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IMPROVING THE PERFORMANCE OF SMALL AND MEDIUM-SIZED ENTERPRISES BY IMPLEMENTING MANAGEMENT ACCOUNTING PRACTICES

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Abstract
The general system of managerial accounting is now obsolete because the information generated by the system arrives too late or too distorted to be relevant in making management planning and control decisions, in addition, the system is based on simplistic and arbitrary methods and not manages to reflect the exact costs of the product. Businesses use as tools in obtaining useful information throughout the technological processes management accounting techniques that include both financial and non-financial information. In the approach, the main objective is to see what is the impact of different practices specific to managerial accounting (MAPs) in assessing the performance of small and medium enterprises operating in the manufacturing industry.

Keywords: *costs; cost calculation; management accounting; decision making; management accounting practices (MAPs)*

JEL Classification: *M11, M41*

I. INTRODUCTION

In an ever-evolving environment, businesses need to produce the right products to meet consumer demand, with the latest production model shifting from a traditional production process to an intelligent production process (Varaniūtė, Žičkutė & Žandaravičiūtė, 2022). Thus, businesses will need to be more competitive to meet the complicated challenges of material, labor and environmental issues, including water and air pollution.

Management accounting is presented as that process of assisting in substantiating decisions to create value and guarantee sustainable achievements for businesses (CIMA, Chartered Institute of Management Accountants, 2013). This is possible when the information provided and analyzed allows companies to plan, implement and control their strategies (Ascani, Ciccola & Chiucchi, 2021).

This information provided is both financial and non-financial (Oyewo, 2021), which is important for management because many business objectives are stated in financial terms, such as profitability, liquidity and solvency, and non-financial information, at the strategic level, it is also important for the management of the company that will be interested in knowing the developments in product markets, new product development, competitors' activities, new technologies, future product demands and the penetration of new products in as many markets as possible.

Important issues regarding the notion of costs have been debated over time in many specialized papers, as can be seen in the following. In The Hidden Factory, developed and published by Jeffrey G. Miller and Thomas E. Vollmann (1985), the notion of calculating costs by processes or activities appears for the first time. The two concluded that indirect cost control requires the structuring of a model that can detail and classify the causes of indirect costs.

Those who succeeded in making such a system were Kaplan, Cooper, and Johnson, (1987). The model developed by the three consisted in the transposition and application of the instrument and methodology of the direct reference quantities with dual function on the sectors, auxiliary sections and auxiliary sections.

Following the joint efforts of technology-oriented accountants and operational managers, the cost management system has emerged, recognizing the transformation that has taken place in production. It has shifted from the dominant workforce to computer-aided projects and flexible production systems, all robotic and industrialized (Choe, 2004).

With the introduction of lean time production concepts, which is a business management concept that considers resource spending for any purpose other than creating value for the end customer to be a waste and thus a target for elimination, has increased and the need to adapt to new accounting practices (Ittner & Larcker, 1998).

Lean management can positively affect a company's performance in terms of quality, delivery and other economic improvements. However, it is necessary to create the necessary organizational culture for the effective implementation and continuation of lean management (Zaporowska & Szczepański, 2022). Thus, companies have

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begun to adopt more sophisticated practices, such as: target costing method, activity based costing and even balance scorecard. By using these methods, the aim is to ensure efficiency in the operations carried out (Grosu et al., 2019).

Starting from the main purpose of the paper to see what is the impact of different management accounting practices (MAPs), such as costs, analytical results, budgeting, information for decision making on the performance of production activities in small and medium enterprises, the hypothesis of the research will be asked of course by the question: *What is the impact of the use of different costs and management accounting methods (MAPs) on the business performance of small and medium enterprises.*

II. LITERATURE REVIEW

The literature emphasizes that the mere adoption of analytical tools in a business does not ensure superior success or performance, rather there are other factors that determine the overall profitability and productivity of an organization. These factors can be in the form of executive recruitment, marketing, training and product development and development (Talha & Raja, 2010).

As organizations change, management accounting practices (MAPs) must also be monitored, evaluated, and reviewed so that they do not become obsolete and reduce their efficiency in decision-making (Chapman & Kern, 2012). These auditing activities require time and effort from various managers and other users of management accounting to be successful (Kennerley & Neely, 2002).

Involving both accountants and non-accountants in the review of management accounting practices (MAPs) can lead to improvements in management accounting, data user satisfaction and interaction with revised management accounting, and improved organizational performance (Wouters & Roijmans, 2011).

Implementing new management accounting practices could improve the business performance of SMEs, but it is difficult to say, because the success of any entity is the result of several key elements and not just their use. Previous research has looked at different aspects of such practices on business performance; however, such firms were complex and large in nature (Gichaaga, 2014).

Some research on *MAPs* (*management accounting practices*) has shown that they can be a source of competitive advantage in the market, but only in developed and developing countries, as SMEs (small and medium-sized enterprises).) is a significant part of their economy (Nuhu, Baird & Appuhami, 2016).

In this paper, an important step is to present the current research trends in the field of costs and their importance in decision making using the VOSviewer program. Thus, in this approach we took into account the mapping of a map and the identification of clusters grouped on selected items, according to the articles published on Web Of Science in 2011-2022, selected by filtering by keywords management accounting practices *(MAPs),* decision making, costs and cost calculation.

In this context, in order to analyze the main research directions related to management accounting practices in the scientific environment, we examined the keywords in the abstracts of articles published in Web of Science using VOSviewer, and the results are presented in the following figure.

Thus, figure no. 1 presents structured the result obtained, by identifying five interconnected groups around the notion of management accounting practices found in the Web of Science database in the last ten years, for a number of 225 articles that were selected, from 2011-2022, based on the title search of this notion. Following the selection of the relevant terms, out of the 1357 terms, a number of 43 terms were selected based on a relevant score.

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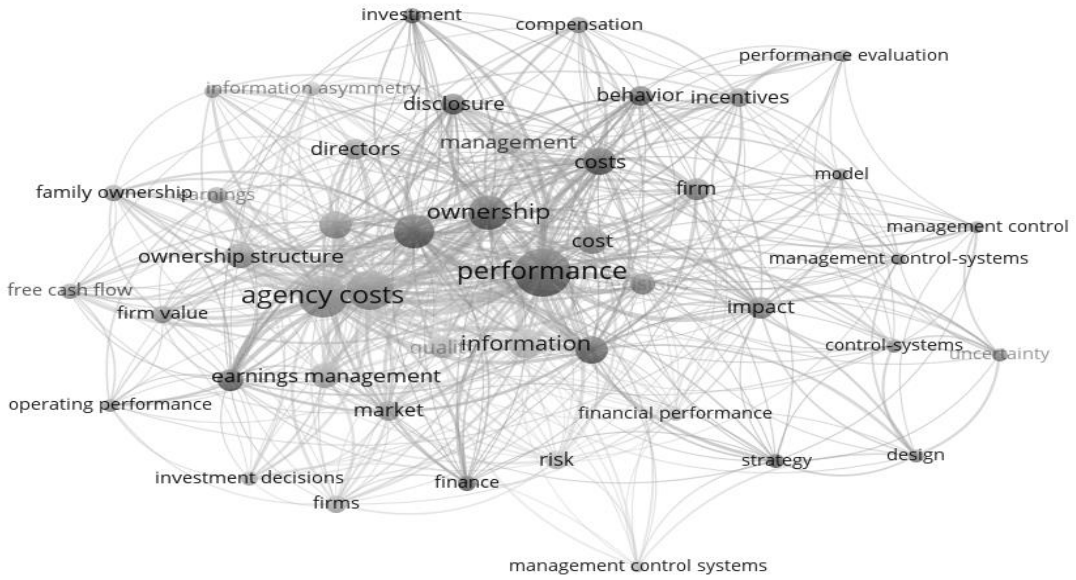

Figure 1 – Co-occurrence keywords network connected by cost concepts (2012-2022) (Web of Science)
Source: own processing usingVOSviewer

Analyzing thus, the profile of the specialized literature regarding the term management accounting practices from the mapping corresponding to figure no. 1, we can see that there are a variety of studies related to this term which in turn is inter-related with various items grouped into 7 clusters. Thus, the first red cluster formed a link from the following 11 words: behavior, capital structure, costs, determinants, disclosure, finance governance, investment, ownership, perfornamce, strategy. The second cluster (green cluster) deals with the following 9 notions: corporate governance, earnings, family ownership, firm performance, firm value, free cash flow, operating performance, ownership structure. In the third cluster (blue cluster) it can see the 9 terms: control-systems, decisions, design, firm, impact, management control, management control system, model, uncertainty. Cluster four (yalow cluster) formed a link of the following 7 words: financial performance, information, information asymmetry, management, management control system, quality, risk. For cluster 5 (purple cluster) 4 notions are treated: compensation, cost, incentives, performance evaluation. The sixth cluster (light green) includes 3 terms: earnings management, firms, investment decision, and cluster 7 (orange cluster) formed a link from the following 3 words: directors, market, voluntary disclosure..

The results of the mapping of scientific terminology used in connection with the concept of costs and practice of management accounting by using VOSviewer, according to the Web of Science database, revealed the terms most frequently associated with these concepts.

Despite the importance of SMEs in an economy, there is a lack of research to understand the application of management accounting practices in SMEs. It is noted that SMEs tend to use conventional approaches to management accounting practices (MAPs) in their business and for the purpose of controlling business activities. There have been a substantial number of studies conducted in the context of studying the relationship between MAPs and business performance. Most research has focused on performance management in organizations, but beyond performance management, several studies have been conducted to study the effects of mediation of other variables that establish the relationship between organizational performance and MAPs.

The findings of previous studies have shown that there is no need to standardize the results, there may be a negative relationship between performance and MAPs. According to the literature provided by Klammer (1973), there is no significant relationship between organizational performance and the techniques used by the organization for capital budgeting.

Cost as a method commonly used by SMEs includes the absorption of variable costs, and the full financial budget together with the annual budget are widely used in SMEs. There has been an increase in the use of management accounting practices and this increase is in line with a positive increase in the performance of SMEs. The research conducted by Joshi (2001), highlighted the difference between the different management methods

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applied. Abdel-Kader (2008), in their study, concluded that despite the fact that modern MAPs have developed, SMEs continue to use traditional MAPs.

III. METHODOLOGICAL APPROACH TO CALCULATING COSTS AND ANALYTICAL RESULTS

In order to be able to make a more relevant analysis regarding costs and results, the presentation of the Delta Plus entity was considered, which has as object of activity the production of footwear, resorting to the identification of the existing types of costs, the direct ones related to the production process. costs directly identifiable in the cost of the product, respectively, indirect costs related to the production activity: costs for employees, depreciation of buildings and equipment, rental costs, energy costs and indirect profits of the manufacturing process. Once each of the elements is calculated, they can be added to obtain a total cost for the production activity. The next step involves using these costs in an analytical framework (Levin H M, Glass G V, Meister G 1987).

The two most important concerns for cost analysis and analytical results are: the appropriate unit for cost expression and who pays the costs. Clearly, the issue of the appropriate unit for cost expression depends on how efficiency is measured and the nature of the decision. Usually, efficiency per product is measured in terms of earnings per unit sold. In this case, it is necessary to convert the total costs into a unit cost figure in order to compare the cost-effectiveness of alternative interventions. After calculating the indirect costs of depreciation, rent, energy and other indirect costs for each section and department within the entity, and applying the traditional methods of calculating the direct cost of production, the table of costs and results for each item produced was prepared and compiled. as can be seen from Table 1.

Table 1. The table of costs and results by the traditional method

Elements	The traditional method				
	Product 1	Product 2	Product 3	Product 4	Product 5
Direct costs (u.m.)	1,371,634	813,040	263,640	206,220	271,125
Indirect costs (u.m.)	23,584	14,537	4,981	3,994	4,995
Production cost (u.m.)	1,395,218	827,577	268,621	210,214	276,120
Quantity obtained (pcs)	6,500	4,000	1,000	1,000	1,000
Unit production cost (u.m.)	215	207	269	210	276
Quantity sold (pcs.)	6,500	4,000	1,000	1,000	1,000
Costs of goods sold (u.m.)	1,395,218	827,577	268,621	210,214	276,120
Administrative expenses (u.m.)	6,670	4,104	1,026	1,026	1,026
Sales expenses (u.m)	11,338	6,977	1,744	1,744	1,744
Full cost (u.m.)	1,413,225	838,658	271,391	212,984	278,890
Selling price (u.m.)	310	310	290	290	310
Turnover – T (u.m.)	2,015,000	1,240,000	290,000	290,000	310,000
Analytical result (u.m.) (T - Full cost)	601,775	401,342	18,609	77,016	31,110
Overall result (u.m.)	1,129,851				

Source: Own processing

In order to be able to perform an analysis as efficiently as possible, a comparison was made between the results obtained by traditional costing methods (Table 1) and the ABC method (Table 2). In this regard, it moved

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on to the primary and secondary distribution of expenditures and the application of the algorithm specific to the ABC method.

Table 2. The table of costs and results by the ABC method

Elements	ABC Method				
	Product 1	Product 2	Product 3	Product 4	Product 5
Direct costs (u.m.)	1,371,634	813,040	263,640	206,220	271,125
Indirect costs (u.m.)	24,795	16,036	4,074	3,676	3,367
Production cost (u.m.)	1,396,429	829,076	267,714	209,896	274,492
Quantity obtained (pcs)	6,500	4,000	1,000	1,000	1,000
Unit production cost (u.m.)	215	207	268	210	274
Quantity sold (pcs.)	6,500	4,000	1,000	1,000	1,000
Costs of goods sold (u.m.)	1,396,429	829,076	267,714	209,896	274,492
Administrative expenses (u.m.)	6,670	4,104	1,026	1,026	1,026
Sales expenses (u.m)	11,338	6,977	1,744	1,744	1,744
Full cost (u.m.)	1,414,437	840,157	270,485	212,666	277,262
Selling price (u.m.)	310	310	290	290	310
Turnover – T (u.m.)	2,015,000	1,240,000	290,000	290,000	310,000
Analytical result (u.m.) (T - Full cost)	600,563	399,843	19,515	77,334	32,738
Overall result (u.m.)	1,129,994				

Source: Own processing

Applying the activity-based costing (ABC) method can help managers find the places in their organizations where the improvement is likely to have the highest financial benefits. To make the best use of the ABC method, managers must separate any costs required to produce individual products from those needed to process batches, maintain a product, or maintain a production facility in operation.

IV. Analysis Of Data and Results

The calculation of the production cost was analyzed and followed in the production section, and the traditional method was used as a means of calculation. The information provided to the entity's management was a real help in establishing the objectives and development strategy, and the interdependencies between costs and their impact on efficiency, optimization, performance, product price, market demand and financial reporting can be observed.

Management accounting is a support for decisions both in terms of forecasting the allocation of resources and their use. In this sense, the global information is broken down into certain structures, which correspond to centers of responsibility correlated with each other. Each center provides a service to one or more centers in order to achieve the proposed objective, respectively to obtain products for third parties, detailed information from these centers is grouped, allowing the calculation of cost and result (Mihalciuc, 2015).

The results obtained after performing the analysis and comparison of the two calculation methods used can be found in Table 3.

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Table 3. Comparison of the results obtained

Comparison costs	The traditional method				
	Product 1	Product 2	Product 3	Product 4	Product 5
Production cost TOTAL	1,395,218	827,577	268,621	210,214	276,120
TOTAL	2,977,749				
Unit production cost	215	207	269	210	276
TOTAL	1,176				
Comparison costs	ABC method				
	Product 1	Product 2	Product 3	Product 4	Product 5
Production cost TOTAL	1,396,429	829,076	267,714	209,896	274,492
TOTAL	2,977,607				
Unit production cost	215	207	268	210	274
TOTAL	1,174				

Source: Own processing

The basic cost estimate that is used for all subsequent cost analyzes is the total cost of production. Subsequent analyses may distribute the costs among the departments that will bear them to determine the implication of that distribution for the decision to be made. The most common measure of cost-effectiveness is cost-effectiveness, that is, the effectiveness of an alternative is divided by its cost. When doing this for each item produced, it is possible to see which of the alternatives has the best results per unit cost.

We can choose, in principle, the alternative with the lowest cost per realization gain, it would be the most logical alternative, but nevertheless, it is important to know if the differences between the cost-effectiveness ratios are big or small. If the differences are small, it is probably wise to weigh in more deeply on other decision-making criteria, such as ease of implementation or previous staff experience. If the differences in profitability are large, it is important to give more weight to the profitability criteria, taking into account, however, other factors that were not previously taken into account in the analysis.

What interests us is generally closely related to the extent of the decisions. These decisions come with high fixed cost alternatives, such as those with large investments in facilities and equipment and machinery, will require high production or use to achieve the best cost-effectiveness ratios. The reason for this is that the fixed costs of a suitable building or machine cannot be easily adjusted on demand and must be used to the fullest in order to achieve the lowest cost per unit of production.

In contrast, alternatives that are largely variable costs, such as staff, will have less sensitive costs at the exit scale. Variable costs are derived from inputs or items that can be slightly increased or decreased (Tyler, 2016). Thus, a comparison of the profitability of items that differ in terms of the intensity of fixed versus variable costs can produce very different results. Therefore, estimates should be made among the items for specific levels of production that are relevant, rather than assuming a general model of cost estimation at a single scale level.

V. CONCLUSION

This paper aims to examine how management accounting practices manage the consumption of resources in improving the competitive advantage of the activities of economic entities specific to the production activity. The implementation of management accounting practices can increase the competitive advantage of entities in various fields related to production, thus contributing to the substantiation of decisions related to the product portfolio. Unlike the traditional costing system, the implementation of management accounting practices has the ability to detect idle capacity costs by analysing overheads into fixed and variable components.

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The analysis reveals that the cost / unit was reduced for the five products due to the implementation of management accounting practices which contributed to highlighting and eliminating the cost of unused capacity.

Consequently, the comparison between management accounting practices and traditional cost allocation methods reveals a reduction in the cost of products. These savings allow managers to make different pricing policy decisions, such as lowering the selling price or changing the product mix.

Based on the results, it can be concluded that the use of traditional cost allocation methods will provide cost information about the actual cost of the product and then help to gain a competitive advantage in terms of costs. As cost reduction is one of the main tasks faced by small and medium-sized enterprises, the correct calculation of costs will help to improve the competitive position by supporting decision-making processes.

After analysing these results we can say that the application of simpler practices is more appropriate and accessible for SMEs. Despite the continuous changes in management accounting practices, it can be seen that traditional methods still dominate the business environment today, and this may be related to the fact that the experience and information available on these methods are easy to find and access, compared with available information on modern accounting practices.

Management accounting is not limited to the accumulation of data on resource consumption; it is not a support for building predictive models and assessing the consequences of actions taken, each economic entity establishing its need for internal information at a higher level or less analytical, depending on the proposed objectives. Thus, the fundamental role of management accounting is given by providing the information that managers need in the decision-making process, respectively quantifying and reporting both financial and non-financial information (Mihalciuc, Grosu, 2019). This information supports managers in making the best and most relevant decisions that will enable them to achieve their business goals.

End notes

[1] ABC - Activity-based costing method
[2] MAPs - Management accounting practices
[3] SMEs - Small and medium-sized enterprises

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