

The Contribution of the Method of Calculating ABC Costs in Public Transport Entity

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Abstract: In an economic public transport entity, strategic analysis is the preparatory stage, with a view to adopting and applying a new method of cost analysis conducted in relation to participatory management, the ABC method. The importance of the ABC method for strategic analysis can be explained by the fact that in an economic entity in any field of activity indirect costs represent much of the total cost of the production process and the cost inductors do not relate only to the production volume but also to other factors, the ABC method makes it possible to directly allocate costs to activities compared to the concepts of traditional costing methods.

Key words: economy, indicators, costs, receipts, the ABC method, cost inductors

JEL Codes: D21, C61

Introduction

The activities carried out within the entity are mainly aimed at ensuring the budgetary balance of the organization and the efficiency of the economic-financial activity. Drafting / updating the tariff policy for public passenger transport and other tariffs for various services: permanent analysis of the economic and financial indicators in order to fit into the approved financial sources; developing forecasts on the progress of the activity and undertaking steps to provide additional financial resources from the local budget; analyzing the evolution of proceeds from the sale of travel documents; study the profile market and adapt the services offered to ensure profitability.

The importance of ABC's method of calculating the cost of strategic analysis is to follow a logic purpose and cooperation to describe the object of actions that are determined internally for organization. The basic principle of the ABC method is that activities generate costs and services, products and works are the ones that generate demand for those activities. Thus, we can highlight the role of the ABC method, namely to identify the various activities carried out by economic entities in any field of activity, and to group activities that have the same inductor in regrouping centers [1]. Managing the activity of an economic entity in any field of activity involves the realization of a decision-making process whose complexity is determined by the hierarchical level of the human factor, being responsible for the need to document and substantiate that decision [2].

Figure 1. The approach of calculating the cost of activities according to the ABC method



(Source: Authors Processing by Charles T. Horgren Srikant M. Datar George Foster, Cost Accounting, a Managerial Approach, ARC Publishing House, XI Edition)

In this context, the economic entities in the field of public transport of persons are interested in reorganizing the organizational structures, which can be manifested in two directions:

- The preparation and formation of the new "target" cross-organizational way, which responds to the customers' market and environmental requirements;
- Implement an ABC costing project to facilitate the transition between existing and flexible organization systems.

The cross-organization in an economic entity of public transport of persons identifies the result of each activity carried out, thus assessing the interest of each activity. The objective of each economic activity is to produce a strategically efficient outcome. Such a vision allows for a link between the strategic objectives and their realization in actions, to achieve the proposed objectives [3]. In order to achieve performance, the management of the public transport economic entity must take into account two essential aspects: diversifying the range of services offered to customers who lead on the one hand to a flexible, evolutionary organization as well as the reduction of the service life cycle. Thus, the ABC method provides the necessary framework for adapting to a flexible organization such as the transverse one. In order to perform the cross-cutting of the economic entity in activities, it is essential to regroup a larger number of actions or operations, more or less important.

An economic entity in any field of activity in the world economy by its nature is a complex system centered on systemic principles. Thus, any reorganization project of an economic entity will always go from an existing economic entity. The approach taken to reorganize the economic entity will evolve as a process to be piloted. In this context, we can define the reorganization of an economic entity in the field of public transport as an operational process of activities. The ABC method stimulates the economic entity to become competitive and responsive to customer requirements, strategic elements obtained by the economic entity, or to target future strategic actions, anticipating the decisions to be made in this respect [4]

Implementation of the ABC method in the public transport persons for performance

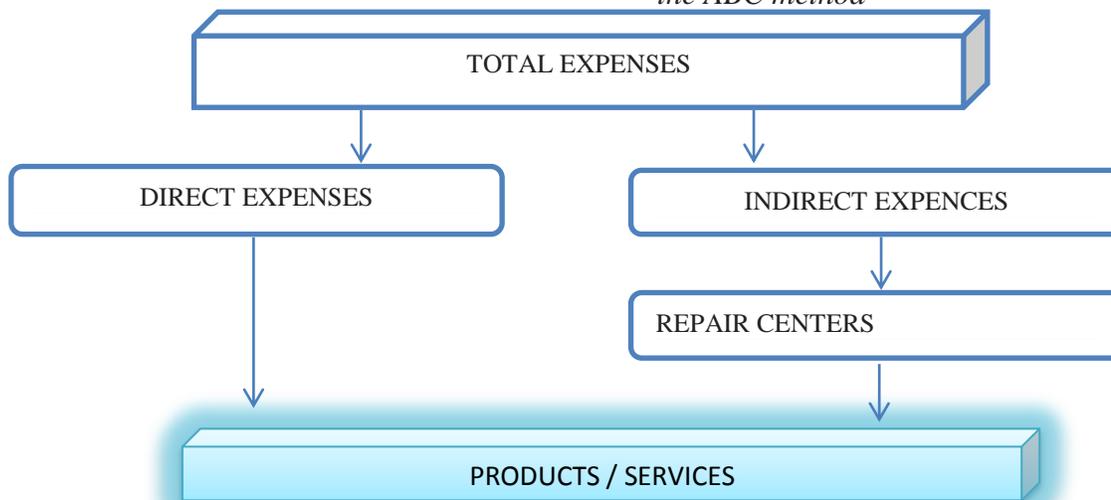
The specialized literature defines the method of costing a succession of calculations made according to some techniques merged between them, in which production costs are identified as the costs of the bearers [5]. Public transport of passengers could be considered as a specific area for the application of the ABC costing method, based on the actual allocation of existing costs. One of the important aspects limiting the application of a modern costing system is the fact that public transport entities do not operate in a fully competitive environment. Most economic entities, which have as their object the public transport of persons, are wholly or

partially owned by municipalities and are not considered to be profit-making subjects. Economic entities of public transport of persons using passenger transport provide their services in a very regulated system. De Borger, B., Kerstens, K., & Costa, A. points out that government intervention in this sector of activity is widespread in the world economy and has traditionally been justified by reference to a series of market failures [6]. Over the past two decades, concerns about possible regulatory failures have led to a reassessment of the role of the state in organizing this main sector of activity in the national economy. One of the main goals of each provider of passenger transport services is to achieve the efficiency of those existing activities on the market [7]. Efficiency and cost measurement within the RATB are relatively simple and restricted for several reasons. Despite the fact that efficiency could be accepted as the main objective of the service provided, stakeholders interested in the structure of public transport economic entities do not seek to use efficiency as the main objective of public transport management, but rather the continuity of activity under optimum conditions [8].

In the 1980s, the famous American authors denounced the lack of "traditional" methods of analytical accounting, their phasing out and their lack of relevance in relation to the evolution of the economic context, and proposed a new model for calculating ABC costs or "by activity". This remarkable movement was prolonged in France during the 90s by the authors Mevellec, Lorino and Lebas becoming a controversial source, asking whether "the ABC method is a revolution, or is it just a return to the source of homogeneous activities?" [9]. The ABC method is motivated by the belief that traditional accounting information is not useful to managers who are interested in assessing the effectiveness of decisions about the resources allocated to the economic entity in which they operate. Liggett, Trevino and Lavelle claimed that the activities use resources causing costs [10].

Managing the activity of an economic entity in any field of activity involves the realization of a decision-making process whose complexity is determined by the hierarchical level of the human factor, which is responsible for the need to document and substantiate that decision. Schematically, the distribution of expenses according to the ABC method can be presented as follows:

Figure 2. Distribution of expenditures in an economic entity according to the ABC method



Source: processing by author: Cucui, I., Horga, V., Radu, M., Management accounting, Ed. Niculescu, Bucharest

In an economic entity, costs are a key element in the management of economic systems, which means that their determination and analysis in order to make decision-making more efficient is a continuous concern within the economic entity. The ABC method grew in the United States during the 1980s as a result of a work by the International Advanced Processing Consortium (CAMI), which considered ABC as the "method used to identify the causes the connections between cost drivers and the cost of activities by measuring the costs of the process to which activities and cost objects relate." Activity-based accounting is a system that allows the pursuit of the evolution of an economic entity in an interactive manner. It can be adopted in any field of activity, irrespective of the profile of the economic entity [11]. In other words, the ABC method of costing has been adopted by various international organizations as the basis for substantiating strategic decisions and at the same time for increasing their performance. The ABC method may be associated with improving the performance of the economic entity by the fact that the results obtained by the organizations that have relied on its implementation have confirmed the benefits of this method. In Romania, there are economic entities that have begun to implement the ABC method of costing, a method that reflects and confirms the ongoing efforts of economic agents to optimize results. At the same time, there are also economic entities that cross the test phase of this type of ABC management. The fact that some economic entities have already implemented this ABC method and others have begun to become more interested in it reinforces the belief that the ABC costing and refinement method will be in the future, managers of economic entities in different fields of activity [12].

Conclusion

The underlying principles of the Activity Based Costing Method is an analysis that accurately reflects the cost of production of products, services and works offered to customers in relation to the consumption of resources of the economic entity and all the time, helps to identify the causes of performance improvement and the profitability of the economic entity, by completing traditional management accounting methods and calculating the costs used. As managers take into account the principles of the ABC (Activity-Based Costing) method in their decisions, the weaknesses of the economic entity they manage will be noted as early as the first stages of its implementation. Thus, managers will see some positive effects on the possibility of lowering costs.

From an economic point of view, economic entities of public transport of people seek the use of advanced costing methods and strategic analysis to achieve remarkable performance. In this context, the economic entities in the field of public transport of people, adapt their economic evolution, constantly changing their main objectives and strategy. These changes led to the adaptation of cost allocation management tools, aiming to increase the performance of the economic entity. In order to meet the essential cost reduction condition for increasing the performance of the public transport economic entity, the mechanism of the determining factors must be ensured, thus:

- Labor productivity is one of the most important economic factors that influences the level of costs, as this is the ratio of production to work and the effect of labor productivity is measured by the final product (useful or unnecessary). The increase in labor productivity significantly influences the costs, both by the relative decrease of the salary expenditures and by their absolute reduction in the cost per product
- The limited nature of the raw materials, materials, human and energy resources includes the reduction of production costs and material expenses, because in the process of activity of an economic entity a special role apart from the process of allocating and combining the raw materials resources, human and energy, it deals with the problem of their consumption, so it is important for each economic entity to calculate production costs and material expenses
- The client, represents the main objective of the new projects for the reorganization of the economic entities in the field of public transport, which try to answer by the quality of services rendered and acceptable tariffs, to its needs and requirements

- In an economic entity in any field of activity, substantial reduction of production costs is a fundamental option for increasing profitability, maximizing profit, which is the most important source of revenue accumulation. Reducing costs in an economic entity in any field of activity is a complex and complex issue, as the reduction in production costs must not affect the quality of the goods or services offered, which leads to the need to develop the research and design activity

Concerning the significant reduction of costs in an economic entity of public transport, it is necessary to take account of the restructuring of the workforce and the activities at the resources of the economic entity; providing good quality services, according to market requirements; real-time bookkeeping through upgraded computerized systems to get a clear picture of costs on a daily basis. It should be borne in mind that it is not always possible to reduce costs, as there are situations when they may increase for certain periods of time due to different causes.

References

1. Cucui, I., Horga, V., Radu, M., *Contabilitate de gestiune*, Ed. Niculescu, București, 2003.
2. Charles T. Horngren, Strikant M. Datar, George Foster, *Cost accounting, a managerial approach*, Arc Publishing House, 6th edition, 2006,
3. Leclere D., Lesel P., Dubrulle L., *Control de gestiune*, Editura Economică 2000.
4. Ravignon L., Bescos P., L., Joalland M., Le Bourgeois S., Malejac A., *Gestion par Activites-La methode ABC/ABM-Piloter efficacement une PME*, Editions d Organisation, <https://www.slideshare.net/super-sonix/procesul-bugetar>
5. Jacquot T., Milkoff R., *Compatibilitate de gestion: analyse et maîtrise des coûts*, Editura Dareios & PEARSON Education France 2007
6. Petriș R., *Bazele contabilității*, Editura Gorun, Iași, 2002,
7. De Borger, B., Kerstens, K., & Costa, A. (2002). *Public transit performance: what does one learn from frontier studies?* *Transport reviews*, Vol. 22, No. 1,
8. Petriș R., *Bazele contabilității*, Editura Gorun, Iași, 2002,
9. De Borger, B., Kerstens, K., & Costa, A. (2002). *Public transit performance: what does one learn from frontier studies?* *Transport reviews*, Vol. 22, No. 1,
10. Leclere D., Lesel P., Dubrulle L., *Control de gestiune*, Editura Economică 2000,
11. Liggett, H.R., J. Trevino and J. P. Lavelle- *Activity-Based Cost Management Systems in an Advanced Manufacturing Environment Economic and Financial Justification of Advanced Manufacturing Technologies*, H.R. Parsaei, ed. (New York Elsevier Science Publishers), 1992,
12. Ravignon, L., Bescos P.L., Joalland M., Le Bourgeois S., Maléjac A. (2003). *Méthode ABC/ABM*, Edition d'Organisation, Paris