

## **The results account of the ABC method. The main source of underlining the performances of an entity**

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**Abstract:** - This paper presents a model of the results account specific for the method of Activity Based Costing (ABC), starting from its definition, component and typology. There are also described the defining elements of the results account in its quality of instrument of measuring and monitoring the performances of an entity. We also describe the role of this instrument in the formation of a “whole picture” that allows the visualization of some general tendencies pursued by the entity which help the managers to take corresponding measures. The paper closes with the authors’ conclusions related to the advantages of this synthesis document specific to the ABC method in using it as a main source in the rapid, correct and in due time substantiation of managerial decisions.

**Key-words:** - Activity-Based Costing, dashboard, balanced scorecard, benchmarking, synthesis documents, dissociative organization, pilotating indicators.

### **1 Introduction**

The purpose of this article is to present a model of results account obtained on the basis of data from management accounting according to the specific of the Activity-Based Costing (ABC) method. Nowadays, in the national and international special literature there is no crystal clear model for the setting up of such a results account within management accounting; therefore our main purpose is to try and find a way to elaborate, to express and to interpret the information meant to help create a whole picture as to help managers take the concrete and relevant decisions. With this paper we address all managers and specialists interested in the elaboration of such a model of “standard” results account specific to the management accounting, similar to the one from financial accounting, but focused on the specific of the ABC method.

### **2 The results account of the ABC method. Presentation, typology**

The results account represents the synthesis document of management accounting allowing the visualization of incomes and/or losses following the development of internal processes and activities. According to the Activity-Based Costing method, the analytical results account implies on the one side the incomes obtained from the sale of the objects of calculation (manufactured products, works done, services offered), and on the other side, the costs registered by the main activities and support from the entity. The results account of the list type is the widest used in the countries of accounting dualism, being a much more agreed form of financial communication of the performances of an entity, regardless of its field of activity. The advantage of this model is reduced to the “added value” it defines according to two key factors of success: the market and the client. The whole sum of activity values allows the functioning of a nomenclature of ignored, yet essential

spending for the management of a company. When allocated according to the functional service, with which the company is familiar but which allows it not to identify the real causes of spending evolution, the ABC method substitutes a new results account where expenditures are no longer the lines according to their nature, nor the cost of the various functional services, but the resources consumed on activities. The Activity-Based Costing (ABC) results account represents the synthesis document of management accounting that allows the visualization of incomes and/or losses which best corresponds to the requirements of the ABC method, related to transversality and structuring of processes on activities. The architecture of the transversal organization of the entity describes the most important strategic actions for the establishment of processes, activities and operations. Actions are described here operational and detailed, while activities and processes regroup the operations according to a result logic per client. The transversal organization of the entity defines the quantitative needs of personnel for each activity or operation. They supply in the same time a situation in qualitative terms, thanks to the introduction of the notion of competence. The transversal organization of the entity highlights the necessary relations for the achievement of the corresponding activities and operations. They describe the relations where responsibilities lie. The transversal organization of the entity defines, thanks to the notions of frequency and capacity, the moment when actions may become doable. It ensures that the entity is able to produce that what has been determined on a strategic plan, considering also the resources it has (people, machines, information etc.). In this respect, two results accounts can be done in management accounting: on a global level (table no. 1) and on the product level (table no. 2). We obtain a much more complex picture when we compare the global results account of several products. In order to organize the information necessary for doing the results account of the ABC method, a junction panel between financial accounting and management accounting of the entity will be drawn.

Table no. 1. Example of results account on an entity level

Explanations	Calculation
<b>1. Turnover</b>	...
<b>2. Direct costs</b>	<b>2.1. + 2.2.</b>
2.1. Consumption of raw materials	...
2.2. Cost of direct wages + accessories direct wages	...
<b>3. Activities costs</b>	$\sum 3.1. \dots 3.n$

3.1. ...	...
...	...
3.n. ...	...
<b>4. Total costs</b>	<b>2 + 3</b>
<b>5. Result (profit or loss)</b>	<b>1 - 4</b>

Table no. 2. Example of global results accounting broken according to the activities for “N” products

Explanations	Calculation	Product 1	Product ...	Product N
<b>1. Turnover</b>	...	...	...	...
<b>2. Direct costs</b>	<b>2.1. + 2.2.</b>	...	...	...
2.1. Consumption of raw materials	...	...	...	...
2.2. Cost of direct salary + accessories wages	...	...	...	...
<b>3. Margin on direct costs</b>	<b>1 - 2</b>	...	...	...
<b>4. Activities costs</b>		...	...	...
4.1. Supplier selection	...	...	...	...
4.2. Launch/reception commands	...	...	...	...
4.3. Depositing materials	...	...	...	...
.....	...	...	...	...
<b>5. Profit or loss</b>	<b>3 - 4</b>	...	...	...

### 2.1 The necessity of the junction panel in taking over information from financial accounting into management accounting

Regarded through the prism of accounts, the management accounting of the ABC method can be organized according to two variants [1]:

- *The integrated organization with the use of some distinct analytics within the financial accounting;*
- *The dissociated organization with the use of accounts.*

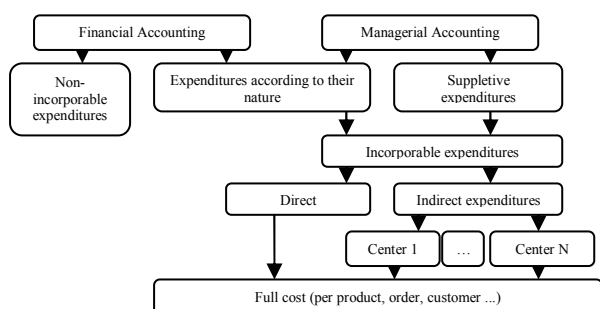
Our option for the dissociated organization with use of the specific accounts implies on the one hand the existence of financial accounting and on the other hand the existence of management accounting. For this purpose a junction panel is elaborated which allows the overtaking of the expenditures incorporable (of operation and of the financial ones of the 6<sup>th</sup> class “*Expenditures*”) in the 9<sup>th</sup> class “*Management accounts*”, according to the simplified form given by the present General Plan of Accounts. The necessity of this panel is given by the fact that in some accounts there appear expenditures that are not incorporable, which means they are not comprised in expenditures like the extraordinary ones. After setting up this junction panel (Table no. 3) the incorporable expenditures are cut off (expenditures of production) and they are regrouped and reclassified as direct expenditures (according to the cost bearers) and indirect (according to processes and than to activities, after their nature, according to the specific of the ABC method).

Table no. 3. Junction panel of expenditures from financial accounting. (Class 6 “Expenditures”) in management accounting (class 9 “Management Accounts”)

Class 6 accounts	Total turnover debtor	Expenditures				
		Direct		Overheads		
		921 Account	...	923 Account	924 Account	925 Account
601 Account						
602 Account						
...						
Total						

In analyzing the issue of incorporable and non-incorporable expenditures there are also the suppletive expenditures, those expenditures we can find only in the analytical or management accounting and not in the financial accounting. Schematically, these aspects mentioned here are presented as follows:

Figure no. 1. The degree of incorporating expenditures in the total cost



### 2.2. Architectural analogy between the results account from the financial accounting and the results account from management accounting

From an architectural point of view, the results account specific to the financial accounting is built on stages of obtaining results according to the three types of activities: operation, financial, and extraordinary. According to this pattern of issuing and to the specific of financial accounting, a manager can dispose only of the finding of the global result at the level of his entity and at most for the three types of activities, according to table 4.

Table no. 4. Results accounting on an entity level

Explanations	Calculation
<b>1. Incomes from operations</b> (turnover, variation of stocks and undergoing production, production done by the entity for its own goals and capitalized, other revenues from operations)	...
<b>2. Operating costs</b> (costs of raw materials and supplies, other external costs, merchandise costs, personnel costs, value adjustments of the corporal and non-corporal assets, value adjustments of the current assets, other operating expenditures, adjustments of provisions)	...
<b>3. Results from operations</b>	1 – 2

<b>4. Financial incomes</b> (incomes from participative interests, incomes from other investments and loans that are part of the fixed assets, incomes from interest rates, other financial incomes)	...
<b>5. Financial costs</b> (value adjustments of the financial assets and financial investments held as current assets, costs concerning interest rates, other financial costs)	...
<b>6. Results from financial activity</b>	4 – 5
<b>7. Extraordinary incomes</b>	...
<b>8. Extraordinary costs</b>	...
<b>9. Results from extraordinary activity</b>	7 – 8
10. Tax	...
<b>11. Results (profit or loss)</b>	(3 + 6 + 9) - 10

By making an analogy between the results accounting done by bookkeepers in the case of using the results accounting from financial accounting (table no. 4) and the ABC method (table no. 1), we may notice the following:

- Considering the junction panel, by overtaking the expenditures from the financial accounting (all the operating costs and from the financial costs, only those concerning the interest rates for long-term credits) one may observe an operating result which is different from the previous mentioned aspects.
- Financial accounting does not help us to distinguish the result per products like in the case of management accounting, with all the implications deriving from it: the lack of product profitability (coverage factor), the inexistence of client segments, of the quality or non-quality of the offered products etc.

### 2.3. Analogy between the results account specific to the traditional methods of management accounting and the results account specific to the ABC method

In the case of the traditional methods of management accounting, the results accounting presents as follows:

Table no. 5. Construction pattern of the results account according to the traditional methods of management accounting

Explanations	Calculation mode	Product 1	Product 2	Product 3
<b>1. Turnover</b>	...	...	...	...
2. Material costs	...	...	...	...
3. Labor costs	...	...	...	...
4. Another direct costs	...	...	...	...
<b>5. Direct costs</b>	5=2+3+4	...	...	...
<b>6. Direct cost margin</b>	6 = 1 – 5	...	...	...
7. Indirect production costs	...	...	...	...
8. Administrative costs	...	...	...	...
9. Distribution costs	...	...	...	...
<b>10. Indirect costs</b>	10=7+8+9	...	...	...
<b>11. Total costs (direct and indirect)</b>	11=5+10			

By making an analogy between the results account done by bookkeepers in the case of using a classic method of management accounting (the global

method, the phases method, the commands method etc. table. no 5) and the ABC method (table no.2), we may notice the following:

- The margin of direct costs is determined by the difference between the turnover and the direct costs, with the mention that, in the case of the ABC method in the calculation of the direct costs only the “*material and labor costs*” are taken into consideration, unlike the traditional methods where also “*other direct costs*” are considered.

- The ABC method breaks the indirect costs according to the activities and their allocation on the calculation methods (products) is done by using the specific cost drivers, while in the case of the traditional methods indirect costs are broken in three types of activities (production, administration, sale) and the allocation of costs on the products is done by using some arbitrary assignation bases. From here the result of cost corruption in the case of traditional methods by using inadequate assignation bases and by obtaining in the end incorrect and irrelevant information for the entity’s managers in taking their decisions.

The results obtained in the case of the traditional methods become irrelevant due to the inadequate calculation of costs by using arbitrary assignation bases, while in the case of the ABC method, the result obtained reflect clearly the contribution of each product in obtaining incomes and the repartition of their costs.

### **3 The importance of the analysis of information supplied by the ABC results account**

The ABC result account can be modeled according to the informational necessities of the pursued objectives in the vision of the entity. It can be detailed on products, as we could notice, but also on clients, strategic segments, projects etc. Its way of presentation offers the possibility of intervention for the improvement of product quality and cost reduction for the affected products per clients or strategic segments, explaining also how costs are formed. Lately, entities from developed countries like the USA, Germany etc., approach the so-called “*lean*” concept which aims at more efficient production processes and implies *maximal flexibility and reactivity to the fluctuations of demand and the elimination of waste in the organization*. “*The Lean thinking*” is the approach of the entire entity exclusively from the point of view of the client, developing a supple system of immediate answer to the signals from the market (clients, suppliers and competitors) [2]. The

accounting of entities is based on volume and inflexible, completely not adapted to the real requirements of the business. In the practical reality managers take operational and tactical decisions without regard to the traditional accounting system of reporting, and the utility of the accounting system suffers a lot.

The *Lean* concept in the management accounting and the management control could lead to the identification of losses and reduction of production costs. The elimination of losses is reflected at the level of costs as well as at the level of incomes. The management control can supply such information about the behavior of the costs system of the entity when losses are reduced. The implementation of the *Lean* concept means the elimination of losses by managing the production time, starting from design – production – sell, up to activity planning. Finally, the *Lean* concept means *systematic cost reduction by shortening of the reaction time to the signal from the market*. The results of the implementation of the *Lean* concept are:

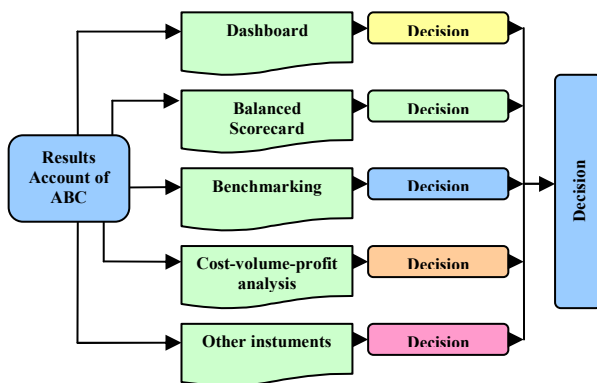
- Cost reduction and shortening of the reaction time to the signals from the market;
- Increase of productivity and reduction of stocks;
- Improving quality, delivery terms and work conditions;
- Motivating the employees;
- Total satisfaction for the clients.

#### **3.1. The purpose of the information supplied by the ABC results account**

Regardless of the model of results account chosen by an entity, it has to consider the preservation of the relevance of information. If the monist system leads practically to the loss of this relevance of information supplied by the results account, an entity must find the way to have pertinent and total cost related information. The ABC method solves this aspect, but still we have the aspect of publishing the information. Most companies all over the world which have already implemented the calculation system of cost per activity also maintain in parallel the classic system of cost calculation, exactly from the desire to use it in the financial situations of reports.

The aim of the information supplied by the results account of the ABC method is to offer a whole picture about the evolution pursued by the management of an entity through the objectives set and to enable the management to take the pertinent, correct decisions. The destination and role of the information of the results account of the ABC method can be visualized in figure no. 2.

Figure no. 2. The destination and role of the information supplied by the results account of the ABC method



### 3.2. Indicators supplied by the ABC method and their importance

Indicators are identified in order to measure the achievement of the objectives and to supply information that allow the management to take efficient decisions [3]. The finality is obvious and allows the entity to improve its performances by the means of competitiveness. The way how data are presented must be most relevant. That is why there has to be a clear distinction between the notions of *information* and *indicator*.

Information is a measure of a phenomenon on the field, while the indicator is the result of a mathematical calculation. Information can be measured and refers to data that can be found within the entity like: quantity of production, costs, number of rebuts etc. The indicator represents the report that allows the comparison of the achievements with the objectives or other references. *How is an entity piloted? Are the data offered by the results accounting of the ABC method sufficient or are there also other information necessary from outside the management accounting? How do we group indicators?* These are three questions we shall try to answer in a scientific, argumentative way.

Piloting represents the technique of strategy development in actions that are to be fulfilled, being formulated by the management of the entity. Even actions of the personnel can be part of the strategy service. The piloting indicator represents an element or an ensemble of elements of informing, representative as related to a certain objective, resulting from the tangible measurement or from the observation of a state, a phenomenon or a realization. The performances of each activity are evaluated through indicators with levels and evolutions that will be compared with the previous

objectives, norms or results. The piloting of the entity is therefore indispensable for the realization of the strategic objectives and is first of all an action on behavior. We must choose the indicators, to direct the individual or collective behaviors in accordance with the strategy. This way we can group indicators according to the instruments of monitoring and measurement of performances we use. For instance, the conditions the piloting indicators of the dashboard must fulfill are as follows:

1. They should be simple and in small numbers (3-5 per activity)
2. They should be clear, concise and perfectly understood by the persons involved
3. They should follow a certain strategy (indicators decline the strategy for various centers of decision)
4. They should present a certain tendency of evolution (they adapt according to the strategic evolutions).

Pilot indicators have the following functions:

- Identification and prevention of negative deviations;
- Measurement of the performances of processes and activities, due to the fact that they are linked to the declination of the operational plans;
- Monitoring of the objective achievement;
- Monitoring of the competitive environment;
- Support for the responsible ones in achieving their objectives.

Pilot indicators are therefore a source of useful data for all hierarchical levels. Each of the pilot types develops further into specific indicators like follows:

- Pilot indicators of the activities and processes that measure the actions carried out within the functional services for the realization of the defined strategy.
- The strategic pilot indicators that measure the action according to the competitors and the competitive environment.
- The pilot indicators of the results that measure the degree of achievement of the objectives of operation.

The objectives of improvement of performances can be of various types, as was previously stated. Therefore we may distinguish the following typology [4]:

1. *Volume related objectives or objectives relate to the level of activity.* These indicators express a volume of activity obtained during a defined period or of a provisional objective of the same type. They measure, in the frame of an optic of improvement, the level of an activity (generally the number of supplied "outputs"). One may take into

consideration the number of contracts with clients, suppliers, internal or external cooperation, deliveries (monthly or quarterly) etc. done by a company. The aim of these indicators is to underline the volume attracted following the contacts with partners in a definite period of time (monthly or quarterly). One may also take into consideration longer periods of time (1 year for instance), but the results should be rather for a short period in order to be able to take most rapid and efficient decisions. The general form these indicators may have is the following:

$$\frac{\text{Cost driver}}{N}, \text{ where:}$$

$N$  = number of management periods.

2. *Objectives of efficacy and efficiency.* Indicators linked to the efficiency objectives reflect the variations of the turnover at the modifications of the cost inductors used by a company. The general form these indicators can take is the following:

$$I_{\text{Efficacy}} = \frac{\bar{T}_{N+1} - \bar{T}_N}{\bar{T}_N} \times 100, \text{ where:}$$

$$\bar{T}_N = \frac{T_N}{\text{Cost driver}}$$

$\bar{T}$  = Average turnover per order;

$N$  = management period.

Indicators linked to the efficiency objectives reflect the hourly variations at the modifications of the cost inductors used by a company. According to the ABC method, the general form these indicators can have is the following:

$$I_{\text{Efficiency}} = \frac{\bar{V}_h N+1 - \bar{V}_h N}{\bar{V}_h N} \times 100, \text{ where:}$$

$$\bar{V}_h = \frac{V_h N}{\text{Number of orders}}$$

$\bar{V}_h$  = average volume of hours per order;

$N$  = management period.

3. *Quality (or non-quality) objectives.* These indicators measure the level of reliability (or non-reliability) of an activity as related to the objective of the total quality. This serves to the calculation of non-quality costs. The form these indicators can have is:

$$\frac{\text{Cost driver (activity 1...n)}}{\text{Cost driver (objective)}}, \text{ where:}$$

1...n = activity number from the list (activity catalogue; objective = total quality (100%).

Another eloquent example is the following:

$$\text{The return rate for damaged transportations} = \frac{\text{Number of returns found}}{\text{Number of shippings}}$$

The more this rate closes to zero the more the quality of the delivered products closes to 100%.

4. *Cost related objectives.* These indicators will measure the cost and the evolution of the resources consumed by an activity. They allow the study of a possible externalization of the subtasks. The general form these indicators can have is:

$$\frac{\text{Cost}}{\text{Cost driver}}, \text{ where: cost} = \text{the cost of an activity;}$$

$$\text{cost inductor specific to the activity (product).}$$

5. *Objectives related to the delivery terms.* These indicators measure the delays in realizing a prestation and with this title participate to the measurement of the normal value per clients. The general form these indicators can have can be expressed this way:

$$360 - \left( \frac{\text{Value invoice client}}{\text{Turnover client}} \times 360 \right).$$

Previously we presented five large categories of indicators used by the ABC method. This does not mean that for each activity we have to determine and interpret all the indicators with the help of the five categories. But, the interest of this multitude is to supply an approach able to ensure the examination of activities from all possible points of view, starting this way from a correct choice of indicators. The most common model of consulting operations, activity drivers, activity centers with the directions of information transmittal within the ABC method is that of the *Activity identification sheet*. Before being consulted and understood, the indicators for this activity are defined in a precise way in order to be measured and calculated easily. Indicators are selected carefully according to the specific of each activity and classified in an *Indicator notebook*. For each indicator we have, in the case of specific activities: periodicity, destination, this is the users, the responsible person and the calculation relation. Indicators are presented in these simple forms in order to trigger reactions. Such types of documents lie at the basis of the dashboards, of the balanced dashboards, of the cost-volume-profit analyses, comparative analyses etc. The informational covering with specific indicators for the above mentioned fields ensures the entity with a coherent and complete pilot system. The results accounting of the method offers a starting point for some complex analyses which, combined with other information obtained from other situations (financial or non-financial) contribute certainly to the drawing of a most complete image for taking efficient decisions on a short or long term, depending on the objectives set by the entity.

## 4 Conclusions

The results account of the ABC method represents the main source of information which helps the elaboration of documents of accounting synthesis derived from it. The information serves to the creation of forecast situations and future tendencies which are at the basis of a rigorous substantiation of manager's decision. The article aims to be the launching base for the creation of a set of documents of specific synthesis of management accounting relying on the specific of the ABC method. We believe that the information presented, which are based on the experience in the area of management accounting, will form an important source of documentation, at an academic level, but also at a microeconomic level, their goal being exactly to find those centralizing situations, efficient and rapid, which lie at the basis of decision of many leaders of departments an entity managers. The results account is only the basis for underlining the performances of an entity which can be detailed and analyzed according to the objectives and strategic requirements of the entity and of the cotemporary competitive environment.

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