ACTUALITIES AND PERSPECTIVES CONCERNING
METHODOLOGY OF COSTS CALCULATION

- Summary of doctoral thesis -

Scientific coordinator,
Professor Ph.D. Neculai TABĂRĂ

Ph.D. Student,
Sebastian UNGUREANU

Iaşi
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We do know that on 12 December 2014, at 10.00 in room R402, Mr. UNGUREANU SEBASTIAN will sustain in the public meeting, doctoral thesis with theme ACTUALITIES AND PERSPECTIVES CONCERNING METHODOLOGY OF COSTS CALCULATION to obtain a PhD title in ACCOUNTING.

Doctoral committee, approved by Decision the Rector of University Alexandru Ioan Cuza from 22.10.2014 number 16798 composed of the following:

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We invite you to participate in the presentation session the thesis. The thesis can be consulted at Library of the Faculty of Economics and Business Administration
CONTENTS SUMMARY OF DOCTORAL THESIS

CONTENTS OF DOCTORAL THESIS........................................................................................................
INTRODUCTION........................................................................................................................................
THE PURPOSE AND OBJECTIVES OF THE THESIS.................................................................8
METHODOLOGY OF SCIENTIFIC RESEARCH.................................................................10
SUMMARY OF THE MAIN PARTS OF THE DOCTORAL THESIS ...............12
CONCLUSIONS AND PROPOSALS.......................................................................................15
BIBLIOGRAPHY......................................................................................................................................
CONTENT OF DOCTORAL THESIS
INTRODUCTION..................................................................................................................5

CHAPTER 1
CONCEPTUAL DELIMITATIONS CONCERNING COST CALCULATION ..........12

1.1. Cost calculation, genesis, references and evolution.................................12
1.1.1. Actual stage of knowledge in the specialty literature.............................12
1.1.2.1. Moments in the evolution of managerial accounting from before 1949 .....16
1.1.2.2. Aspects of management accounting in the period 1949 – 1989 ..........16
1.1.2.3. Highlights on management accounting in the present time ..........18
1.2. Concepts on cost calculation ........................................................................20
1.2.1. Definition of the cost calculation ..........................................................25
1.2.2. Concept of the cost .............................................................................25
1.2.3. Place and role of the cost calculation ....................................................26
1.2.4. Expenses, costs constitutive elements ..................................................28
1.3. The information costs - the result of cost calculation .................................30
1.4. Typology of costs in the making decision .................................................34
1.5. Principles and factors organization of management accounting and cost calculation ..........................................................43
1.5.1. Principles of applied in the calculation costs of production .................43
1.5.2. Factors that condition the organization of the cost calculation ..........50
1.6. Production in the vision of managerial accounting ....................................52
1.6.1. Areas of spending ..............................................................................53
1.6.2. Costs carriers.......................................................................................55

CHAPTER 2
NEW DIMENSIONS OF THE TYPE COST INFORMATION IN DECISION MAKING ..............................58

2.1. Importance of a cost information in decision making ..............................58
2.2. Decision making .....................................................................................62
2.3. Management Accounting essential source of information for the organization....64
2.3.1. Management accounting and organizational management ..................68
2.3.2. Using a cost information in decision making ........................................71
2.3.3. The costs of the decision making process ............................................73
2.4. Life cycle cost methodology .....................................................................79
2.4.1. Using the methodology .....................................................................79
2.4.2. Information needed for the classification of the methodology and life cycle costs ........................................................................82
2.4.3. Example of applying the methodology L.C.C ........................................86
2.5. The hidden Costs of organization.................................................................88
2.6. Strategic cost management .....................................................................91
2.7. The planning company data system to reflect the strategy .........................94
2.8. Control of management and modernization of accounting information processing instruments ..............................................................................97
2.8.1. The problem of the management control ...........................................97
CHAPTER 3
TRENDS IN THE METHODOLOGY OF COSTS CALCULATION.................106
3.1. The system of calculation methods and the cost allocation ....................106
3.2. Management methods the costs. Definition and classification of methods of cost calculation .................................................................................................................................114
3.2.1. Classical methods of cost calculation..................................................115
3.2.1.1. Global method of cost calculation ..................................................115
3.2.1.2. Method of cost calculation of manufacturing phases ......................116
3.2.1.3. Method of cost calculation on commands .......................................118
3.2.2. Evolved methods of cost calculation...................................................119
3.2.2.1. Standard cost method .................................................................119
3.2.2.2. Machine-hour-rate method ..........................................................121
3.2.2.3. Georges Perrin method ...............................................................123
3.2.2.4. Direct Costing method ................................................................125
3.2.3. Modern methods of cost calculation in the context of the new problematic of production, a technologies and informatization .........................................................127
3.2.3.1. Activities based costing method....................................................127
3.2.3.2. Activities based management .......................................................131
3.2.3.3. Target costing method .................................................................134
3.2.3.4. Kaizen Costing method .............................................................136
3.2.4. Factors that determine selecting the method of cost calculation ..........139
3.3. Perspectives in the methodology of cost calculation............................141

CHAPTER 4
PARTICULARITIES OF COST CALCULATION AT SC AEROSTAR S.A. BACĂU ...146
4.1. The aviation industry in Europe and worldwide .....................................146
4.1.1. Context global şi european ................................................................149
4.1.2. The European aeronautics industry ..................................................152
4.1.2.1. Romanian aeronautics industry .....................................................153
4.1.2.2. Common development policy in the aeronautical sector ..............155
4.2. Change of strategy to development in aviation industry .......................156
4.2.1. Niche segment in research - development - innovation ..................158
4.2.2. Promotion of capabilities romanian aviation sector at the international level .........................................................................................................................159
4.3. National economic environment at S.C. Aerostar S.A. Bacau ..............159
4.3.1. Company overview .........................................................................160
4.3.2. Products and services supplied by the company, the level of technical and market positioning ..........................................................................................163
4.4. The production activity at S.C. Aerostar S.A. Bacau ............................167
4.4.1. Implementation of the method A.B.C. at Aerostar company ............172
4.4.2. Modernization cost calculation through Target Costing method ........183

CONCLUSIONS AND PROPOSALS........................................................................201

BIBLIOGRAPHY ..........................................................................................208

LIST OF TABLES .....................................................................................226

LIST OF FIGURES ...................................................................................227

LIST OF ANNEXES .................................................................................228
INTRODUCTION

Management accounting is an system of information that collects and processes information in assessing and managing the company's performance. The current economic environment, characterized by competitiveness, is a challenge for management accounting because its instruments are highly influenced by historical, cultural, technical, etc.

The companies have started to pay attention to human behavior and cultural aspect, considering human intelligence as the main economic resource. Performance in the current economic environment involves the development and use of computer systems and management costs. Being oriented control and decision costing is one of the basic components of the system profitable management of the company. As an information tool, it deals with the producing and providing the necessary information on costs and is used as a management tool in decision making on increasing profitability. The local political and economic context in slow development of the national economy had a negative impact on changes as a result of globalization, increased competition, revamping production processes etc. Reasons why they management accounting has evolved somewhat difficult to separate and the international level. During the time, introduced new methods and tools of management accounting as a result of the direct influence exercised by the literature and practice internationally.

Doctoral thesis on "Actualities and perspectives concerning methodology of costs calculation" has as main objective the implementation of relevant solutions to modernize information system cost. In approaching the levels of management accounting information system, to ensure the effective leadership of the company objectives are traced in terms of costs and responsibilities related of deviations.

The costing methodology is a coherent set of techniques and procedures in relation to which must implement all actions required to achieve the fundamental objective of management accounting and control certain internal conditions of production through costs. Management accounting has the tools and resources necessary to support this approach by new methods of calculation and cost management, targeting business processes and adapt more easily to changes, whatever their nature. In modern vision that modern accounting is not a succession of technical operations, which are designed to accurately record economic transactions, but to support management decisions through relevant financial and accounting data. Modern calculation methods adapted advanced industrial technologies, assisted by computing systems implemented in countries with developed economies have become classics alternative calculation methods
applied in companies in Romania. This involves providing logistical and conceptual terms, including opening to accept change management vision on the modernization of the company in terms of organizational, technological, and managerial accounting.

**AIMS AND OBJECTIVES OF THESIS**

Field management accounting provides the opportunity for multiple experimental studies, because of the possibility of choosing the organization and method of calculation. Literature, quite rich in this area, providing sufficient opportunities both in terms of theoretical research and practical. We believe that all these changes, both at the international level and nationally, is both a cause and a challenge for any passionate researcher of the management accounting. We approached this subject in order to consider the application of modern methods of costing the aviation industry in Romania by example. New trends in the use of advanced production technologies make it necessary to change the management accounting vision and orientation to support management decisions. The research purpose is to improve the methodology of cost calculation tackling the calculation in the aviation industry.

In this respect, the scientific approach is not limited to theoretical, but went on to check the extent to which these methods can be applied in the study, with the advantages, disadvantages compared to modern classical methods.

By conducting research we aimed to obtain answers to current issues in the field of management accounting with an approach through the aviation industry.

For achieving the research purpose, we considered the following objectives:

- studying the conceptual stage current management accounting and cost calculation in national and international literature;
- follow parts and evolution of management accounting in Romania;
- knowledge of the nature of the information provided by costing;
- Determining role in modernizing management control instruments accounting treatment information;
- substantiation of managerial decisions based on the information on costs;
- implementation methodology lifecycle costs of products;
- presentation of classical, modern and advanced costing applied in Romanian companies to identify their advantages and disadvantages;
- analyze the current situation and developments at global aerospace and European level;
- analyze the peculiarities of aerospace companies’ activities in Romania;
- microenvironment analysis of a company producing aerospace systems;
- application of modern methods of costing the aerospace companies;
- proposal to modernize the management accounting by the method of costing Activity Based Costing (ABC) in a company that manufacture aerostructures field;
- proposal for implementation of the method of costing Target Costing in the aviation industry, aiming to maximize profit.

Thesis “Actualities and perspectives concerning methodology of costs calculation” treats with a theoretical and practical approach following:

- the importance and role of management accounting in the management of companies;
- the quality of information provided by management accounting and costing;
- accuracy of the information provided by management accounting and costing, as mainstay in decision making;
- the efficiency of traditional calculation methods in terms of the economic environment characterized by competitiveness;
- the implementation of modern methods of costing the companies in Romania;
- receptivity companies to apply modern methods of costing;
- consequences costing method change in national enterprises.

THE METHODOLOGY OF SCIENTIFIC RESEARCH

Doctoral thesis was made based on the knowledge gained from the study of literature and practical experience in aerospace, using three types of qualitative research, as follows: theorizing, testing and precision.

The paper involved literature review, presentation and discussion of the current state of knowledge to understand and explain theories, phenomena, existing concepts or to develop new research, theories, concepts, methods and techniques of management accounting.

The developed theories or assumptions have been tested and verified in order to obtain answers or feedback from other researchers, practitioners and the general public, this being achieved by articles published in national conferences, international journals.

Both the theorization and testing must be performed exactly and precisely in order to achieve quality research that is useful academia and practice.

Making a qualitative research involved the review of the theoretical background of the topic studied or studying the behavior and practice existing methods within companies in Romania.
After setting objectives of the research topic, the next step of the scientific approach involved identifying the type of research, qualitatively or quantitatively, which is most suitable for the theme addressed.

Qualitative research are those that allow outline the main aspects of the problem or research topic and diagnosis of the situation, identify hypotheses for future research descriptive. Instead, quantitative investigations have the role to define, characterize and quantify relevant aspects identified using qualitative methods, which are used to quantify certain phenomena, to establish statistical data and to verify and test existing theories or developed using specific methods.

Thus the specific and traits from field research, this scientific approach is in category of qualitative research connected at the same time, quantitative elements.

1. **Qualitative research concerns**: conceptual analysis on companies and their role in the development of the industry in which they operate; conceptual analysis of financial and management accounting; presentation objectives and the role of management accounting and cost calculation; analytical presentation and classification methods of costing identified at international level; presenting ways to exploit the information provided by management accounting and costing; emphasizing the role of management accounting and cost calculation in the decision making process of each company.

2. **Quantitative research concern**: comparative studies on the evolution of the main economic and financial company level, nationally and internationally; reflecting the current state of research in management accounting and cost calculation in Romania; study aimed at tackling the costing the aviation industry, methods of calculation and management tools used in the Romanian companies. Research methods used in this scientific approach are: document analysis, comparative method, participant observation and non-participating.

We can see that the research methods are a combination of the methods listed longitudinal transverse, which are used to build a descriptive research, basing on theoretical and conceptual aspects of management accounting, cost accounting, costing methods, ways the use of information and their utility in decision making, to proceed to empirical research by studying the behavior profile companies, national and international level, through the practices, methods of calculation and management tools used.

Starting from the theories, concepts, models and existing methods and their practical implementation, this research can be classified as research that is based on deductive approach,
but then go to the inductive approach, due to theoretical and conceptual transposition practical issues identified.

Informational resources used in formulating this research include national and international specialized books, scholarly articles published in reputable journals, recognized national or international laws, regulations, national and international professional bodies, studies and surveys conducted by various professional organizations.

**SUMMARY OF MAIN PARTS OF DOCTORAL THESIS**

In Chapter 1, "Conceptual delimitations concerning cost calculation" I approached the theoretical concepts, typology and peculiarities cost calculation.

I also made a picture of the genesis and evolution of cost calculation both in Romania and worldwide. Cost calculation supports the control processes and decision making, is a key component of the company's management system.

The major conclusion of this chapter is that, given an efficient cost management system, managers are able to integrate cost calculation and analysis of the company's strategic approach to create a competitive advantage.

In Chapter 2, "New dimensions of a cost information in decision making" we turned to the decision making process to analyze the multitude of decisions that can be taken based on cost data type. Since the the overall activity of a company is represented by cost, they are the basis of most decisions made by managers. Whether it aim to buy / sell at certain prices, whether they will introduce / give up certain products in the portfolio, whether it be to improve certain processes or production technologies, managers will always use costs. In this respect, as evident from this chapter, a cost information is useful when managers offered to place and time.

**The costs of decision-making**

To make the right decision the manager must consider only the relevant expenditure, ie raw materials, and indirect variable costs because they are avoidable, that would not occur if the company does not manufacture these hydraulic systems.

Anlizând data in the table no. 1, that the alternative to hydraulic devices in the company factory is cheaper to 748,000 lei (the difference between the total value acquisition and total value our own production).
For decision making must consider only future costs, costs will depend on the decision, and no costs will be used to assess the cost of production. Identifying costs depend on the circumstances of the decision in a particular situation can be a cost associated, and another does not.

In conclusion, it is impossible to determine the costs that will be associated in any case.

To identify them, should be know all the the circumstances in which the decision must be brewed with the principle that the costs of those future costs that differ from one alternative to another. Whenever circumstances change, the decision should be reviewed. Such circumstances may include decreased demand or acquisition of additional capacity.

**Life cycle cost methodology**

In table no. 2 to calculate the life cycle cost of the product, the cost being determined by adding the "initial investment" to "total value date".

Application of this methodology of calculation the following advantages:
- helps to better information for long-term investment decisions;
- the methodology is the basis pricing strategy, based on experience and learning;
- allow evaluation and comparison of alternative strategies for the use, operation, testing, inspection and maintenance of products;
- facilitate evaluation and comparison of different approaches to replace, rehabilitate and extend the useful life of products;
- focus on reducing the cost of logistics support.
### Table no. 2 Life Cycle Costing

<table>
<thead>
<tr>
<th>Period (during normal operation)</th>
<th>Update Factor</th>
<th>Inflation factor</th>
<th>Total expenditure</th>
<th>Value date</th>
<th>Total Value date</th>
<th>Initial investment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,631</td>
<td>2,631</td>
</tr>
<tr>
<td>2</td>
<td>0.99</td>
<td>1.02</td>
<td>169</td>
<td>171.49</td>
<td>171.49</td>
<td>2,631</td>
<td>2,802</td>
</tr>
<tr>
<td>3</td>
<td>1.01</td>
<td>1.02</td>
<td>169</td>
<td>174.01</td>
<td>345.49</td>
<td>2,631</td>
<td>2,976</td>
</tr>
<tr>
<td>4</td>
<td>1.13</td>
<td>1.01</td>
<td>169</td>
<td>193.05</td>
<td>538.54</td>
<td>2,631</td>
<td>3,170</td>
</tr>
<tr>
<td>5</td>
<td>1.22</td>
<td>1.02</td>
<td>169</td>
<td>209.92</td>
<td>748.46</td>
<td>2,631</td>
<td>3,379</td>
</tr>
<tr>
<td>6</td>
<td>1.34</td>
<td>1.03</td>
<td>169</td>
<td>232.69</td>
<td>981.15</td>
<td>2,631</td>
<td>3,612</td>
</tr>
<tr>
<td>7</td>
<td>1.36</td>
<td>1.02</td>
<td>169</td>
<td>233.95</td>
<td>1,215.10</td>
<td>2,631</td>
<td>3,846</td>
</tr>
<tr>
<td>8</td>
<td>1.43</td>
<td>1.02</td>
<td>169</td>
<td>246.98</td>
<td>1,462.09</td>
<td>2,631</td>
<td>4,093</td>
</tr>
<tr>
<td>9</td>
<td>1.41</td>
<td>1.01</td>
<td>169</td>
<td>240.98</td>
<td>1,703.07</td>
<td>2,631</td>
<td>4,334</td>
</tr>
<tr>
<td>10</td>
<td>1.48</td>
<td>1.01</td>
<td>169</td>
<td>251.91</td>
<td>1,954.98</td>
<td>2,631</td>
<td>4,586</td>
</tr>
</tbody>
</table>

Source: own calculations performed, the data are taken from www. Aerostar.ro

In Chapter 3, "Trends in the cost calculation methodology" presents the main traditional methods, advanced modern costing. I also pointed out their advantages, organizational typology that can be implemented, similarities and differences existing limits. The common characteristic of all methods of calculation is that each attempt to calculate the production cost of a product or service based on all expenses related to the production process.

The calculation method is performing in each method, in successive stages, using specific work processes.

In view of current economic environment in which companies operate, we believe that modern methods of costing is always the ideal solution, managers must consider the priorities, objectives and strategies of the company when deciding to implement a particular method of cost calculation.

The processes for allocating indirect costs takes many different forms from elementary algebraic and arithmetic operations and continuing with the analysis and modeling matemetică.

Identification of indirect cost allocation systems on the cost of manufactured products, works and services provided involve the following stages: primary distribution, secondary distribution, determining the cost of a responsibility center.
A coherent system of performance measurement involves structuring the company's responsibility centers.

This method of allocating primary and secondary costs enables rapid determination of indirect costs per center and sector analysis of the company.

Allocation of indirect costs, regardless of the nature and content, is made properly if all the following conditions:

- Between base and distribution expenses allocated to have a positive relationship, a relationship of interdependence, as the size of the share of indirect costs in a given category, which returns the type of activity, sector or carrier costs, always depends on the size allocation base that characterize in total bases. This condition can not be taken into account when allocating the base is too small to shared expenses;

- Allocation basis to be used to distribute a single or at most costs of a particular group overheads constituted by the possibility distribution relative to said base;

- Utilization of the allocation of costs to be possible under similar conditions, all or at least most companies in a particular sector, in order to achieve comparability of costs between companies with same activity;

- Both in pre-calculated and after calculation, it is necessary to use the same basis of apportionment of expenses to ensure comparability between actual costs and the pre-calculated;

- Use of the bases of cost allocation, over a long period of time because changing it affects comparability dynamic product cost.

Determining the cost of a unit of work is based on indirect costs related to major centers and structure, the nature of which is determined by the specifics of each individual.

As can be seen in the table no. 3 cost of a unit of work is determined by dividing the total indirect costs due to the secondary distribution, the number of work units consumed.
Table no. 3 Allocation of indirect costs

<table>
<thead>
<tr>
<th>No</th>
<th>Explanations</th>
<th>Amount of distributed</th>
<th>Auxiliary centre</th>
<th>The main centers</th>
<th>The center of the structure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Personnel management</td>
<td>Connected supply</td>
<td>Supply</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Consumables</td>
<td>420,000</td>
<td>42,000.00</td>
<td>84,000.00</td>
<td>42,000.00</td>
</tr>
<tr>
<td>2</td>
<td>External services</td>
<td>240,000</td>
<td>36,000.00</td>
<td>60,000.00</td>
<td>36,000.00</td>
</tr>
<tr>
<td>3</td>
<td>Current repair costs</td>
<td>610,000</td>
<td>61,000.00</td>
<td>152,500.00</td>
<td>122,000.00</td>
</tr>
<tr>
<td>4</td>
<td>Taxes</td>
<td>120,000</td>
<td>18,000.00</td>
<td>30,000.00</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Indirect labor</td>
<td>840,000</td>
<td>84,000.00</td>
<td>168,000.00</td>
<td>84,000.00</td>
</tr>
<tr>
<td>6</td>
<td>Maintenance costs</td>
<td>25,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>Other general costs</td>
<td>36,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Depreciation of fixed assets</td>
<td>85,000</td>
<td>-</td>
<td>17,000.00</td>
<td>17,000.00</td>
</tr>
<tr>
<td>9</td>
<td>Total primary distribution</td>
<td>2,376,000</td>
<td>241,000.00</td>
<td>511,500.00</td>
<td>301,000.00</td>
</tr>
<tr>
<td>10</td>
<td>Distribution management personal</td>
<td>0</td>
<td>327,552.00</td>
<td>65,510.40</td>
<td>16,377.60</td>
</tr>
<tr>
<td>11</td>
<td>Distribution connected supplies</td>
<td>0</td>
<td>86,552</td>
<td>577,010.00</td>
<td>57,701.00</td>
</tr>
<tr>
<td>12</td>
<td>Total secondary distribution</td>
<td>2,376,000</td>
<td>0</td>
<td>0</td>
<td>375,079</td>
</tr>
<tr>
<td>13</td>
<td>Nature unit of work (UBR)</td>
<td></td>
<td>units bought</td>
<td>spare parts</td>
<td>hours car</td>
</tr>
<tr>
<td>14</td>
<td>Number of units of workers(UBR)</td>
<td>15,000</td>
<td>7,000</td>
<td>3,200</td>
<td>4,500</td>
</tr>
<tr>
<td>15</td>
<td>The cost per unit of work (the cost of UBR)</td>
<td></td>
<td>20.07</td>
<td>41.68</td>
<td>91.17</td>
</tr>
</tbody>
</table>

Source: own calculations performed, the data are taken from www. Aerostar.ro
In Chapter 4, "Peculiarities of cost calculation S.C. Aerostar S.A. Bacau "I made a review of current affairs and prospects for the global aerospace industry, European and national.

Further we identified premises implementation of modern calculation methods in the division "Aeronautical products" in the company Aerostar.

Table no. 4 The profit obtained by applying the ABC and Target Costing

<table>
<thead>
<tr>
<th>No</th>
<th>Product</th>
<th>The result determined under the conditions of using ABC calculation</th>
<th>The result determined under the conditions of using the calculation Target Costing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Unitary</td>
<td>Global</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>Sunroof niche outside profiled leg</td>
<td>808</td>
<td>40,405</td>
</tr>
<tr>
<td>2</td>
<td>Jamba outer main</td>
<td>-198</td>
<td>-9,893</td>
</tr>
<tr>
<td>3</td>
<td>rotary joints</td>
<td>-404</td>
<td>-80,737</td>
</tr>
<tr>
<td>4</td>
<td>Landing gear outer wheel</td>
<td>1,989</td>
<td>79,560</td>
</tr>
<tr>
<td>5</td>
<td>Outer wheel assembly</td>
<td>587</td>
<td>23,467</td>
</tr>
<tr>
<td>6</td>
<td>Outer wheel brake assembly</td>
<td>1,041</td>
<td>41,628</td>
</tr>
<tr>
<td>7</td>
<td>Previous wheel landing gear</td>
<td>1,725</td>
<td>51,751</td>
</tr>
<tr>
<td>8</td>
<td>Previous wheel assembly</td>
<td>553</td>
<td>16,578</td>
</tr>
<tr>
<td>9</td>
<td>Previous wheel brake assembly</td>
<td>1,305</td>
<td>39,152</td>
</tr>
<tr>
<td>10</td>
<td>The main landing gear wheel</td>
<td>1,724</td>
<td>103,413</td>
</tr>
<tr>
<td>11</td>
<td>Main wheel assembly</td>
<td>1,929</td>
<td>115,755</td>
</tr>
<tr>
<td>12</td>
<td>Main wheel brake assembly</td>
<td>2,321</td>
<td>139,276</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>13,380</td>
<td>560,354</td>
</tr>
</tbody>
</table>

Source: own calculations performed, the data are taken from www. Aerostar.ro

In this context, we performed a calculation of production costs in this section using ABC methods and Target Costing. Analyzing the data in Table. 4 shows that using the Target Costing, with all its phases of analysis of the company's activity, namely: value engineering, functional analysis, reengineering, we can achieve a profit almost double.

Managers must take the appropriate decision and to apply the method of calculation which fits the company's specifics, but must take into account the specifics of the industry, a strategic area where security given by the quality products, works and services is more important than profit made. In view of current economic environment, in the new issue of production, a
technologies and computerization, companies in the aviation industry must adopt a series of policies concerning production and activity costing follows:
- volume of production must be based on orders received from customers, profitability is determined by how quickly the finished products can be obtained to meet customer orders;
- management of companies have focused on elements "key" in making profits, reduce inventory and response time to customer requests;
- to facilitate the operations of collection, centralization and data processing operations concerning record indicated that consumption of stocks does not occur as they occur, but when the finished products are produced or sold; because such an approach does not generate wrong information should be made based on forecast production volume orders received from customers;
- the total elimination of waste in all stages of the manufacturing process, from design to delivery, through a process of continuous improvement;
- maintaining a high level on product quality, product quality is given by the raw materials used and the continuous inspection activities of the production process in the order to extract and eliminate any irregularities;
- should be encouraged continuous improvement of labor, cultivation correctness employees; they are considered part of a team, being deeply involved in the production process;
- to your attention must be product managers but not the process, and this process is the most important dimension of organizational, ie the ability to communicate;
- considering that the new production environment has significantly reduced the number of direct labor hours and expenses concerning labor force indicators essential in determining the cost of production, it is necessary to use different methods of allocating indirect costs, traditional calculation of production costs are not an alternative due to instability in time and space production and management priori impossibility of production;
- increasing importance indicator "number hour car" rather than "number of direct labor hours" in this context to determine indirect cost allocation rates used term "theoretical capacity".

CONCLUSIONS AND PROPOSALS

The paper "Actualities and perspectives concerning methodology of costs calculation" during the course of the research imposed the involvement of several disciplines: accounting basis, financial accounting, management accounting, financial analysis, management, computer science, economics and statistics features of the aviation industry.
In the study we addressed the application of principles of management accounting and cost calculation in the aviation industry.

From the analysis were drawn the following conclusions:

1. Management accounting has been an ascending evolution in the role of collecting information on costing, to support the information in making management decisions.

   Managerial decisions for determining the medium and long term strategies are based on a cost provision of information in a short time.

   The new targets are set, adapted their methods of calculation and determined human, material and time needed to implement management option and plans to improve existing work.

   At present the following trends are emerging regarding management accounting:
   • management accounting is considered as an integrated system;
   • the existence of divergent views regarding the application tier accounting system using management accounts;
   • use of information lead to addressing limiting costing methods adapted model of automatic data processing;
   • application of modern methods of costing information to provide a cost in real time;
   • the creation of modern software to allow full implementation of calculation methods, involving a large number of specialists in different fields of activity: production, technological knowledge of all phases, specialists in economics and accounting, calculation methods for implementation cost information system programmers to create characteristic industry, specialists in marketing and management;

   Financial Accounting by economic circumstances - it generates financial, operating expenses and financial centralized as it is the basis on which costs and extraordinary ones are not taken into account as cost elements.

   Financial accounting is an observation of economic phenomena while management accounting, studying in detail all aspects of the cost and proposed management and control models and solutions to eliminate disturbing phenomena of company activity.

2. Identifying the consequences of implementing modern methods of costing in a company in the aviation industry

   Field of aerospace implies a changing and diversifying attributed satisfy desires, preferences, needs and requirements of customers growing. Aircraft production worldwide has been characterized in recent decades by a tendency to concentrate producers, through mergers and acquisitions, the need to develop new and innovative solutions in increasingly complex technically, to meet customers regarding their safety and comfort.
Under the conditions of current business environment aviation industry companies should consider:

- technical and technological restructuring of production activities as a factor for determining the company's efficiency, increase competitiveness and to face competition in domestic and foreign market. The main objective of general strategic production is the rehabilitation departments in order to increase the quality of manufactured products given the competitive conditions and the particular importance it manifests company.

- typology of market relations - production due to barriers imposed by national authorities which establish joint production capacity oriented regional development. From the need to have a complete and accurate quantification of costs, relevant and analysis exercise, establishing deviations and activities generating additional costs, proposing measures to improve and correct slippages in real time are processes that occur for implementation modern methods of costing.

3. The benefits of applying modern methods of cost calculation

Modern methods of cost calculation changing vision company accounting organization, and the organization of information flows. There are several methods of cost calculation that occurred in response to management accounting in technical and technological progress, the need to provide timely accounting information to decision makers. Among modern methods of cost calculation addressed in this thesis are: methods Activity Based Costing (ABC), Target Costing and Kaizen Costing.

Applying modern methods of cost calculation bring important advantages in managing the company's situation by identifying cost centers and cost information system strategies.

These methods have the basic principle analysis of activities and processes of the cost, which changes the traditional optical methods. In this context, not products or services at a cost, but the activities and processes. Another important aspect is the monitoring of indirect costs, identify sources that generate them, and activities that trigger them. You have exceeded mere phase costing to cost-effectively manage torque performance that must make the transition from AB.C. the A.B.M.

In addition, past the simple cost analysis to develop a management control directly related to the strategies adopted by management. Production systems are influenced by factors derived from the global economy in recent years. These factors evidently put their mark on the organization of industrial production. Globalization has determined a change of option buyers due to increased access to information and their choices are influenced and changed quickly. Managers must take into account the progress of informatics and virtual communication so must constantly adapt products and services and meet customer requirements.
The formation of partnerships in the supply chain is an effective way to ensure the necessary resources, especially since half of the built-in products and services comes from suppliers. Suppliers should be selected so as to be able to respond and they diversified requirements on the content and structure of materials.

Reducing stocks is important because businesses are investing significant financial resources in stocks and growth stocks value slows the possibility of effective responses to market requirements.

Product development is determined by the development of communication systems. Companies can easily find out what are the trends in consumer preferences and adapt products or services to them.

The mass production on order is a variation order to respond to certain categories of customers, no matter what region is, however, managers must redesign the technological production so as to respond quickly to specific requests.

Users are increasingly aware that their options are particularly important for productive companies, such production must face the pressures of increasingly high.

Delegation of authority to subordinates is important for enhancing the efficiency of production and implementation of modern methods of cost calculation, but this involves a high level of staff training and institutional ethics well implemented.

Each employee who is in a leadership position should be responsible and interested in increasing company productivity. Quality of products and services is a basic concept in the aviation industry, which is a strategic area.

Using modern methods of cost calculation the following advantages:

• shows a high flexibility in the allocation of costs on areas of interest (customers, products, profit centers, etc.);
• offers relevant information on the long-term variable costs that are useful to managers in order to take strategic decisions;
• Indirect costs can be individualized product in modern factories there are a growing number of non-productive activities;
• provide useful financial measures (factors, criteria of cost) and non-financial measures;
• focus on early stage development costs - product design;

The limits of these methods relate to:

• weight collecting adequate information on certain activities that cross the boundaries of departments of enterprises;
• high employment levels during all phases of development (design, implementation, control).
• the heavy workload both in the implementation phase and in the application;
• existence of priorities for the conduct of the company's current activity on the classical model.

4. Software and management accounting

Using accounting software has become a reality in all Romanian companies. Product market specializing in accounting, financial especially is highly developed. Specialists in informatics offer products increasingly more efficient at prices ever lower. Most programs are made with modules that meet the requirements of financial accounting, management accounting is a relatively underdeveloped. This is easy to understand, because of the confidential nature of management accounting firms producing accounting software are keen to include a broader market as buyers and to offer products with a high degree of generality, specific financial accounting. Creating a software for management accounting requires high costs because the design is enforcing teams of specialists in various fields, with command of profile activity to study long specifics of management accounting. Costs are high, given that each company can opt for a method of calculation imposed by several factors specific to each company (character production method of organization). Basically it performs a software product for a company or an industry.

Standard accounting programs used by companies have a predefined set of menus that can not be changed after the needs and specific activity. Such programs provide an important aid in the efficiency of processing, but the information provided limits, especially in terms of management accounting.

The software on the market offers many advantages on bookkeeping, among which:
- reducing the time of data collection of documents;
- the creation and organization of databases, the management, suppliers, customers;
- generating financial reports - accounting;
- automatic generation of accounting records;
- automatic generation of annual financial statements;
- making comparative analysis of financial indicators;
- generating fiscal declarations.

Bookkeeping using automated technique is effective, but the set of information generated by programs is post factum and record documents after conducting production processes, without giving managers the opportunity to correct certain deficiencies in real time.
There isn't effective communication between financial and accounting records, production and management activities as in relation to management and management accounting, financial accounting functions in a relatively independent manner. In recent years began to develop integrated systems management company that provides business process monitoring all access the same database for all departments. The visibility of the company's business is global, and decisions are based on access to complete and complex databases.

5. **Author's own contributions concerns:**
   - designing a synthesis of elements that have characterized the evolution of the concept of cost to ensure that traditional cost calculation methods applied in companies can be improved and have many limitations, using an approach from past to present, from international to national level;
   - present the main contributions of the literature, the development of knowledge in the topic;
   - presentation of case studies on different issues of costing, both conceptually and in practical terms;
   - identify the main trends that have marked the evolution from traditional cost accounting to modern methods applied in an environment of advanced technologies;
   - identify the main limitations of traditional management accounting in relation to modern methods of management accounting costing;
   - description of the organization of management accounting in the company SC Aerostar SA and propose solutions by applying modern costing;
   - conclusions and proposals to develop and improve the efficiency of the company SC Aerostar etc.;
   - make an analysis economic - financial the key indicators were calculated both at company level and at national level, the field;
   - conducting a study on the current situation of the aviation industry, global, European and national level;
   - conducting practical studies on costing methods Activity Based Costing (ABC) and Target Costing;
   - conducting a study comparing modern calculation methods implemented in a sector of the company.

6. **Suggestions for improving the activity in the company studied**

   From studies that applied to streamline the company's business managers must address a new optic regarding the organization and functioning of management accounting, with direct implications in decision making at different hierarchical levels, as follows:
• increase the use of type information provided by management accounting cost for analyzing the efficiency of the company and their products;
• modernization of production technologies to increase business efficiency, product quality; aplicarea unor metode moderne de calculație a costurilor pentru a se obține informații de tip cost în timp util, în timpul desfășurării proceselor productive în vederea ameliorării deficiențelor;
• reorganization of management accounting in terms of the treatment of indirect costs and streamline support activities;
• the use of advanced computer programs that facilitate increased efficiency costing information system;
• modernization of strategic and operational management for better resource management to reduce costs; derularea de programe de formare profesională a personalului pentru creșterea gradului de implicare în activitățile companiei;
• development and implementation of marketing strategies.

7. Perspectivele cercetării

• to promote the usefulness of management accounting as actual support management decisions;
• promoting the business of modern concepts of management accounting methods;
• analysis methods to reduce costs by applying modern methods of management accounting;
• study of the effects generated by the use of modern methods of management accounting;
• development of management accounting modules of the system software to develop integrated accounting information system and increase connections with other specialized information systems within the company.

In this context, we emphasize that the management accounting and cost calculation in terms of value is the modeling of resources related to the objectives of the company.

Manager must adapt to future changes, accepting uncertainty, requiring reflection convinced that: "If it moves quickly, any company can suddenly discover that its cars are obsolete. But more dangerous than cars are rusted rusty ideas. In today's ever-changing climate, can it really an organization to remain adaptable ideas of yesterday? "
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