TRADITIONAL AND MODERN METHODS AND APPROACHES TO THE EVALUATION OF COMPANY PERFORMANCE

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Abstract:

Traditional methods and approaches to the evaluation of company performance are fundamental deficiencies in the fact that provide only a retrospective view of the company's competitive position that existed at some point in the past. This analysis are both static and outdated, but in addition also incomplete. Traditional financial indicators do not tell anything, why the overall results are as they are, or that the company´s areas must be improve in order to company closer to fulfillment its own strategic objectives. Therefore it is necessary to complement classical financial indicators of a series of more dynamic, non-financial indicators, adapted to specific conditions of competition. At present implementing new approaches to the evaluation company performance, which do in the traditional system, but it added of other aspects. The modern methods company management is possible to imagine that we are talking about the logistics approach to managing a company where company can be understood as a system of flows (information, material and financial) and chains (purchase - production - sale and the resulting triads logistics processes) is an attempt evaluate the performance of the company, ie performance of the company logistics system using non-financial the (of leading) indicators. The modern method of evaluation company logistics performance is based on the assumption that the company is efficient if they are able to achieve a predefined strategic goals.

Keywords: methods, evaluation, performance, logistics system, company

1. INTRODUCTION

On the basis of the research foreign and domestic literature and generalization of acquired knowledge can be said that the performance of the company based on the standard economic categories [1]. For the purpose of this paper is however appropriate for this important term and to specify more precisely defined by Šiška, L. and Matýska, M. [2], the performance of the company (Company performance) as follows: " Company performance we understand company success in achieving its primary objective. This is based on factual view in the creation of outputs in the form of products, works and services beneficial to business clients, and at the least possible consumption of scarce resources needed for the operation of the company [2]. "

2. IMPORTANT POINTS TO RESEARCH ISSUES

If we look back thirty years, to the period when the greater abroad began to pay attention to company performance, the measurement and evaluation can be noted that there are several approaches to the understanding of the notion of a performance of the company in the literary sources [3], [4] , [1], [5], [2], [6]: eg. by Titmama, 1988, Zinglaesa-Rajan, 1995, Neumaierovci, 2002, Maříkovci, 2005, preferred and gave to financial view of the performance, evaluation of performance through financial indicators, [3], [5]
1. to opposed Bielik, 1999, Nenadál, 2004, Nepela 2005, Závadský, 2005, Susta, 2007 put the emphasis to the need to perceive the company performance of the system point of view, ie talked about a systemic approach to company performance [7], [5], [8].

2. Second other authors such as. Varcholová, 2007 understand company performance through the value and economic approach., ie value approach is presented using value indicators and economic approach for assessing the performance of the company prefer mainly company owners [1], [2].

3. There are other various system models, approaches and methodologies measurement and evaluation of the performance such as System performance criteria (Globerson, 1985), Measurement of performance, World-class manufacturing (Maskell, 1989), SMART (Gross and Lunch, 1988-9), Performance measurement questionnaire (Dixon, Nanni and Vollmann, 1990), Cambridge design process performance measurement (Neely, Gregory and Platts, 1995), Balanced Scorecard (Kaplan and Norton, 1992 and 1996) and the EFQM Excellence Model (EFQM 1992). [3], [2]

4. Other areas such as. quality management and environmental management have control models and standards, describe the structure and content of the large-scale management systems, ie standards ISO 9000, QS9000 and ISO 14000 [8], [2].

Summary of the approaches you can see in the following figure processed by the author of the source data [3], [4], [1], [5], [2], [6]:

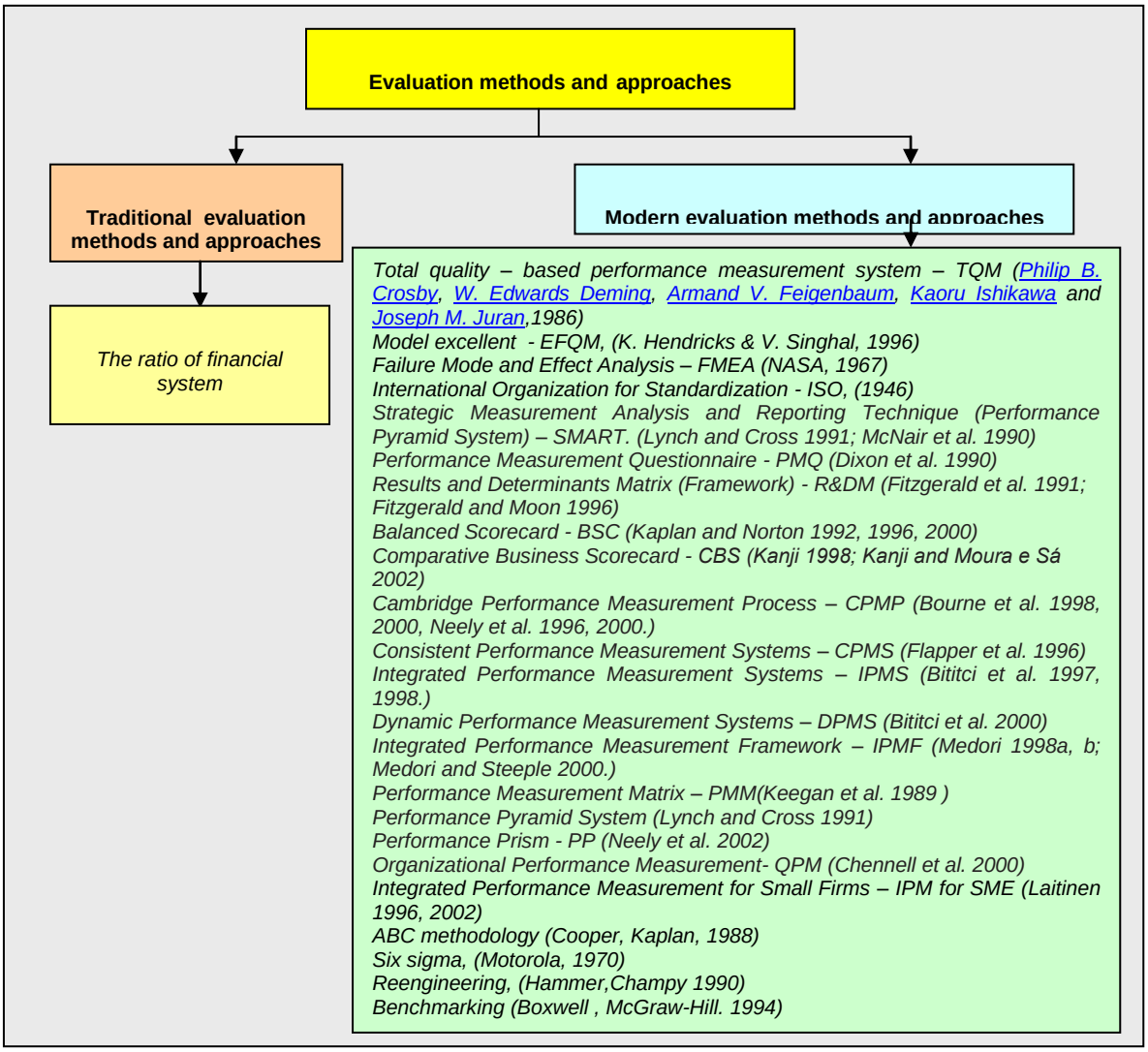

Fig. 1 Evaluation methods and approaches**,**

Source: own processing by:Pun, White, 2005; Garengo, Biazzo, Bititci, 2005, Gavurová, B. – Delina, R.: Prístupy k meraniu a riadeniu výkonnosti a ich aplikačné možnosti v podnikoch, Ekonomika a manažment podniku, 2010 , ISSN 1336 – 4103.

3. TRADITIONAL METHODS AND APPROACHES TO THE EVALUATION OF COMPANY PERFORMANCE

The traditional method of monitoring company performance is based on evaluation of the company's ability to achieve desired financial indicators - profit, turnover or market share. The company is evaluated as executive when it reaches the projected financial results. [9], [10], [11]. Traditional methods and approaches to measuring company performance are fundamental deficiencies in that they provide only a retrospective view of the competitive position of the company, which has existed at some point in the past. [3], [5], [12]. Classic financial indicators do not say anything at all, why the overall results are as they are, or what company areas we need to improve to company approached fulfillment their strategic objectives. [3] It is therefore necessary to supplement the traditional financial indicators on a series of dynamic, non-financial indicators, adapted to the specific conditions of competition [3], [1].

4. OTHER APPROACHES TO MEASURING THE COMPANY PERFORMANCE

4.1. Performance management system

Another view of company performance by Zavadski, (2007) is concept of performance management, which represents effective management of employee performance so that, is reached overall performance of the company. This is a connection with the performance of the overall performance of staff and teams, while emphasis is put on employee performance so that most contributes to achieving the objectives the company [100]. The second approach by Bacala, (1999) is based on the measurement of organizational performance by measuring the performance of processes, called Performance Management. [6]. The common denominator of both approaches is their departure from the company performance evaluation solely on the basis of financial indicators and the widely used other types of indicators (quality and time) [13], [3], [6].

4.2. Balanced Scorecard

By Kaplan and Norton(1992, 1996, 2000) is Balanced Scorecard (BSC):

- Balanced Scorecard management system,
- strategic performance management system
- or a balanced system performance

which allows company to clarify its vision and strategy, and transfer them into real practice. [3], [9].

5. LOGISTICS COMPANY SYSTEM

At modern methods of business management by Malindžák, D., (2007) it is possible to imagine, that we are talking about logistical approach to business management, where the company can be seen as a set of flows (information, material and financial) and chains (purchasing - production - sales and the consequences flowing triads logistics processes) is an effort evaluate the performance of company, ie. company logistics system using nonfinancial (leading) indicators [8], [14].

Logistics system of the company can be defined as follows:

1. Malindžák, D., Takala, J., (2005) define logistics system of the company through the transfer process, which does not change the qualitative goods, but space and time. Processes, that on this basis in company underway, refer to as logistics processes. Space and in time bridging can represent main tasks arising from the purpose of the business (logistics companies), or tasks for the purpose of its own business [9], [10].

2. Logistics system of the company is system that manages, secures and realizes "movement" of materials, information, finance. Define the logistics system means to define the structure, functions, activities, goals. [15], [16], [10].

3. Logistic system is a hierarchical system. On the logistics system can be viewed from a technical and functional sites. [15].

3a) From the technical pages elements such as the facilities and equipment ensuring and carrying out the movement and ties to material, information and financial flows. [14].
3b) In terms of functions - logistics activities.

All these activities interdependent, creating chains, follow the flow of activity - the management objects, create a logistics system [10].

4. Logistics system of the company (LSP) is arranged set of artificial (technical) and human elements and ties between them, cooperating in the planning and implementation of logistics chains caused company [9], [10].

Include all logistic chains created by company for each product and groups of customers. Operates with logistics resources (goods, capacity, information, people, ...), which aims to optimally deploy or harmonize. Pursues main external goal, which is derived from the objectives and to strengthen its position on the market and its sub-activities: to deliver the right goods in the right quantity, quality, in the right place at the right time and "economically" and that the correct costs [9], [10].

6. THE PERFORMANCE OF THE COMPANY LOGISTICS SYSTEM

On the development of measurement and evaluation of logistics company performance influence determinants the development of logistics in company, content metrics of this performance. The current trend is to emphasize for consistency, that is, the continuity of all logistics processes in company logistics system [13]. Measuring and evaluating the logistics performance of company are thus considered to actions and activities to be provided mainly objective, timely, accurate information about the various logistic processes, so that these logistics processes can be in control with a view to meet the set objectives and logistic requirements [13],[9]. The performance of logistics processes directly affects the overall performance of the logistics system and performance measurement and evaluation of company logistics system should gradually become part of the management and logistics performance should be measured continuously [3], [12]. Management of logistics process performance, performance measurement and evaluation of company logistics system should represent continuous process in order reach the objective, synergy effect of the connection and that, the achievement of a controlled and managed the logistics performance of logistics company system in relation to the strategic objectives of company [3] , [12], [9].

Followed early identification of weaknesses in company logistics system, as well as providing information of company management about logistics performance of company can be achieved by effective elimination deficiencies found, increasing the performance of the entire company logistics system and improving the company management system [9].

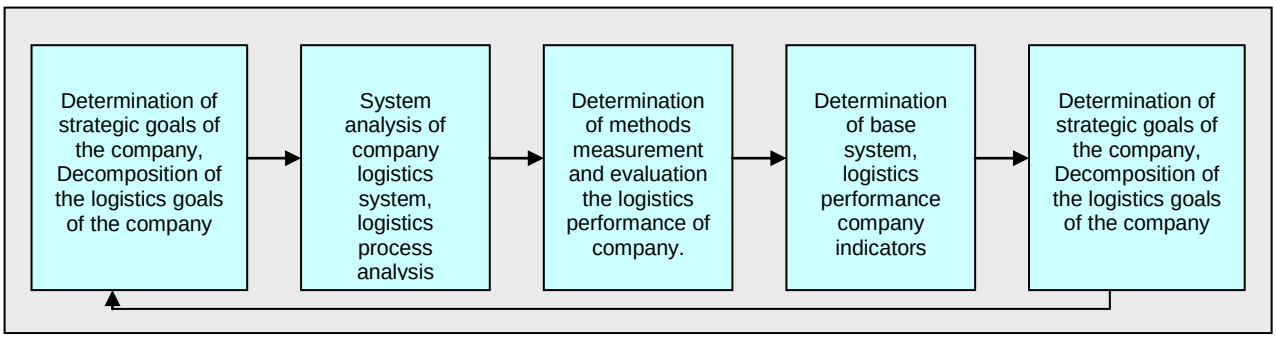

Fig. 2 The continuous process of measuring and evaluating the performance of logistics company

Source: own processing

6.1. Methods and approaches measurement and evaluation the performance of company logistics system

Since, as has been previously mentioned [10], the logistics still under development and the creation of new logistics methods and practices and it is quite difficult to handle survey of current methods for measuring and evaluating the performance of logistics company.

Notwithstanding this observation was conducted a detailed research of domestic and foreign literary sources, and it must be held that there is no specific methodology for measuring and evaluating the performance of logistics company.

In view of this, we at the Logistics Institute of Industry and Transport, FBERG, TUKE see space for implementation and research. It has been developed, a team of the Institute of Logistics and Transport industry, philosophy, the different new and unique methods to come up with solutions to this problem into account and how this philosophy realized in practice. On this basis, the proposed methods and approaches:

Tab. 1 "Proposal logistics performance evaluation methods", source: own processing

	Methods	Characteristic	Typ	Rate of subjectivity
1.	Logistics audit	Flash analysis	qualitative method	subjective
2.	Multicriterial evaluation of logistics performance	AHP method, RAL model	qualitative - quantitative method	subjective
3.	**Logistics controlling**	**Controlling approach**	quantitative method	**objective**
..... *area for creating other evaluation methods.....???*				

6.1.1. Logistics audit

The idea of creating this method has been derived from the existing auditing and audit process that is normally performed in companies. However, as the idea of an audit process to transfer the logistics understanding of company, the logistics approach to business management? The basic idea was, that the logistics audit will be understand [9] as a standardized evaluation process focused on the logistics activities company logistics system. Scope will correspond to complex understanding of the logistics, t. j. concept involving all aspects of management material flow throughout its course of from suppliers to customers. [16] Logistics audit can then be seen as methodology of condition evaluation and performance of company logistics system. For the purpose of evaluating logistics processes were compiled form. Use these forms to evaluate the condition, implementation and level of logistics processes [4]. Logistics audit result is then the definition of tasks and measures for the implementation of a sequence of changes in the logistics system company, which will lead to increased performance of logistics system company, allowing company to achieve higher level of competition [9]. After creating methodologies, conception and logistics audit system continued research at the Logistics Institute of Industry and Transport in the area of new evaluation methods logistics company performance and further applications of the principles into a multicriterial decision making, not only for evaluating performance of logistics company.

6.1.2. Multicriterial methods for performance evaluation

Approaches to multicriteria evaluation

The most used approaches to multicriteria evaluation logistics company performance can indicate

- The simplest and to date the most common method of multicriterial evaluation is the evaluation through questionnaires used by the actual creator of the method of AHP Thomas L. Saat (Saat, Kearns, 1985). In this type of the questionnaire is performed paired comparisons. The questionnaire was completed by management of company, respectively. experts evaluated company. Those then determined based on its assessment of the most important criterion [17], [18].

- Another approach is based on the analytical calculation of space, it from two to n - dimensional (area, volume), where the number of criteria: the number of dimensions of space. This definition provides the most important criterias (Malindžák, 2010) [10].

6.2. AHP method

AHP method provides complex and coherent approach to structuring the problem of quantifying the parts that relate to overall objectives, and for evaluating alternative solutions. AHP method can be used in many different areas. It is a suitable method for the evaluation of companies where several criteria leads to objectification of in evaluating them. [17]

• AHP method as a flexible model for decision making, clarifies issues that have several possible solutions. AHP is performed by an expert and then a mathematical method, which divides the principal problem into smaller and more detailed elements.

One of the major shortcomings of this method is to load some steps of its application a certain degree of subjectivity. AHP methods of investigation and the detailed analysis, it is concluded that it is possible to use this method for processing and evaluation of data obtained logistics audit [11].

7. THE FORMULATION OF OBSERVATIONS FROM THE ANALYSIS

Based on the results of basic research aimed at use of methods and approaches to performance measurement in companies Slovak Republic can concluded that companies prefer (use) mainly these approaches and methods: The system of proportional financial indicators, Quality management systems (TQM, EFQM, FMEA, ISO series of standards), Process Management, Balance Scorecard, Six sigma and method ABC. It is important to mention that these methods are not mutually exclusive, quite the opposite, rather to complement and support and of course there is the possibility of different combinations of these methods, if the need to measure and evaluate the performance of logistics company.
One of the methods that is not yet elaborated and it appears to be a suitable method approach and inspiration for creating a model of a complex system of measuring and evaluating performance of logistics company is controlling, which could theoretically be applied to logistics. The question is why not?
Controlling offers solutions on how to use the concept evaluation company performance, but so that the new philosophy will not only rely on the financial assessment, but rather move to a different assessment of the qualitative and quantitative evaluation of higher level and logistics processes of logistics chain company. It's a new idea, still not applied in practice, which also creates the possibility to implement the solution set of the problem.

On the basis this statement it is possible logistic controlling or otherwise controlling logistics regarded as the chosen instrument measurement and evaluation of performance of logistics company.

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LITERATURE

[1] LESÁKOVÁ, Ľ.: Metódy hodnotenia malých a stredných podnikov. Banská Bystrica: UMB, EF v Banskej Bystrici, 2004. ISBN 80-8055-914-7.

[2] ŠIŠKA L., MATÝSKA M.: Progresivní nástroje měření výkonnosti podniku. In Vývojové tendence podniků III : specifický výzkum Katedry podnikového hospodářství. Svazek II. / [editor Ladislav Blažek.] Brno : Masarykova univerzita, 2007, s. 753-884

[3] GAVUROVÁ, B. – DELINA, R.: Prístupy k meraniu a riadeniu výkonnosti a ich aplikačné možnosti v podnikoch, Ekonomika a manažment podniku, 2010 , ISSN 1336 – 4103.

[4] KUFFNEROVÁ, A.: Reinžiniering ako nástroj podnikovej stratégie. In: Management pro 21. století. - Praha : VŠCHT Praha, 2002 P. 118-122. - ISBN 8070804912

[5] NENADÁL, J.: Měření v systémech managementu jakosti. 2. dopl. vyd.. Praha : Management Press, 2004, 335 s., ISBN 80-7261-110-0.

[6] ZÁVADSKÝ, J.: Teoretické východiská riadenia výkonnosti podnikových procesov, in: Výkonnosť podniku, Ročník I, číslo 2/2011, ISSN 1338-435X.

[7] MALINDŽÁKOVÁ, M.: Significance evaluation of environmental aspects. In: Communications. Roč. 13, č. 3 (2011), s. 48-51. - ISSN 1335-4205

[8] ROSOVÁ, A., PRIBULOVÁ, A., BARICOVÁ, D., FEDORKO, G.: Dekompozícia logistického systému podniku systémovou analýzou. In: Logistický monitor. Jún 2012 (2012), s. 1-15. - ISSN 1336-5851 Spôsob prístupu: http://www.logistickymonitor.sk/images/prispevky/clanok-jun-2012.pdf...

[9] ROSOVÁ, A.: Controlling a logistika priemyselného podniku I., Košice: Dekanát - Edičné stredisko, 2010, ISBN 978-80-553-0510-3

[10] MALINDŽÁK, D. A KOL.: Teória logistiky, Karnat, 2007, ISBN 978-80-8073-983-8

[11] BINDZÁR,P., IŽOLOVÁ,J., BALOG, M.: Návrh koncepcie mestskej logistiky s využitím prvkov IDS s aplikáciou na mesto Nitra. In: Acta Montanistica Slovaca. Roč.15, mimoriadne č. 1 (2010), s. 73-81. - ISSN 1335-1788. http://actamont.tuke.sk/pdf/2010/s1/12bindzar.pdf...

[12] ROSOVÁ, A.: Sústava ukazovateľov distribučnej logistiky, logistiky dopravy a materiálového toku ako jeden z nástrojov controllingu v logistike podniku. In: Acta Montanistica Slovaca. Roč. 15, mimoriadne č. 1 (2010), s. 67-72. - ISSN 1335-1788 Spôsob prístupu: http://actamont.tuke.sk/pdf/2010/s1/11rosova.pdf.

[13] BALOG, M., STRAKA,M.: Logistika informačných systémov, Epos, Košice, 2005, ISBN 80-8057-660-2

[14] PRIBULOVÁ, A.: ŠADEROVÁ, J., FEDORKO, G.: Model materiálového toku procesu úpravy a spracovania nerastnej suroviny / In: Logistický monitor. Apríl 2012 (2012), s. 1-7. - ISSN 1336-5851 Spôsob prístupu: http://www.logistickymonitor.sk/images/prispevky/tukosice-4-2012-2.pdf...

[15] BÁRTOVÁ, P., KAMPF, R.: Možnosti uplatnění CBA analýzy v dopravním inženýrství. In Doprava 6/08, s. 16 – 18, 2008, ISSN 0012-5520.

[16] ROSOVÁ, A.: Controlling a logistika priemyselného podniku II., Košice: Dekanát - Edičné stredisko, 2010, ISBN 978-80-553-0511-0

[17] KAČMÁRY, P., MALINDŽÁK, D.: Prognózovanie obchodu a výroby v dynamicky sa meniacich podmienkach trhu. In: Acta Montanistica Slovaca. Roč. 15, mimoriadne č. 1 (2010), s. 53-60. - ISSN 1335-1788 http://actamont.tuke.sk/pdf/2010/s1/9Kacmary.pdf

[18] MARASOVÁ, D., TARABA, V., GRENDEL, P.: Legislatíva a jej požiadavky na bezpečnosť tunelov. In: Acta Montanistica Slovaca. Roč. 15, mimoriadne č. 1 (2010), s. 9-13. - ISSN 1335-1788 Spôsob prístupu: *http://actamont.tuke.sk/*.