

ACTIVITY-BASED COSTING APPLICATIONS IN THE CZECH REPUBLIC

Boris Popesko
Tomas Bata University in Zlin
Faculty of Management and Economics

Petr Novak
Tomas Bata University in Zlin
Faculty of Management and Economics

ABSTRACT

The Article deals with the problem of Activity-Based Costing (ABC) utilization in conditions of the Czech Republic. Shortcoming of the traditional costing methods and advantages of Activity-Based Costing systems are explained in the opening part of this article. Major part of article is dedicated to presentation of advantages of utilization of ABC system in practice. Final part of article is focused on results of the authors' research focused on the level of the cost management systems in the Czech enterprises. Authors search the answer for the question: "How do the Czech enterprises deal with the different types and levels of costing methods and systems? ". In the final part of article, authors define the obstacles of modern costing methods application and the possible ways of the utilization and implementation of these systems.

Key words: Cost management, costing methods, Activity-Based Costing

1. INTRODUCTION

In the last several years we can see a dramatically growing importance of the high quality information for the company management decision. The area of the cost management systems used for costing and budgeting is one of the most important areas of company financial management. According to growing competition on the globalized markets, companies need the information about the profitability of a product, customers or markets, about costs consumed by different activities and other different areas where the costs have the important role. If the company wants to keep in touch with the strongest competitors, its costing system has to implement the ability to react to changes in product and activities structure and feature these changes in the product costing. If the costing system does not change and does not conform with process, activities and product structure dynamics, than the costing system will become obsolete and will produce the incorrect information about the company cost.

Modern, process and activity based costing systems has been developed in early 1980's and are mostly used by US companies and the European top companies. The level of utilization in the central European companies is not very high. Companies often deal with problems and obstacles in application and useful utilization of these systems. Authors have participated on several ABC implementation projects an interviewed a lot of companies which showed the discontent with present quality of their costing system. Most of them showed an interest in the area but was unsure if the ABC system is practically able to solve most important problems with the costs.

Traditionalism and inflexibility in adoption of modern management tools is also the one of the problem in the extension of process costing systems. This article describes the approach of Czech companies to the problems of cost management in today's business environment and seeks the obstacles in adoption of modern costing systems.

2. INTRODUCTION OF THE ACTIVITY-BASED COST MANAGEMENT SYSTEM

In the beginning of 1980's companies started to seek for new costing methods and started to deal with activity-based methods, consequently with development of process management, which has been developed in the same period. The Activity-Based Costing (ABC) as the type of the costing method was constructed in that time. ABC involved the important quality improvement in the area of cost calculations and solved the basic shortages of traditional absorption costing systems, by the seeking of the true causes of the overhead costs consumption.

Major problems of traditional costing methods: mixing of all types of costs together in the few company overheads; arbitrary allocation of that overheads; and "averagization" of the overhead costs allocated, can be effectively eliminated by the process view on the allocation process. Usually used **absorption costing method** allocates the proportionally same volume of overhead costs to each product, according to the volume of the direct costs. In present enterprises could be this method very often misleading. The effect that plays its role in wrong overhead cost allocation could be described as the "averagization". This term means the effect, when to all cost objects, will be allocated proportionally average volume of costs of any type.

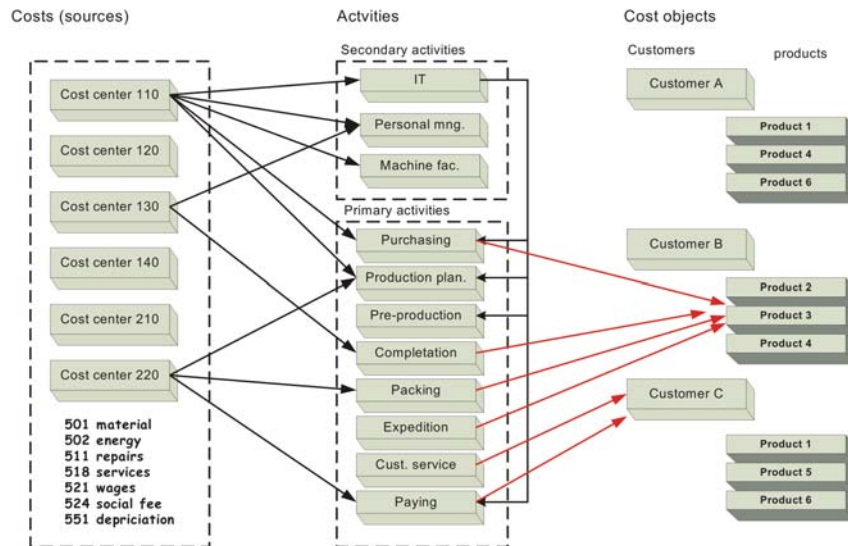
Problem of the averagization of the overhead costs allocation can be effectively solved by the ABC method, in that way, that individual groups of overhead costs will be allocated by individual cost drivers, according to the nature of relation between these costs and cost drivers. ABC system divides the costs into individual groups of costs (Cost pools), where the costs of similar type and behaviour, are gathered together. This gathering is also performed according to process structure of the enterprise. The costs are than measurable and manageable by the similar ways as the company processes. Some authors also consider the ABC method as the complete alternative to the traditional way of accounting. (Potkany, Hitka, Gejdos 2007).

The basic idea of the ABC method is the allocation of the costs to the operations through the individual activities, which can be measured by the cost drivers. In other words, the cost units are in the first phase allocated to the individual activities (such as planning, packing, quality control), using the resource cost driver. In the second phase, costs of those activities are allocated to the concrete products or cost objects, which in reality caused the incurrance of the overheads, using the activity cost driver.(fig.1)

The cost allocation deals also with the division into primary and secondary activities and its cost consumption relations. Not all company activities are

consumed by the external cost object (such as product or customer); some of the activities are consumed within the organization, for the in-house needs (such as IT, personal management or infrastructure).

Figure-1: Overhead costs allocation in ABC systems



Source: Stanek, V. 2003

FIELDS OF USE OF ABC SYSTEM

After short introduction of the system, there is necessary to answer the question: “For what type of companies may utilization of the ABC system bring a highest effect?” In previous paragraph, the main advantages of the system had been introduced. These advantages can not be fully achieved by companies of any kind. ABC system is useful tool for allocation of that type of costs, which are not effectively allocatable by the traditional methods. The criterion for the effective ABC application is, from that point of view, the relative portion of these types of overheads. In other words, if the portion of overheads, and also the wideness and structure of the performed overhead actions is high, than the application of the ABC system could bring the measurable effect. Usual recommended fields of application are the services (IT, financial, energy distribution or the project-based manufacturing industries (automotive industry). (Glad, Becker 1996)

2. COMPONENTS OF THE COST MANAGEGENT SYSTEMS IN CZECH ENTERPRISES

The image of the cost management level in central European companies could be presented through the results of the research performed at the Tomas Bata

University in March and April 2007. The sample of Czech enterprises, of different size, ownership structure and business branches, has been chosen as the object of this research, to help to show the approach of the Czech companies to the utilisation of the ABC system in their cost management.

RESEARCH METHODOLOGY

Random sample of 500 Czech Enterprises has been chosen for participation on this research. The sample had been chosen to correspond to the average structure of the regional business. Chosen companies had been contacted through the email and those companies (153), which decided to participate on the research, had filled the questionnaires, with the questions related to the area of research. Contacted persons were usually financial or general managers of the companies, what proves the relevance of the gathered data. In spite of the relatively small number of enterprises in the file, the results relatively accurately show the real level of the cost management among central European countries. The main aim of this research was to identify the number of enterprises using or considering the utilization of the process costing and management system (Activity-Based Costing) and describe the relation of the enterprises to possible utilization of these systems. Some of these results are compared with a similar research performed on Tomas Bata University in 2004 (Popesko 2004).

COSTING SYSTEMS USED

The core part of the research focused on the questions about the costing method used by the company. Companies were asked to define, which costing method they use for their product costing. The results are shown in table 1. The 5% of companies don't perform any product costing. (Portion of enterprises not doing any product costing in 2004 research was 6%)

Table- 1: Calculation methods used in Czech enterprises

1 - division costing	18	12%
2 - absorption costing	31	21%
3 - standard costing	42	29%
4 - variable cost analysis	18	12%
5 - Target costing	1	1%
6 - Activity-Based Costing	7	5%
7 - combination (2, 3, 4)	18	12%
8 - other	10	7%

Source: Own research

As we can see, the most extended costing methods are the traditional absorption costing and standard costing. The results are very similar with the research performed in 2004 the amount of absorption costing was 25% (21% in 2007), portion of standard costing was 34% (29% in 2007), portion of variable costing was 24% (12% in 2007) and portion of Activity-Based Costing was 4% (5% in 2007). Definite interpretation of these results is not possible, but we can see a slow decrease in number of traditional costing methods and variable costing methods and very slow increase in ABC utilization and development of combined costing methods, which should replace the obsolete traditional costing methods. These results are relevant to the trends described in the worldwide information sources.

Despite of the costing method used, a relatively high number of enterprises do not consider their costing system as the accurate one; 26% of all firms are not satisfied with their cost managing system and 20 % of all firms assume that their own costing system doesn't provide the real image about the company costs. That means, that in fact the quarter of the firms in the sample recognize their own costing system as insufficient and providing the inaccurate data. Rest of the should consider their costing system as providing the correct data or firms could be satisfied with its level, but its not proving, that the data and information provided by that system are correct in fact. Based on these results, it is not possible to formulate any proved conclusion what portion of the companies uses the incorrect system in fact and what is the level of distortion of the calculated costs. According to the experiences from worldwide researches and findings, we can expect that a relatively large number of enterprises, uses the inaccurate costing system, but regard their costing system as suitable.

UTILIZATION OF ACTIVITY-BASED COSTING SYSTEMS

The following part of the research focused on the Activity-Based Costing systems itself. 43% of the enterprises know about the ABC system, but only 21% of them are completely informed about the features and consequences of the system. This shows that the popularization of this method is good, but there is a lack of practical experience with the utilization of this system and detailed information about the advantages and possibilities of effective applications.

Table 2 shows the companies' approach to the Activity-Based Costing methods. As we can see, most of the companies have never dealt with this type of costing method. A relatively high number considered the possible implementation of ABC, but finally they rejected the application of this system. The high number of enterprises, that have not dealt with the ABC or rejected the application of this method, is generally caused by the lack of information sources about this approach and a general lack of experience with the method.

The reasons why companies have never dealt with ABC systems or rejected its application are described in the following part of the research. 26% of companies consider the ABC system as not suitable because of the character of their operations, 10% of companies consider the application of the method as

inadequate for investment and 51% of companies do not have enough information about the ABC system. Companies are not able to perform any kind of analysis, which could help them to forecast the propriety of the ABC application or lead them through the successful implementation process. Sometimes also the implementation performed by the external consultants could be seen as expansive and ineffective.

Table- 2: Calculation methods used in Czech enterprises

Never dealt with	109	71%
Considered but rejected	15	10%
Really considering	12	8%
Implementing	8	5%
Using	9	6%

Source: Own research

The last part of the research focused on the companies which use or consider the use of the ABC system. The intention of the research was to find out the reasons why companies decided to use this system. The results are introduced in the table 3. According to the low number of enterprises participating in this field of the research, the results can be accepted only as a preview.

Table - 3: The reasons of using ABC system

Necessity of cost reduction	2
Necessity of cost reduction + improving of the information about costs	6
Original system became insufficient	2
Other reasons (changes in process structure, rise of overheads)	4

Source: Own research

CONCLUSION

The results of the research provide an overview of the level of cost management in Czech Republic. Despite long discussions about the limitations of the traditional costing systems, the modern Activity-Based Costing systems, which are able to eliminate the inaccurate absorption of costing methods, are not widely extended. There is very presumable, that the level of utilization of ABC system is very similar in neighboring central European countries, according to similar history in business development. On the other side, some sources refer about

slightly higher level of utilization in Slovak Republic. (Stanek 2003) The main reason of the low utilization of these systems is the inability to perform effective implementation process and be able to effectively utilize information outputs of the system. The ABC method itself is mostly utilized by the biggest Czech enterprises operating in the field of energy, telecommunications and other services, where the limitations of the traditional systems and obscurity of cost objects is very relevant. Medium sized companies with heterogeneous production, where the application of ABC system could be very effective, do not deal with ABC system in a wider range, because of the reasons mentioned above.

Possible solution of this problem, which is primarily caused by the information barrier about the system details and information outputs, is to publicize the practical examples of useful and effective utilization in the sources, where could be recognized by the possible users of these systems.

BIBLIOGRAPHY

[1] Glad, Ernst, Becker, Hugh (1996), *Activity-Based Costing and Management*, John Wiley and Sons, ISBN 0-471-96331-3

[2] Popesko, Boris (2005), *Aplikace procesního řízení nákladů v podmínkách českých organizací*, dissertation thesis, Tomas Bata University Press, ISBN 80-80-7318-280-7

[3] Potkány, Marek, Miloš Hitka and Pavol Gejdoš (2007), "Cost calculation in wood processing industry in the new century", *Intercathedra*, No.23, Annual Bulletin of Plant- Economic Department of The European Wood Technology University Studies. Poznań: 2007, pp 116-120, ISSN 1640-3622

[4] Staněk, Vladimír (2003), *Zvyšování výkonnosti procesním řízením nákladů*, Prague, Grada Publishing, ISBN 80-247-0456-0