

# THE ANALYSIS OF THE IMPACT OF THE ABC METHOD ON TRADITIONAL MANAGEMENT ACCOUNTING SYSTEMS IN ROMANIA

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## **Abstract:**

*This article focuses on a comparative analysis between the Activity-Based Costing (ABC) method and a series of management accounting methods used in Romania, such as phase method, ordering method, standard cost accounting method and direct costing method. There are highlighted the advantages and disadvantages of traditional methods, compared with the ABC method. The analysis of authors aims at the promotion of the implementation of the ABC method within the Romanian enterprises, considering the advantages it offers compared to traditional analysis and to implementation critical factors analysis. The article ends with the authors' conclusions, arguing for the implementation of the ABC method within the Romanian enterprises.*

**Key words:** Activity-Based Costing, Direct-costing, benchmarking, performance, implementation.

**JEL classification:** M21, M41.

## **1. Introduction**

Based on analytical studies done by experts in the field of management accounting upon management accounting methods, a series of advantages and disadvantages of the methods have been highlighted compared to the modern and contemporary managerial accounting methods, but also a number of problems underpinning their implementation within Romanian enterprises.

It is already well known that in Romania, management accounting methods dating back to 1950-1980 are still used. It's time for a revival of the economy and for the use of modern methods suitable for obtaining superior performance by all Romanian enterprises. Although there are very few enterprises or companies that actually apply the Activity-Based Costing method in Romania, we believe that proper media coverage of this method and its benefits would lead to a promotion on a large scale implementation among small and medium enterprises. In some studies conducted among organizations and promoting institutions of modern cost calculation methods, we have found out that some of these, although they are involved very much in the implementation of the ABC method, most of those concerned with its implementation think they should wait or seek alternative implementation method at lower costs.

Many of the articles related to the Activity-Based Costing (ABC) method published in various professional and academic backgrounds from Romania advocates for or against implementing this method. There will be always controversial opinions, but the purpose of our article is to highlight two relevant aspects:

- Analysis of advantages and disadvantages offered by the ABC method compared to Romanian traditional management accounting methods;

- The main positive and negative aspects, related to the implementation of the Activity-Based Costing method in Romania.

## **2. The impact between classical full-partial methods and ABC method**

The Activity-Based Costing (ABC) method occurred in 1981 while the traditional management accounting methods have been designed and developed between 1870 -1920. Most large Romanian companies are using, since the 1950s, traditional management accounting methods such as: phase method, the ordering method. Although, these methods were effective in their time, new production technologies and consumer demands have changed radically in recent years. Thus, the phase method was the most appropriate method in terms of mass production, but also had a number of disadvantages such as:

- Requires more work when applying semi-products variant, when phase production stages are many and there are unfinished products at the end of the reporting period;

- Do not accurately reflect the costs of each phase due to conventional boundaries caused by their technology-based flow technology, delimitation that can not be rigorously done.

The ordering method ensures establishment of a fair cost of the product or work performed, services provided in an acceptable position. However, like the phase method, the ordering method presented a number of limits such as:

- Does not provide knowledge of the real production costs at the end of the reporting period since the execution of orders continues during the following periods;

- Determination of the costs of orders in the “semi-products” variant are much more analytical and difficult, because some of the products are made up of several components or parts;

- Does not allow precise delimitation of materials and labor consumption, leaving the possibility of transferring them into the same product from one command to another. This leads to loading of consumption of some commands to a greater extent and to the discharge of others;

- In case of partial delivery of products to the customer before the full completion of the order, their evaluation at either the planned cost or the actual cost of similar products previously made makes that the deviations from the actual cost of products be charged on the last part of the command, which leads to the distortion of period costs.

Since 1970, in Romania has introduced and applied the Standard Cost Accounting method. At that time, the benefits offered by this method recommended it as an effective cost calculation method:

- Operational providing of information necessary for budgeting, evaluation, coordination and activity control of an enterprise;

- Effectiveness, as it is used for the preparation of corrective measures and leverages the information in the preparation and decision making process;

- Standardization of production costs is based on quantitative standards and value standards scientifically justified. Operative determination of deviations from standard costs allows rapid release of essential information in tracking corrections and making decision compared with the determination of deviations from standard costs at the end of the reporting period;

- By preparing standard overhead budgets, the Standard Cost Accounting method provides a basis of concrete comparison and operational for making assessments (future trends) of actual costs;

- Partial standard costs variant is recommended for the use of enterprises with continuous production and still have in manufacturing a small number of products;

- Single standard costs variant does not require mandatory inventory in progress, thus, it can be used by all industrial enterprises regardless of size, complexity of the technology process or lists of products;

- Double standard costs variant enables the determination of deviations in the absolute amount to perform the analysis of causes.

Like any other method, the Standard Cost Accounting method has shown some disadvantages such as:

- Partial standard costs variant does not allow partial knowledge of deviations during the production process, but only at the end of the reporting period;

- Partial standard costs variant allow to establish the overall deviations at the calculation items level and determination of the causes of production requires a great deal of work and inventory of the production in progress;

- Single Standard Costs variant requires an additional effort necessary for determination and operational reporting of deviations;

- Double Standard Costs variant involves a lot of work;

- Double Standard Costs option involves the use of additional accounts for recording of standard production costs, evaluation of consumption and products both at standard and cost effective, also inventory of production in progress.

Variable Cost method has been applied successfully in several companies in our country since 1980 until now. The advantages of this management accounting method are:

- Simplicity in calculation and determination of unit costs of products. Also efficiency because it provides quick information to management of the enterprise about the final result;

- determination and calculation of specific indicators against which the cost-volume-profit and price-volume-cost relationships are analyzed, as it is efficient for short-term decisions in the production and sales policy;

- Allow an efficient control at all levels of the enterprise and careful planning of expenditures, judging the performance of the persons responsible based on the margin in the cleared areas.

- Abandoning products whose margins on variable costs are negative and the positive shift to different products as well as assessment of profitability starting from variable cost margins. But the justification offered by the variable cost method is valid only in the short term; the reduction or the abolition of fixed costs by intervening only in the long term. This method does not take into account some products, apparently profitable, may be intensive support functions and, in fact, reflected in the extremely high fixed costs.

Compared with traditional cost calculation methods applied in Romanian enterprises, the ABC method brings several important advantages such as:

- The production costs obtained are more real than those obtained in the case of traditional management accounting methods, and this is due to the use of very advanced production technologies (an essential and success factor of the ABC method), where the overheads have highest share in the total production costs;

- currently, in most enterprises, there is are more unproductive activities (non-value) and the ABC method allows the allocation of most indirect costs per manufactured products, performed works or rendered services;

- It focuses attention on the real nature of the cost's behavior, thus helping to identify the non-value activities (non-value added products);

- Uses multiple cost drivers that highlight the direct cause-effect relationship between allocated costs and the used allocation bases;

- has flexibility in allocation of costs of manufactured products, work performed, rendered services, customers or various strategic segments;

- It regroups the support activities into the main activities. Compared with the expenditure centers method, it did not allow regrouping of activities according to transverse processes and did not exceed the limit of established responsibility centers. Also, ABC method does not provide auxiliary centers, the costs of all centers are incurred by all product costs without secondary distribution;

- Uses dashboards compiled on the basis of carefully selected steering indicators, thus providing long-term reliable information relevant for long-term strategic making decisions;

- is compatible with other management tools;

- Opportunity for adjustment to the general accounting Plan from our country to the specific of the ABC method.

Some disadvantages can be mentioned:

- The system complexity due to the use of a large number of information from the cost drivers, multiple cost carriers, steering indicators, dashboards, etc. Managing such a system is not exactly cheap, but not very expensive either, depending primarily on the resources of an enterprise and to the extent to which it wishes to extend its activities in the future;

- the applicability of the method on cost-based price approach is clearly demonstrated and favors the ABC method, however, another approach, based on market price, remains to be adapted to the ABC specific and so this drawback can be turned into its advantage;

- there is still some prevailing confusion in understanding the "ABC" concept by some experts, businesses and even management. This confusion is particularly evident in the implementation steps of the method, with special emphasis on the selection of a number of cost drivers in the allocation of company overheads.

The ABC method provides accurate information and it is preferred to the traditionally management accounting systems. The ABC method can be adopted if a firm's overhead costs are high and there is a range of different products. Inaccuracy or errors in delivery costs are the most undesirable because of the competitiveness established by the market competitors. Considering this heavy and stiff competition, a highly reliable and accurate method as the ABC method is needed for cost management. The ABC system is advantageous because it helps simplify the decision-making process and implementation of the concepts of the management process becomes clear and focused to proposed target. Also, the ABC method helps evaluate the performance and establishes those standards that can help managers in using this information for comparison purposes. In traditional management accounting systems, the company determines the production cost after the products are made while in the case of the ABC system, value or cost of the product are determined based on customer's feedback and on the established targets.

### **3. Aspects of implementation of the ABC method in Romania**

Based on data collected from different companies of Romania and based on studies made by researchers worldwide, regarding the implementation of the Activity-Based Costing (ABC) method, we have identified a few common application aspects, as follows:

***Managerial aspect.*** This aspect is the main reason for failure implementation of the ABC system into an enterprise regardless of its size. For a successful implementation of the ABC system we need a powerful team which has to be involved in the project. This project has to be run by a project director. The ABC project team needs to have adequate resources, labor force, knowledge and organizational culture available and eager to learn and improve continuously in order to contribute in this way to successful implementation of the ABC system into the enterprise and to obtain

superior performances. They can appeal to experts or consultants specialized in ABC implementation, so that the implementation should be successfully guaranteed.

**Financial aspect.** Many of specialists' studies in this field have indicated as main cause of the ABC's system failure implementation the low financial performance of an enterprise. Impossibility of some managers to understand the real nature of costs and its amplitude could lead to ABC's failure implementation before being tested, developed and implemented according to the enterprise's specific requirements. In this case, the costs can be: tangible and intangible. Among maximization profit solutions we can have: products prices lower than the competition's prices, removal of non-benefit products from the range of products, focus on specific product promotion, product mix that contribute to obtaining efficiency and increased effectiveness etc.

**Property issue.** Not accepting and not applying the ABC method because of the lack of property leads to confusion among the employees and employers. In most institutions and enterprises where initially the ABC method was presented, it enjoyed a quite big success from the interested specialists, but shortly after adoption and actual implementation of the method, the regular maintenance problems of the ABC system came up. The delegation of the responsibility regarding the ABC's management belongs more to the workers or production personnel. The difficult problem remains the responsibility of collecting and updating information and another problem comes up here, the level of documentation of the departments and of the directly involved persons. Each department or involved person must know "*their corresponding activity and cost drivers catalogue*" to help mastering the specific methodology of the ABC method, avoiding any confusions and clearly establishing the responsibilities of the persons and departments involved in maintaining the ABC system.

**Informational aspect.** This aspect is based on three critical main factors that may cause the failure to implement ABC method, namely: huge work amount in collecting information required by the ABC method; accuracy degree of the information provided through the ABC method; confusion in elaboration of other bookkeeping logs in addition to the financial accounts.

Regarding the first factor, many of the accountants consider that the ABC method implies a very large work amount in collecting data, processing and drawing up reports needed by various final users. We can have two situations: either we choose a very simplified calculation model, and the risk of obtaining distorted information is maximal, or we choose a very complex model, and the chance to obtain accurate information is very high, but the processing costs are also very high. So, we choose none of these solutions. We will choose an intermediary solution based on a rational model that will highlight the relations between cost relevancy, information significance, data accuracy and flexibility necessary given the recording of consumptions in activities and processes during several administrative periods. We need to have in mind what we lacked in traditionally methods, namely visibility, relevance and information accuracy specific of the managerial accounting. In other words, in order to avoid processing a larger information amount and additional costs, we must achieve a cost calculation system whose architecture should be orientated according to the final decisions.

The second factor is connected directly to the first factor and depends on the degree of orientation to the final decisions. We can have two situations: one connected to provisional calculation, another connected to absorption costing. In the case of provisional calculation, the work amount necessary for its achievement is very high, but it must be very correct. In other words, the information must be accurate to be used in the second stage of the absorption costing, where the cost drivers used in the first stage must not change in order to avoid distortion of costs.

As we already know, the ABC method is a direct result of the full costing method (absorbing) which takes into account all direct costs, and the overhead

(activities) are allocated based on specific allocation keys. As a result, the ABC method uses surrogate related costs in the case of activities costs. The ABC system is considered as an interface between existent data and tools to be processed with it. The experienced accountants consider that the ABC system, once implemented and adequately maintained operational, facilitates enormously the collecting work and the processing of the obtained information. All depends on the degree of knowledge and accumulated experience in working with the Activity-Based Costing system.

**Performance aspect.** This aspect looks suspicious to the majority of employees when focus is placed on a new system like ABC. According to it, the unitary costs and benefit margins vary significantly compared with the volume based costs. If ABC method is not aligned to the compensation system and performance evaluation, it tends to become, in the employees' perception, just a threat to their jobs.

**Technical aspect.** This aspect finds its solution in one of the factors that could lead to implementation failure of the ABC method, namely, the lack of software. The criteria underlying the choice and determination of cost drivers are very important. Most specialists think that without adequate software, we can't succeed in implementing the ABC method, which is particularly complex from the point of view of work amount. It is very well known that 95% represents the effort made to achieve the architecture of the ABC system and the management of behavioral changes and only 5% represents the effort made to implement the ABC system with software. Initially, it was thought that the existence of new software is imperative. If we think twice, most software is created in a common language. Why should we spend more money on software if we could adapt the old databases we are interested in?! The database administrator which is also a good programmer can succeed in correlating more data levels, thus creating a new program meant to fit perfectly into the ABC method architecture. In other words, we have two options: either we turn to a specialized firm that can create the needed software, either we use an updated existent database, by making a data conversion according to the new requirements imposed by the specifics of the ABC method.

**Behavioral aspect.** This aspect brings out the fact that the ABC system doesn't represent only a simple range of data and their analysis. It interacts through employees with the reality of the IT, finance or behaviors. The ABC system changes the political landscape of organization.

**Competitiveness aspect.** This aspect focuses on two directions: internal and external competitive degrees. Regardless of the type of system, traditional or advanced as the ABC, it won't provide us with information about the degree of satisfaction of a customer or about the degree of control of a process in the enterprise. The ABC system can't distinguish very clearly between a new customer and a loyal and customer satisfied with the quality of the services provided to him. The ABC system, broadly speaking, doesn't ensure the necessary time for a feedback on elements as efficiency and effectiveness of the activities performed. The visualization of connections between processes performed in the enterprise and the related activities contribute to the improvement of the performance of the respective activities. Operational systems used with the ABC system can also contribute to the successful implementation and operational maintenance of the latter.

#### **4. Conclusions**

Starting from what we mentioned and analyzed in the traditional management accounting methods applied into the Romanian enterprises, it seems necessary to introduce a modern and advanced method in terms of meeting the requirements to supply real and relevant costs for the managerial decision-taking. Considering the experience of countries that have successfully implemented and maintained the ABC method, we advocate for its implementation.

The factors that influence the implementing or not implementing the ABC method in Romania are not covered by this article. We are therefore launching the desire to make contributions to the research and to a deepening of the knowledge regarding these issues that Romanian enterprises and others face, and to a successful implementation of the Activity-Based Costing (ABC) method.

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