non-financial indicators.

The performance evaluation system, as a balanced scorecard, was created based on a study conducted by professor Kaplan and consultant Norton of Harvard University. In 1990, ten American companies were studied to find new methods for evaluating performance results. As a result, a system of indicators was created that allows tracking various types of activities at the enterprise: internal business processes, issues related to working with clients, the activities of researchers, and the interests of shareholders. Kaplan and Norton called the new tool as a balanced scorecard (Kucukaltan et al., 2016). They believe that the system of indicators collects in a single management report allegedly disparate elements that characterize the current competitiveness of the company (Baranov, 2004; Koll, 2002). According to American researchers, at the end of the 1990s, about half of the largest companies in the United States used this system for evaluating performance and successful strategy implementation (Niven, 2004). At the same time, Kaplan and Norton recognize certain limitations of the balanced scorecard, in particular, its complexity when used as a tool for evaluating and motivating staff (Kaplan & Norton, 1996).

2. Problem Statement

All indicators of the efficiency of business activities can be divided into individual and complex, as well as internal (managerial) and external (financial). No single indicator can provide a comprehensive assessment of activities. In addition, those factors of influence that remain unappreciated will be neglected in order to get better results on a single indicator. In other words, the more factors are not evaluated, the more falsifications are possible at an enterprise with an efficiency assessment system (Baranova, 2011). Using many indicators will allow to get a more complete picture of activities efficiency, but it will be more difficult to collect data for evaluation and combining it into an aggregated assessment of the enterprise overall efficiency. At the same time, the overall financial activities indicators of the enterprise does not allow for an assessment at the level of individual divisions. On the other hand, it is quite difficult to aggregate the activities indicators of individual divisions into a single generalized indicator at the level of the entire enterprise.

3. Research Questions

The research question for this article was: how in real business practice can we determine the optimal set of efficiency indicators that would meet the following criteria:

- to have a minimum set of indicators. A large number of indicators complicates calculations. The introduction of new evaluation criteria is usually carried out at the expense of indicators that are interrelated with the existing ones;

- to cover all aspects of the activities. Such indicators have the following advantages over highly specialized indicators: they can be consistently tracked from the lowest to the highest levels of management; they can be compared at the horizontal level between different divisions of the enterprise;
- to have good adaptability. Non-financial indicators should predict future financial results, that is, non-financial indicators become the defining criteria of efficiency, and financial indicators become lag, they change and accumulate over time;
- to have a stable character. Indicators should change gradually so that employees are aware of the enterprise's strategic goals and their behavior is predictable;
- to create opportunities for evaluating and motivating staff.

4. Purpose of the Study

A balanced scorecard has only two requirements: minimality and usefulness for forecasting. This situation can be explained by the following facts:

- enterprises are overloaded with various indicators, and the problem of excess of a finite number of criteria makes it even more acute;
- the ability of scientists and practitioners to create and disseminate indicators is in advance of the ability to separate non-financial indicators that contain information about financial efficiency in the future from those indicators that do not contain such information;
- some non-financial indicators are comprehensive for the whole enterprise, it is easier to choose universal financial indicators;
- efficiency indicators, especially non-financial ones, are constantly changing. Over time, when used, they lose their appeal, so they can't signal high or low efficiency.
- motivation for several efficiency indicators is quite complex. If indicators are combined according to a formula, employees will adjust to the indicators. If they are combined subjectively, the relationship between the indicators and the estimated effectiveness will not be clear.

The purpose of this article is to distribute the types of efficiency indicators by the level of its use associated with the choice of indicators for evaluating the activities of an enterprise and its divisions.

5. Research Methods

The methods of the theoretical level used in the research include: abstraction, formalization, analysis and synthesis, induction and deduction, axiomatics, generalization. Rethinking efficiency evaluation should be started with the concept of "effectiveness" itself. Studying the etymology of the term, let's consider some of the most well-known sources:

- in the Dal dictionary, the word "efficiency" is missing. There is the term "effect", which in French means "action, impression, influence" (Dal, 2018);
- Ozhegov's (2018) dictionary already contains three similar terms: "effect", "effective", "efficacious". Three definitions are given for the term "effect":
 - an impression that turns out to be someone or something on someone;
 - the action by something, the consequence of something;
 - a mean by which a certain impression is created.

Regarding the general concept of effect (efficiency), it can be noted that it is reflected at the present time (at the time of implementation or functioning) or in the past (in the form of achievements) and can be studied and calculated (Borushevskaya, 2018).

On the contrary, economic efficiency includes elements of expectation or even promise. A certain contradiction can be noted: the dictionary definition is directed to the present or past, while the economic definition is directed to the future. At the same time, the everyday definition of efficiency tends to limit the factors under consideration and is linked to certain evaluation indicators. For example, if we use financial results (profitability), business processes indicators, customer satisfaction level, and innovation and personnel for the efficiency evaluation, we get the balanced scorecard suggested by Kaplan and Norton (1996). Another criterion for efficiency may be the level of satisfaction of the requirements of the company's owners (shareholders), and so on.

In order to find the best means of efficiency evaluating, scientists and practitioners have to rethink the activities of the entire enterprise and the relevant divisions (Jetter et al., 2018). Indicators that allow to assess the past situation, predict future development, as well as indicators of employee motivation and encouragement that are common for both small firms and large, complex companies (Günther et al., 2019). Indicators that are intended for "bottom-up" aggregation and "top-to-bottom" cascading distribution, as well as indicators that are used for comparison purposes and become more important as the company grows and becomes more complex, are attributes of the organization. Indicators for evaluating the past and predicting the future are used to evaluate the economic efficiency and past achievements of the enterprise as a whole. Indicators of motivation and compensation are designed to motivate and stimulate the activities of individual employees.

6. Findings

Efficiency indicators that are used on enterprises can be divided into four groups:

- market evaluation of the enterprise (return on equity, added market value) is intended for evaluating the activities of the enterprise as a whole, and not its individual business units, functional divisions, employees. These indicators cannot be obtained either by "bottom-up" aggregation or by "top-down" cascading. The future direction of market evaluation depends on the degree of effectiveness of the financial market, because it reproduces information related to future cash flows. These indicators are widely used to motivate and encourage top management of companies;

- financial indicators (the amount of profit, return on assets, investments, income) can be used to evaluate the activities of both the enterprise as a whole and its individual components: branches and firms that make up balance sheets and reports on financial results. However, these indicators cannot be used to evaluate functional divisions or employees. Financial indicators are more directed to the past than to the future, because the existing results of activity are reproduced. Although it is possible to note a partial direction of these indicators to the future: higher performance results reduce the costs of attracting financial resources, improve reputation. Financial indicators can also be widely used in the field of employee motivation and remuneration at the level of the company's management and its individual business units, but not at the level of divisions or work groups. Thus, we can talk about aggregation and cascading of

financial indicators from the company level to the level of business units, which allows comparing the efficiency of various forms within the company;

- non-financial indicators (innovation, quality, customer satisfaction level, customer loyalty) are quite complex and ambiguous. On the one hand, these indicators can cover all aspects of the enterprise's functioning: production, sales, management, marketing, innovation, etc. On the other hand, due to the fact that functional divisions within an individual company are usually specialized, most non-financial indicators that characterize the activity of the enterprise as a whole cannot be applied to individual specialized divisions. Also, the problem of aggregating non-financial indicators "from bottom to top" for a generalized evaluation of several divisions effectiveness is difficult. A similar question arises if it is necessary to compare the functioning of different divisions within a single company, as well as with similar enterprises or reference values. Regarding the future orientation and the possibility of using non-financial indicators to motivate staff, we can say that these aspects are very ambiguous over time, that is, non-financial indicators need constant monitoring of their effectiveness, revision and updating;

- expenses indicators are of limited use compared to other types of indicators, because they determine only one aspect of efficiency (costs). Costs evaluation is based on past information. Although trends in these indicators make it possible to make forecasts for the future, failure to control current expenses can lead to adverse consequences for the enterprise.

The table below shows the types of efficiency indicators by the level of use and purpose (Table 1).

Table 1. Types of efficiency indicators by the level of use and purpose

Signs of comparison		Indicators			
Level of use	Focus on the future	market evaluation	financial	non-financial	Costs
		enterprise	business unit	functional divisions	enterprise, business units, functional divisions, working groups
Motivation and reward	full	partial (short-term forecasts)	partial (tactical forecasts)	partial (line cost prediction)	calculated only on the basis of past information
The aggregation "bottom to the top"	from business units to company	only for similar groups and divisions	Full		
Cascading from "top to bottom"	from company to business unit	only for similar groups and divisions	Full		
Comparisons	by different business units	only for similar groups and divisions	Full		

Source: authors.

The table shows that indicators that are actually or potentially directed to the future (that is, which are useful for forecasting economic efficiency), as a rule, cannot be distributed "bottom-up" or "top-down". For example, the market evaluation of an enterprise cannot be distributed "top-down", and functional non-financial indicators cannot be aggregated "bottom-up". Thus, it is quite difficult to find indicators that can be used at different levels of the organization and that allow to make a suggestion about economic efficiency. Financial indicators are intended to the future only for a short-term period. They can be aggregated and cascaded only to the level of individual business units, not functional divisions or work groups. Only some non-financial indicators are focused on the future and comparable at the level of individual company units. The last group - cost indicators-corresponds to the largest number of features. However, they estimate the efficiency only by one side and show a tendency to change the level of costs, although they are easily used for aggregation and cascading "from top to bottom".

7. Conclusion

Efficiency evaluation systems used at enterprises are based on current and past results. Entrepreneurs are more interested in the future prospects and position of the company. Thus, economic efficiency is directed to the future and its assessment always has a certain amount of uncertainty. The amount of uncertainty varies depending on the delay (lag) of the factors affecting the assessment, as well as on the variability of the external environment (Andreeva, 2021; Sharokhina & Shevchenko, 2021).

Indicators of motivation and remuneration based only on cost indicators are usually not used at the enterprise, because they quickly cause deterioration of other (primarily qualitative) activities indicators of both individual employees and divisions or business units. Thus, the desire of employees of the logistics department to reduce costs on purchasing raw materials leads to the acquisition of a cheap but low-quality resource, which can lead to significant additional costs in the manufacture of products, an increase in obtaining low-quality products, etc.

The larger the enterprise and the more complex its organization, the more imperfect is the evaluation of efficiency indicators. This pattern occurs for several reasons: the division of labor is becoming more intense, which causes a greater need for specialized functional divisions; it is almost impossible to lead to a unified evaluation and comparison of non-financial indicators at the level of specialized divisions and financial indicators at the level of business units and the company as a whole. The balanced scorecard partially solves these issues, but its application requires adaptation to the economic system and the specifics of individual enterprises.

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