

# THE ENTERPRISE PERFORMANCE ANALYSIS

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This article talks about the enterprise performance. It is aimed to fields and methods by means of which the enterprise can increase or improve its performance.

**K e y w o r d s:** the enterprise performance, methods of analysis.

## 1 DEFINITION OF PERFORMANCE

The essence of performance as an economical category is formed by three elements.

- The first one is definition of the target value against which the actual performance is compared with the performance required.
- The second element is formed by criteria of goals evaluation in a form of parameter or set of parameters.
- The third element of performance is a system measurement and evaluation, which defines the rules for measurement of parameters and methods for their evaluation. [1]

The performance of the enterprise is the ability of the enterprise to achieve the desired effects or outcomes, and if possible, in measurable units. The performance problem is so transformed into two questions: What are the desired outcomes? How to evaluate (and how to measure) the performance (in what units)?

The value of the enterprise is determined by its performance. To increase the value of the enterprise, it is necessary to increase its performance. To this idea it is necessary to add that if we want to increase the performance of the enterprise, we should increase the efficiency of business processes, especially that of the main processes. [3]

## 2 THE ROLE OF MANAGEMENT ACCOUNTING IN THE PERFORMANCE MANAGEMENT SYSTEM

The primary objective of management accounting is to measure the economic performance of the enterprise and by means of it even provision of relevant information for operational and strategic management. Quality and way of settings of the management accounting also directly reflected in the the resulting quality of plans and budgets, reporting and analysis or documents for strategic decision making.

Unlike financial accounting, which is compulsory by law and has its fixed rules, the managerial is not at all ordered and specified. This is a natural, vital internal activity of each enterprise and it is often "tailor-made". The purpose of management accounting is therefore not provision of information required by anyone, but the information useful for something. This is also the most important rule which the manager must remember if he wants to introduce management accounting or if he already has used it.

In the management accounting there are many other terms, such as e.g. cost accounting, internal accounting, responsibility accounting and performance accounting and each of these terms reflects a specific approach and purpose.

Expense accounts can grow up to management one so that the company uses resulting information as an input for other management tools. In practice, the most commonly used system is a system of calculations, in which the costs are structured upon their specific characteristics (purpose, variability, necessity) and allocated per unit of output where they are compared against the revenues (revenues of the respective performance). The result of calculation so provides the information on the amount of costs, profit or other financial indicators in relation to the unit of performance (most often to the product). For costing, there are several methods that differ just in cost structure method and method of their allocation. The most commonly used methods are as it follows:

- Absorption Costing (method of fully allocated costs),
- Variable Costing (method of variable costs),
- Activity Based Costing (method of allocation in relation to activities) .



**Fig. 1 Structure of management accounting**

Information from correctly set management accounting is an effective tool for economic management of individual departments, setting of motivation system, evaluation of compliance with plans and interannual development of the results, management of costs of production, the basis for price negotiation and other managerial tasks [7].

## 2 IMPORTANCE OF PERFORMANCE ANALYSIS FOR THE ENTERPRISE MANAGEMENT

For successful enterprise management, the analysis of economic phenomena and processes existing and ongoing in the enterprise is essential.

In economic practice rather the term an analysis or an analysis of business performance, an analysis of the company analysis than an analysis of economic phenomena and processes (economic analysis) is used. The analysis is shared with business statistics, budgeting, calculations, and accounting of current information economic disciplines. The analysis uses the outcomes of information economic disciplines dealing with collecting and classification of information and transforms them into information for decision making and management.

In order to manage the economic reality it is necessary to know it and be able to measure and correctly evaluate the information. It depends on the manager the right decision. The analysis forms the foundation for solution of the managerial decision-making problems. [3]

### 2.1 Assumptions of the performance analysis

For analysis quality the quality of input information and adequate use of suitable constructed model is decisive.

*The economic model* must meet the following conditions:

- It is constructed for certain purpose. The purpose of each model is to help to clarify certain question. Precise determination of issue, ie. problem that will be solved by the model. It is the first prerequisite for the model construction.
- It is based on:
  - indisputable assumptions, ie.

economic theory, by which indisputable axioms and definitions are provided.

- disputable assumptions, ie. hypotheses about behavior of goals set in the pattern of occurring entities. These assumptions must be close to reality as it is an explanation of real economic processes. Disputable assumptions significantly affect the solution
- It is the simplest way of solution.

At model forming, it is necessary first to set variables and parameters included in the model. With regard to variables the parameters are constants. But we can observe what happens with the resulting values as the value of some of parameters changes.

In further and crucial phases of model formulation it is necessary to formulate conditions so that the model could work. There are three types of them:

- Definition relations resulting from definitions of the respective economic terms.
- Functional relations, ie. dependences assumed in the model.
- Assumptions for functioning of the model in a state of balance or imbalance, which can be divided into flow and state conditions. [4]

## 2.2 Economic performance analysis methods

The managers for management decision-making also need and **economic theory and methods of economic analysis**.

The analysis uses **tools, economic analyses** allowing an assessment of the facts and creation of information material for decision-making of the managers.

Economic analysis is a method of knowledge, ie. way of thinking and approach to examining the economic reality. Using economic analysis, it is possible to examine the economic reality and understand the forces standing behind the economic phenomena.

Economic processes and phenomena that are significant in terms of studied phenomenon are simply trying to describe the economic models.

There are four basic types of economic models:

- *Descriptive model*. It tries to describe certain real situation. It includes even the simulation models applied as copies of behaviour of real system results of which, unlike other mathematical models, have derived and not general character.
- *Normative models*. They try to optimize. They prescribe the optimal procedure at achieving the set goal. These models have purposive functions that is optimized (it is maximized or minimized). While it is subject to certain restrictions.
- *Heuristic models*. It is suitable for cases when it is necessary intuitively to apply the rules and method of approximate calculation.
- *Predictive models*. They are used at prediction of future development.

Depending on whether the model takes into account development at time, it is possible to distinguish between static and dynamic models. Static models are time-less. All variables here are related to the same time moment or period. The model becomes dynamic as soon as the time-dependent variables relate to different time moments or periods. Dynamic models take into account the time flow of the process.

In models it can be assumed different nature of relationships between variables. Accordingly, they are deterministic or stochastic models. Deterministic models assume functional relationships, ie. to certain value of one variable is assigned a specific value of other variable. In stochastic models, it is assumed that these relationships are random, ie. certainly values of one variable correspond with certain probabilities to certain values of the other variable. [4]

### 3 APPROACHES TO VALUATION OF THE ENTERPRISE PERFORMANCE

The current dynamic business environment causes that the efficiency and effectiveness is at the heart of intense interest of the management at all levels of management and is based mainly on the corporate strategy. The success and performance of the enterprise grows in proportion to the willingness and the ability of management to know value-creating business activities so that they would be operated effectively and that their quality of design would codetermine on how to help the customer while achieving business goals. Increase of the enterprise performance can be achieved by a consistent focus on three main attributes of operating base operation: cost, quality and time. Their effective management and control may become an acceptable starting point in raising of competitiveness and thus increase of the enterprise performance. For the top management, the key factor of success uses to be achieved earning, but conventional methods of management of efficiency and performance often appear to be insufficient. The top management of the enterprises should concentrate to better, more flexible and more precise tool for observation of the key criteria for management and following decision-making - Key Performance Indicators (KPI). They have character of complex values that inform the user to optional extent of details on development of the key indicators in certain field.

In addition to individual indicators evaluating the results of the enterprise and its centers from one point of view, in business practice even the comprehensive systems that evaluate both financial and non-financial aspects of performance starts to be applied. One of them is a system of RDF (Resultand Determination Framework) - set of results and their determinants.

In this system, achieving of positive results is subject to set goals in the field of determinants meeting. [6]

### 4 METHODS OF MEASUREMENT AND EVALUATION OF THE ENTERPRISE PERFORMANCE

Within the financial indicators, there are such measuring tools that are used to measure the

actual economic results upon many causes that cause it.

In practice, however, for performance assessment and measurement company the net capital perspective still dominates. But it is necessary to focus on staff costs. The higher the personnel costs are compared to capital costs, the more evident is the need of extension of traditional system indicators by indicators showing the performance of human resources.

#### 4.1 Economic Value Added - EVA)

One of financial indicators is also Economic Value Added. Most of concepts of measuring and evaluating performance is based on value creation for the owners.

Economic-mathematical model of indicator of the Economic Value Added measures how the enterprise has contributed by its activities to the change of value for the owners. This system provides more realistic information of the enterprise performance to the managers and at the same time, it motivates them to make decisions leading to growth of the enterprise value.

EVA measures whether the operative profit is sufficient in comparison with overall costs of capital invested. EVA is a net operative profit after taxation (NOPAT) minus fees for the capital.

$$\text{EVA} = \text{NOPAT} - \text{CAPITAL COSTS} \Leftrightarrow \text{EVA} = \text{NOPAT} - \text{WACC} \times C_t$$

Or, similarly, return on invested capital is defined as  $\text{NOPAT} / C$ . If  $\text{ROIC}$  (after taxation) is defined as:

$$\text{ROIC} = \text{NOPAT} / C_t$$

The formula can be adjusted as it follows:

$$\text{EVA} = (\text{ROIC} - \text{WACC}) \times C_t$$

Explanations:

*EVA* economic value added for observed period

*NOPAT* net operative profit after taxation

*WACC* weight average of capital costs

*C<sub>t</sub>* capital invested in the enterprise

*ROIC* return on invested capital

If we want to say that the enterprise is successful, it must be applied that  $\text{EVA} > 0$  Only in

this case the shareholders' wealth grow as they receive back more than the original investment was even at satisfying the creditors. If  $EVA = 0$ , the enterprise has produced only what was invested, and if  $EVA < 0$ , the value for the shareholders is decreased. [4]

#### 4.2 In-company controlling

Controlling is a progressive approach of the enterprise performance management because it provide the managers with different views of the enterprise or its parts upon preparation of different sets of information on the enterprise processes. It creates so called multidimensional performance evaluation environment.

Controlling is a special method of the enterprise management aimed at making profit. The peculiarity of the method is in its multidimensionality.

Controlling consists of three main pillars - financial controlling, investment controlling and controlling house (also known as controlling of costs). Within the controlling it is possible to define even other fields, such as quality controlling which helps us purposefully to allocate the costs that are necessary for observation of specific enterprise goals such as amount of costs for training of the employees, the impact of quality on the profit and cash flow process and the like. [4]

#### 4.3 Reporting

Reporting is a source of information on the company performance. It enables the persons interested immediately to act upon the up-to-date information. Reporting creates a common context for decision-making process across the all enterprise departments and ensures that everyone in the organization works with one version of truth.

Reporting system of most companies has a wide range of user's classes and requirements. Most of the end users are only receivers of regularly supplied reports. A smaller group needs reports that are more interactive or have the option to edit them. The smallest group of users - often called power users requires full interactivity, ability to create user's or ad hoc reports and queries and drill-through. Reporting system must be adapted to specific requirements of the users.

Creation and modification of reports through the Web both by IT professionals and ordinary users helps to increase the possibilities of making reports for a wide range of users.

Requirements for modern reporting information system are as it follows:

- suitability for all users,
- wide file of types of reports,
- reports authorization in web environment,
- global use of once created report,
- simple use facilitating users' adaptating,
- simple integration and automation,
- adaptation to existing security model. [4]

#### 4.4 Benchmarking

Benchmarking is a systematic use of methods for comparing themselves with others and find better ways how to do their job.

The basic idea of benchmarking is simple: "In order to compete, the performance of the enterprise must be continuously adjusted and improved, not only on local but also on global level. Benchmarking is therefore search of successful practices and procedures of other enterprises (not only in its own competitive environment) with the aim to adopt them and thus improve the own performance.

Benchmarking is actually a management tool that helps business to identify its potential of improvement and to improve known weak spots, or in other words - to increase productivity and efficiency.

Because this tool was in last years used only by big enterprises, the EU Commission started new initiative in order to: enable many small and medium enterprises (SMEs) to use and exploit the advantages of this instrument. Thanks to this wide-ranging policy of the EU Commission the SMEs are already an integral part of EU economic policy.

Otherwise, in our country it is in the long term presented great importance of SMEs for the country's economy, but real support does not respond to this great importance. How to improve support of the state as well as to find and exploit reserves of SMEs can be found out by monitoring

the current policies of the EU Commission or of some EU countries in this area and to be inspired by them. [4]

#### 4.5 Reengineering

Reengineering basically means fundamental reevaluation and radical reconstruction of the enterprise processes so that dramatic improvements in terms of critical rates of performance could be achieved, such as costs, quality, service and speed.

Reengineering as a tool for radical change of the firm lies in fundamental, interrelated changes of products and processes of the organization. The purpose of reengineering is to manage the competition and better satisfy all parties concerned. Material, rapid changes of processes and products of organization should be developed with small improvements and thus form a sequence: Reengineering - Kaizen - Reengineering - Kaizen.

#### 4.6 Six Sigma

Six Sigma is a method of improving productivity, efficiency and quality of products and services provided. It is based on a thorough understanding of requirements and expectations of the customers and applies the proved tools to eliminate defects in processes of their satisfaction. Six Sigma is implemented through the own employees of the enterprise.

In recent years, Six Sigma method has been successfully applied by many of the most important world companies.

Six Sigma method is based on six basic principles that help at starting initiatives of Six Sigma method implementation in manufacturing companies or enterprises of:

First principle – customer focused management,

Second principle – management based on information and facts,

Third principle – orientation to processes and their improvement,

Fourth principle – proactive management,

Fifth principle – cooperation without frontiers,

Sixth principle – pursuit of excellence and

tolerance of failure.

Benefits of Six Sigma methods can be briefly summarized into the following basic characteristics:

**Six Sigma provides a lasting success** - the only way how to sustain business growth and continue to influence the situation on market is a continuous innovation and reorganization.

**Six Sigma sets a performance goal** – in each company of any size it is difficult to make all to work in a same way and it is not easy to focus their effort to common goal.

**Six Sigma accentuates the importance of the customer** - with today's hard competition in any field it is not possible to ensure the business success by supplying only the good and perfect goods or services.

**Six Sigma accelerates the speed of improvement** - the enterprise improving most rapidly is likely to win the competition on the target market so the method of Six Sigma incorporates many techniques and tools from various fields to create a set of tools for improving the enterprise performance.

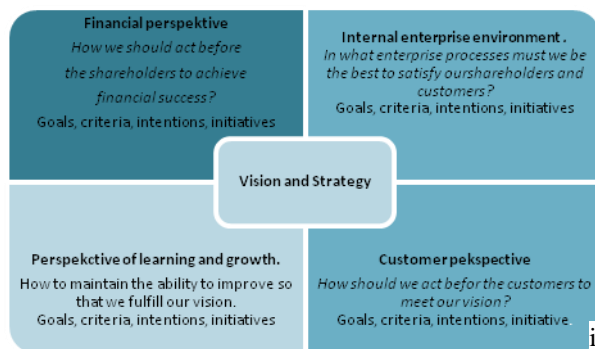
**Six Sigma promotes learning** - it was proved that the method of Six Sigma can increase and accelerate the development of the application of new ideas in the organization.

**Six Sigma helps to make strategic changes** - daily the hundreds of new products are presented, tens of new projects are started, many companies enter new markets or takes over new companies. [4]

#### 4.7 Balanced Scorecard - strategic system of the enterprise performance measurement (BSC)

BSC is another method that measures the enterprise performance by means of four balanced perspectives:

- financial perspective,
- customer's perspective,
- perspective of internal business processes,
- perspectives of learning and growth (Fig. 2).



**Fig. 2 Perspectives of BSC**

Perspectives of BSC allow to establish a balance between short and long term objectives, the required outcomes and motive forces of these outcomes and between all measures. There is no mathematical theorem that would prove that just four perspectives are necessary and sufficient. There are enterprises that use more or less than four perspectives, according to the circumstances in the industry and depending on their strategy. [5]

## 5 RELATIONSHIP OF THE EMPLOYEE'S PERFORMANCE TO THE ENTERPRISE PERFORMANCE

Performance management is a socially oriented concept of performance evaluation. It is a continuous process of communication ongoing in the partnership between the employee and his superior, including defining clear expectations and understanding of the work which the employee expects, further understanding of how the work of the employee contributes to meeting the objectives of the company, but also what specifically means "to carry out job well".

The principle of management of work performance in relation to overall corporate performance is understanding of the links between the measurement of the work of staff and its impact on overall business performance.

If we want to consider the performance of the employee or the group, it is necessary to establish performance criteria that must be adequate to work evaluated and have sufficient probative ability. The basic and somewhat universal criteria are:

- quantity of work performed for certain time period,
- quality of work for certain time period,
- timeliness of performance of working tasks,
- stability of performance at time,
- occurrence and frequency of misconduct, faulty goods.

These criteria, however, are usually insufficient to evaluate job performance and should be supplemented by additional and more detailed ones. The criteria used are largely determined by the method of evaluation, of which there is quite a lot and have several other variants. [4]

## 6 CONCLUSION

The basis of evaluation of the enterprise performance is determination of indicators which company wants to achieve, namely those that represent the level of the expected results. The next stage is followed by the measurement of these indicators, namely the measurement of actual achievements their comparison with performance expected. It is necessary to determine the differences - deviations from expected values and determine their causes. After carrying out these activities, it is necessary to implement remedy measures that may have character of improvement of individual activities performance, resources diverting, changes of performance indicators, or a change of strategy.

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