COST MANAGEMENT AND COST CONTROL IN DECISIONAL PROCESS OF ORGANIZATIONS

Stefania – Eliza Bana (Panciu)  
Florin Sgârdea

ABSTRACT: In this article we wanted to show the importance of the costs of providing the necessary information to the management in order to take the best decisions in crisis conditions. Under the double-effect of the pressure coming from the competition and the world financial crisis, the enterprises feel the need to understand better their costs in order to determine with maximum precision the selling prices and the limits that can be achieved for each product. It’s not only about prevision, there should also be considered the necessary ways in order to achieve the goals. That’s how we can explain the development of the today’s managerial control and of its favourite instrument, the analytic accounting of which no enterprise in Romania or Europe could be spared, and this is because behind the demand and offer of all price-competition there lies, indirectly, the cost-competition.

Key words: managerial accounting, internal transfer prices, hidden costs

JEL code: M 41

Introduction

At European level, in 2009, one can identify three aspects of the world financial crisis: a credit crisis, an economic system crisis and a psychological crisis related to consumption. In this material we will only deal with the economic aspect, meaning the crisis impact over the growth and development of the Romanian enterprises in the actual conditions of the economic environment and also of the changes of logics that are imposed at European level.

In this paper we wanted to show the importance of the costs of providing the necessary information to the management in order to take the best decisions in crisis conditions. We considered the following objectives that an enterprise should have in the conditions of an unfavourable economic environment: the importance of the costs with the wages in the cost structure of the enterprise, the analysis of the hidden costs, the investment policy in crisis conditions, the expenses with financing on short term, the readjustment of the commercial contracts and limiting the expenses with external labour conscription, the sales growth policy by diminishing the advertising expenses, the theme of qualifying the work force by starting national programs of work force reconversion.

Crisis periods have their own characteristics. The first and the most important is the fact that they produce big changes. These changes don’t appear when an economy works at full speed ahead, when new jobs are available and wages grow from year to year, because when we are dealing with a positive economical dynamic it is hard to believe that there is a motivation for important measures. The crisis is more suitable to drastic decisions. These are the moments when constraints and

1 The Academy of Economic Studies, Bucharest Romania, PhD Student, elizabana@yahoo.com.
2 The Academy of Economic Studies, Bucharest Romania, sgardea@gmail.com
pressures appear and especially when the most important and tough questions are raised, questions that require categorical answers. These are tough times and ignoring them and smoothening their answers - although the crisis demands them - are the mistakes of troubled times. These are trains of big changes that pass only once through the station.

Under the double-effect of the pressure coming from the competition and the world financial crisis, the enterprises feel the need to understand better their costs in order to determine with maximum precision the selling prices and the limits that can be achieved for each product. It’s not only about prevision, there should also be considered the necessary ways in order to achieve the goals. That’s how we can explain the development of the today’s managerial control and of its favourite instrument, the analytic accounting of which no enterprise in Romania or Europe could be spared, and this is because behind the demand and offer of all price-competition there lies, indirectly, the cost-competition.

The information regarding the production cost is used in goods evaluation and profit growth, and they are the result of data collection in the managerial accounting system. The information regarding the costs is provided, in general, by the accounting systems which prove to be insufficient in decision making. Traditionally, the elements of the costs are reunited by an industrial logic (on product, on achievement), but never by a “social” logic.

As a consequence, to calculate, monitor and control costs represents only one of the aspects of performance of which we are going talk about in this study. To manage costs involves organizing a managerial accounting that should allow the calculation, analysis and reporting of these costs according to the needs of the management. Managerial accounting should not solve only operative and operational aspects related to costs, but also strategic aspects related to the mission and vision of the enterprise. Therefore, we believe that it would be necessary to organize a Strategic Managerial Accounting, mainly due to the need for establishing some viable strategic goals integrated into the market demands. These goals should take into account the existing and potential competitors.

The calculation of process costs (Activity-Based Costing or ABC) is one of the last achievements in the cost calculation domain. Its origin is in U.S.A. Its base is considered to be the „The hidden factory” paper, written and published by Jeffrey G. Miller and Thomas E. Vollmann. The two authors submitted the sectors and the places of common costs (indirect) to a critical study, reaching the conclusion that the crucial step in indirect cost control include the elaboration of a model that details and structures the causes of these costs. The first attempt of achieving such a new system in costs calculation was made in 1987 by Kaplan, Cooper and Johnoson.

We consider as causes of using the process costs method in the conditions of world economic crisis, the following:
1) changes of the strategic position of the company;
2) changes in the demand for information for management;
3) deficits of the calculation systems for the existing costs.

1) Changes of the strategic position of the enterprise

The strategic positions of the enterprises have changed a lot because of the economic crisis. This happened due to the changes occurred in the organization’s environment. These changes were influenced by the necessity of keeping the enterprise on the market although the purchasing power has decreased. This was done by forgoing short-term financing for the consumption needs of the population. Due to the sharpening of the competition on the market, there is a tendency to reduce costs, improve product’s quality and develop new products and therefore the life of the products is shortened.

Because of these reasons, the size and the importance of the indirect and common costs sectors grows compared to that of the production sectors. These modifications of activities
contribute to the modifications in the costs structure, the importance of the individual direct costs decreases in the favour of the common indirect costs, and this happens in the same time with the growth of the fixed costs.

2) **Changes in the demand for information for management**

Within the enterprise’s decisions, in the foreground, lie new aspects, like:
- Preparing and providing information about costs, related to a multitude of objects of costs calculation;
- Reducing of the manufacturing batches sizes;
- Determining an optimal number of the types of products;
- Determining the costs for specific orders;
- Controlling the economic effectiveness in the most important sectors of the indirect common costs.

The necessary information refers to the entire value creation chain in an enterprise, including all the production sectors and auxiliary activity sectors. Also it is essential that managers concentrate on both the internal and external factors of the organization. We believe that the most important objectives in costs control management are the following (the objectives were selected after an analysis of the accounting literature):
- To provide information for strategic planning - information about competition, strategy, external factors and internal performance;
- To provide information for strategic control and to measure financial and non-financial performance;
- To give information for benchmarking;
- To provide information about the products and about the lifecycle of the products.

All organizations should prepare a strategic plan based on a modern approach: to analyze the markets, the competition and the external environment, and after doing this, to set the objectives. The key point of a strategic plan is the external analysis because the environment (economic, social and cultural) influences the objectives. In our opinion, the external factors that should be analyzed are: interest rate, exchange rate, socio-cultural factors, technology, competitive environment, the sustainable development of the frame work etc. It is important for managers to know how these factors act because they must respond to the environment by:
- Introducing quality programs and calculating costs and revenues;
- Controlling the production process more efficiently, eliminating losses and inventory and reducing different costs (acquisition, production, total);
- Organizing a total quality management (TQM) and calculating the quality cost;
- Controlling the product lifecycles and applying a life-cycle costing method;
- Introducing a Kaizen Costing Process and managing the cost;
- Changing the structure of the business with a more decentralized one and calculating the performance for each manager so that their activity should be appreciated.

3) **Deficits of the calculation systems for the existing costs**

The traditional systems of cost calculation are oriented towards the actual production sectors. The common indirect costs are distributed in the products through some reference sizes. Discounting indirect costs is done by adding more in some value sizes.

This indirect costs allocation is not complying with the opportunity principle, and this can lead to wrong strategic decisions.

We will continue with the presentation of a study which compares the traditional costs calculation methods and the modern costs calculation methods.
The contribution of the ABC method in the management of an enterprise can be represented in the following figure:

![Diagram of ABC method](image)

**Figure nr. 1. The contribution of ABC method in enterprise management.**

In order to present the application of the ABC method, we considered two items: the electrical copper single-phase switchboard, model 116 (A) and the electrical aluminium three-phase switchboard, model 116 (B), about which we know the following information:

<table>
<thead>
<tr>
<th>Elements</th>
<th>U.M.</th>
<th>A</th>
<th>B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct expenses</td>
<td>Ron</td>
<td>2,000</td>
<td>3,600</td>
<td>5,600</td>
</tr>
<tr>
<td>Indirect expenses of production</td>
<td>Ron</td>
<td>-</td>
<td>-</td>
<td>2,200</td>
</tr>
<tr>
<td>General administrative expenses</td>
<td>Ron</td>
<td>-</td>
<td>-</td>
<td>500</td>
</tr>
<tr>
<td>Selling expenses</td>
<td>Ron</td>
<td>-</td>
<td>-</td>
<td>300</td>
</tr>
<tr>
<td>Manufactured quantity</td>
<td>piece</td>
<td>400</td>
<td>600</td>
<td>1000</td>
</tr>
</tbody>
</table>

The indirect expenses of production are distributed considering the direct expenses. The general administrative expenses and the selling expenses are distributed considering the production cost.

Profit margin is 20% of the selling price.

The analysis and grouping of activities is as follows:

<table>
<thead>
<tr>
<th>Activities</th>
<th>Cost ( RON )</th>
<th>Inductor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orders for raw materials and equipment</td>
<td>200</td>
<td>Number of orders issued</td>
</tr>
<tr>
<td>Inventory management</td>
<td>200</td>
<td>Number of sorto-tipodimensiuni raw materials</td>
</tr>
<tr>
<td>Preparing and launching of the manufacturing</td>
<td>400</td>
<td>Number of lots released</td>
</tr>
<tr>
<td>Production</td>
<td>1,400</td>
<td>Operating hours for machineries</td>
</tr>
<tr>
<td>Administration</td>
<td>500</td>
<td>Calculation cost hours</td>
</tr>
<tr>
<td>Selling</td>
<td>300</td>
<td>Number of products</td>
</tr>
</tbody>
</table>
We also have the following information:

<table>
<thead>
<tr>
<th>Inductor</th>
<th>A</th>
<th>B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of orders</td>
<td>5</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Number of sorto-tipodimensiuni raw materials</td>
<td>4</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Number of lots</td>
<td>400</td>
<td>500</td>
<td>900</td>
</tr>
<tr>
<td>Operating hours for machineries</td>
<td>100</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>Calculation cost hours</td>
<td>30</td>
<td>35</td>
<td>65</td>
</tr>
<tr>
<td>Number of products</td>
<td>400</td>
<td>600</td>
<td>1.000</td>
</tr>
</tbody>
</table>

1) **Distributing activity costs on products, based on cost indicators:**

<table>
<thead>
<tr>
<th>Activities</th>
<th>Cost</th>
<th>Product A</th>
<th>Product B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials order</td>
<td>200</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Inventory management</td>
<td>200</td>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>Preparing and launching of the manufacturing</td>
<td>400</td>
<td>400</td>
<td>177.60</td>
</tr>
<tr>
<td>Production</td>
<td>1.400</td>
<td>100</td>
<td>350</td>
</tr>
<tr>
<td>Administration</td>
<td>500</td>
<td>30</td>
<td>230.70</td>
</tr>
<tr>
<td>Selling</td>
<td>300</td>
<td>400</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>3.000</td>
<td>1.029.75</td>
<td>1.970.25</td>
</tr>
</tbody>
</table>

2) **One can thus calculate the cost of production:**

1) **For product A:**

- direct expenses: 2.000 RON
- indirect expenses of production: 1.029.75 RON
- production cost: 2.000 + 1.029.75 RON = 3.029.75 RON
- production cost per unit: 3.029.75/400 = 7,574 RON

2) **For product B:**

- direct expenses: 3.600 RON
- indirect expenses of production: 1.970,25 RON
- production cost: 3.600 + 1.970,25 = 5.570,25 RON
- production cost per unit: 5.570,25/600 = 9,284 RON

3) **Selling price:**

- for product A: 7,574 + 20%X = X; A = 9,468 RON
- for product B: 9,284 + 20%Y = Y; B = 11,605 RON

4) **The result is:** (9,468 – 7,574) x 400 + (11,605 – 9,284) x 600 = 2.150,2 RON – Profit.

Regarding this, it can be appreciate that, by destination, the process costs calculation is directed by long-term decisions and can be considered a support for strategic business issues. The whole functional body of an enterprise is represented by activities and processes, the processes being positioned under costs report, horizontally related to the traditional splitting of the places of the costs.
ABC Method is the result of some research supported by:
- the need to eliminate waste;
- identifying cause-effect relationship between costs and products;
- rational allocation of expenditure on products, not using a global and imprecise manner;
- integration in the cost calculation of the differences on spending imposed by customizing products.

**Causal relationship between resources and products**

Classic Methods

Resources: Constant expenses

- **Calculus**
  - **Auxiliary Centers**
  - **Principal Centers**

ABC Method

Resources consumed =

- **Induce (involve) the costs**
  - (resource consumers)
- **Activities**
  - (actions on activities)

**The consumption generates the products cost**

The basic principle of the ABC method is: activities consume resources and products consume activities. ABC method determines the cost of the product by considering the activities that take place when it’s manufactured, offering in this way the advantage of a more real cost. With the help of this cost strategic decisions can be made.

The basic premises of ABC method, in fact the logic behind this method is the following:
- Cost objects consume activities;
- Activities consume resources;
- The consumption of resources is one that generates costs;
- Understanding the causal relationships is the basis of a successful management.
The scheme for calculating the cost of activities is as follows:

ABC method focuses over a production cycle, starting from the premise that for the production of a cost object some activities are executed, activities which in turn are consume resources.

This method recognizes causal relationship between activities and the occurrence of costs.

ABC method is used in cost management and in performance management. Performance means efficiency, effectiveness and economy. (EEE)

The **traditional method** involves the following steps:
- Determining the production cost = direct expenses + indirect expenses of production
- Determining the completely commercial cost = production cost + general administrative expenses + selling expenses

1) The total of direct expenses = 2,000 + 3,600 = 5,600 RON

2) Allocation of indirect expenses:
   - calculating the additional coefficient:
     \[ K_s = \frac{2,200}{5,600} = 0,39 \]
   - calculating the shares of allocation on products:
     A: 2,000 x 0,39 = 780 RON
     B: 3,600 x 0,39 = 1,420 RON
     Total: 2,200 RON
3) Allocation of general administrative expenses:
- calculating the additional coefficient:
  \[ K_s = \frac{500}{7.800} = 0,06 \]

- calculating the shares of allocation on products:
  A: \[ 2.780 \times 0,06 = 166,8 \text{ RON} \]
  B: \[ 5.020 \times 0,06 = 333,2 \text{ RON} \]
  Total: 500,0 RON

4) Allocation of sales expenses:
- calculating the additional coefficient:
  \[ K_s = \frac{300}{7.800} = 0,04 \]

- calculating the shares of allocation on products:
  A: \[ 2.780 \times 0,04 = 111,2 \text{ RON} \]
  B: \[ 5.020 \times 0,04 = 188,8 \text{ RON} \]
  Total: 300,0 RON

5) The complete commercial cost:

<table>
<thead>
<tr>
<th>Calculation article</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct expenses</td>
<td>2.000</td>
<td>3.600</td>
</tr>
<tr>
<td>Indirect expenses of production</td>
<td>780</td>
<td>1.420</td>
</tr>
<tr>
<td><strong>Production cost</strong></td>
<td><strong>2.780</strong></td>
<td><strong>5.020</strong></td>
</tr>
<tr>
<td>General administrative expenses</td>
<td>166,8</td>
<td>333,2</td>
</tr>
<tr>
<td>Sales expenses</td>
<td>111,2</td>
<td>188,8</td>
</tr>
<tr>
<td><strong>Complete commercial cost</strong></td>
<td><strong>3.058</strong></td>
<td><strong>5.542</strong></td>
</tr>
<tr>
<td>Quantity</td>
<td>400</td>
<td>600</td>
</tr>
<tr>
<td><strong>Complete commercial cost per unit</strong></td>
<td><strong>7,645</strong></td>
<td><strong>9,237</strong></td>
</tr>
</tbody>
</table>

6) Selling price:
- for product A: \[ 7,645 + 20\%X = X; A = 9,556 \text{ RON} \]
- for product B: \[ 9,237 + 20\%Y = Y; B = 11,546 \text{ RON} \]

7) The result is: \[ (9,556 – 7,645) \times 400 + (11,546 – 9,237) \times 600 = 2.149,8 \text{ RON} – \text{Profit} \]

**Conclusions**

Started through signals more or less shy 2 years ago, especially within the USA economy, the world financial crisis, with direct and indirect repercussions upon the world and national economies, is no longer something new. Small and large companies, players from all areas of activity – from world-class ones (giants/symbols of national economies of the most developed states in the world) to the small investors, simple citizens – from the richest to the poorest – began to feel the negative effects caused by the international financial crisis.

Many companies went bankrupt, some have temporarily suspended their activity, others have reduced their workforce – increasing unemployment, decreasing of the purchasing power and reducing the demand of goods from luxury to consumer.

At least the next 4 - 6 months will continue to be characterized by incertitude, but managers will have to make decisions that will influence both short term results and medium/long-term business development potential.
The price is a market and a reality instrument, which under the requirement of linking the demand and the offer, obtains a complex character. This character, in the context of the actual world economic crisis, is magnified by the market characteristics in which it manifests and by the legislative framework that regulates the formation of prices, itself perfectible.

The price of a good or a resource is an item that shows what you must give in order to obtain that good or resource.

The reduction of the production cost determines the stability or even the reduction of the prices, the increase in the products competitiveness in the competition battle on the national market as well as on the external market.

In order to reduce costs, the manufacturer must seek and find the reserves to reduce the consumption of production factors, to act simultaneously in all the compartments of the enterprise, on all the production factors, in all the phases of the economical activities and to apply the possible measures to diminish costs in compliance with the requirements of the competition imposed by the market.

The reduction of the production cost should have place without negative influences over the quality of the material goods and services, but, on the contrary, it should ensure a growth of quality. Reducing the costs by reducing the quality is anti-economical. The general trend imposed by the market competition is that the economic assets to incorporate in their costs less raw materials, high quality work, and to be obtained with the most modern technology.

The careful choice of the elements and results that the analytical accounting users need is imposed. The users must always follow two fundamental principles: the principle of the threshold of signification – several significant figures are more efficient than a voluminous documentation that can’t be consulted because of lack of time; the principle of relevance – an approximate but sufficiently accurate information, rapidly obtained, is often more useful than a precise information known later.

So, we think that New techniques may be adopted by Romanian companies such as: target costing, life-cycle costing, Kaizen costing; performances must be measured and reported both for managers and divisions.

References: