UDK 334.72.012.63/.64:338.43/.45]:657.478.2:658.155(497.7) (Original scientific paper)

BILJANA ANGELOVA* BLAGICA KOLEVA** MILA MITREVA***

COST MANAGEMENT-METHOD FOR INCREASING THE PROFITABILITY OF ENTERPRISES, WITH REFERENCE TO THE PRODUCTION SMES IN THE REPUBLIC OF NORTH MACEDONIA

Abstract

The globalized world in which the companies operate, constantly changes the conditions under which the companies perform their activities, offer their products/services and manage their cost activities. This pressure affects the profitability of the enterprises and finding the right way to balance their cost-profit basis becomes one of the main factors for success. Hence, working towards being profitable, but keeping the costs at the lowest level are some of the challenges that many businesses face. Therefore, the aim of this paper is to analyze the cost management-method that N. Macedonian companies and the obtained results will further enhance the knowledge of other business entities in managing their business operations.

Keywords: cost management, profitability,

SME, models, cost leadership

JEL Classification: M40, M41, P43

^{*} PhD, Ss. Cyril and Methodius University in Skopje, Institute of Economics-Skopje, Republic of North Macedonia, E-mail: b.angelova@ukim.edu.mk

^{**} PhD, University "Goce Delcev", Faculty of Economics-Shtip, Republic of North Macedonia, E-mail: blagica.koleva@ugd.edu.mk

^{***} MSc University "Goce Delcev", Faculty of Economics-Shtip, Republic of North Macedonia, E-mail: mila.mitreva@ugd.edu.mk

Introduction

In conditions of global economy, the realization of profit is still imposed as the primary business goal of every company. Although in recent years the opposite idea of social entrepreneurship has been developed, aimed at creating social value and improving the quality of life, profit still remains a basic movement, and at the same time the goal of modern business, because it is clear that without profit other goals can not be achieved.

According to Michael Porter, the company's profit is a result of its primary and secondary activities, and the increase in revenue in terms of costs, is achieved through more efficient performance of activities. Porter singles out two basic strategies for achieving competitive advantage in the market: product differentiation and cost leadership. The differentiation strategy seeks to create a consumer perception of the uniqueness of the product or service, usually of superior quality, which allows manufacturers to charge higher prices. The main weakness of this strategy is that it does not require companies to minimize operating costs, which in turn leads to greater inefficiency, which in combination with scheduling aggressive marketing can lead to a loss of market position. Unlike differentiation strategy, cost leadership puts costs first. The business goal of this strategy is to surpass competitors in the production of products and services at the lowest price. Because operating costs are a result of the productivity of production, distribution and overall "administration" of the company and form a category in which the company can have an impact, they are the best basis for increasing business activity or making a profit. Therefore, every organization should strive to balance its cost structure, eliminate the non-value added costs and keep its competitive position. However, cost control management is a necessity for every business that requires maximum profit and lower price for the products of services it offers (Akeem, 2017)1.

1. COST MANAGEMENT

One of the most important management responsibilities include projection of costs and their control. According to Clough (1986)² the main components of project cost management include the costs required to complete the

¹ Akeem, L. B. (2017) Effects of cost control and cost reduction techniques in organizational performance. *International Business and Management*. Vol. 14, No. 3, p.19-26.

² Clough, R. H. (1986). Construction contracting. John Wiley & Sons, Inc.

project, labor, equipment-hours and the production quantities. Therefore, implementation of performance metrics is necessary, which will indicate whether the project is successful or not. Hence, for many companies one of the main driving success factors is successful cost reduction strategy. This is because cost reduction is a long-term strategy for creating a competitive advantage of the company to which competitors can hardly respond or cannot even respond in long run. Therefore, the effects of the cost reduction usually involve finding better working procedures and cheaper resources, which do not immediately provide noticeable results, but for long-term oriented companies are of crucial importance. Furthermore, when it comes to cost management, the share of the costs in the price of the product must be gradually reduced, hence, to become lower than the competition in a long run. The companies must maintain the relationship between the cash inflows and the cash outflows in a way that they will manage the flow of costs and the profits. In conditions of fierce competition, the short-term advantages of a particular production disappear over time and therefore constant improvements are needed by either lowering the costs or improving the quality of the product. Those parts of the enterprise that can no longer be competitive must be abandoned or replaced with new profitable programs, where the profitable products must take precedence over the best-selling products³. Notwithstanding, cost management is more of an evolutionary process rather that static one, which can take variety of forms, such as cost containment, cost avoidance and cost reduction. However, over the lifespan of the company, its costs can change for reasons, such as inflation, technological innovations, fluctuations in the demand and the supply or change in the production process. Nevertheless, depending on the characteristics of the industry in which the company operates, the characteristics of the product or service it provides, the strength and the weaknesses of the company itself and the opportunities and the threats in the environment are some of the factors based on which the manager should choose a specific management model for managing the costs 4.

Additionally, when reviewing and defining costs, as well as revenues, it is necessary to specify the existence of the economic and the accounting aspect. Considering the two aspects of defining costs, it is necessary to specify

³ Agrawal, S.P., Mehra, S., Siegel, P.H. (1998). Cost Management System: An Operational Overview, *Managerial Finance*, Vol. 24, No. 1, p.60.

⁴ Groth, J., Kinney, M. (1994). Cost Management and Value creation. *Management decision*. Vol. 32, No. 4, p. 52-57.

the difference in the classification and coverage of costs according to different characteristics that are significant and have an appropriate impact on cost auditing. The economic aspect of costs is broader than the accounting aspect. According to the economic aspect, costs are the price-financial sum of all factors of production: labor, capital, natural resources and entrepreneurship, which have their own price to be paid for their contribution to the creation of production. Unlike the economic aspect, the accounting aspect in defining costs starts from determining the cost price. Thus, the accounting aspect is narrower than the economic one, precisely because of the price of the entrepreneurship factor, because the cost price includes only purely economic costs of labor, capital and natural resources, i.e. means of labor and objects of labor, which directly participate in the production of effects or effects. Costs are determined and dependent on certain factors such as the type of activity, capacity, production and sales volume, cost-efficiency, cost-effectiveness, prices of production elements, etc. The importance of these factors, especially the dependence of costs on the volume of production contributes to achieving a comprehensive analysis of their movement, conducting business policy and proper management of the success of the business entity. The knowledge of the laws of cost issues, their variability and the negative impact on the financial result, enable management to make important decisions about the operation and development of the business entity. Only with timely data and information on the reasons and areas for the occurrence of costs and expenditures of factors of production, can faster influence the dynamics of their movement and the detection of centers of responsibility in order to reduce their growth. In that way, it can certainly influence the growth of their dynamics, both in the sphere of material production, and in the sphere of the sales market and the collection of the effects of the business entities⁵.

1.1 Target cost management

The globalized and competitive world that we live in requires from the companies to be able to provide the right products with the right prices, while managing their costs and remaining profitable. This market pressure stimulates the companies to implement adequate competitive tools for managing their operations. Therefore, since 1970's many companies, especially the Japanese ones such as Komatsu, Topcon, Isuzu, Sony, Toyota, Nissan etc. have used the Target Cost Management (TCM), which is a form of Strategic Management Accounting

⁵ Hilton, R. W., Michael W. M., Frank H. S. (2000). Cost Management, Strategies for Business Decisions, International Edition, Irwin & McGraw-Hill, Boston, p. 1.

(SMA). The purpose of TCM is to help the companies to maintain their strategies, while operating under a profitable margin. TCM assist the companies to set the right price, while making the right cost and obtaining sufficient profit. However, the development of TCM did not occur from a previously established theory, but mainly from practical applications. Its former names referred to 'Cost Planning', 'design to cost', 'basis net price', 'Target Costing', 'Cost Projection' etc.6 Nevertheless, TCM cannot be defined as a costing system separately, neither as a system to set the target cost. Its basis lays in setting the target-selling price before designing the product and by subtracting the target-selling price from the target profit, then the target cost is determined. Therefore, companies that use this method improve their cost position and gain their target profit. Moreover, according to Mihm (2010), TCM is a good method especially for large new product development projects, because it provides efficient use of available information, while reducing development times and balancing the profit margins. Nevertheless, there have been some differences between TCM practices in Japanese companies compared to the European and the US companies. However, this differentiation cannot be explained in a satisfactory manner and this may be due to the various contextual and environmental factors. Furthermore, it is worth mentioning that for achieving the target cost, there has to be internal and external cooperation within all parties in the value chain. When a close supplier relationship exists, it can be said that those companies that implement TCM will reach the full integration stage⁷.

2. COST MANAGEMENT MODELS IN MANUFACTURING ENTERPRISES

In the manufacturing business entities, the received sales revenues represent regular revenues arising from the basic activity of the entity. In addition to regular income, business entities also generate irregular or extraordinary income arising from the various non-weekly transactions of business entities. Hence, in any market economy, the basic rule of thumb is: in order to generate revenue, there must be costs. According to Lockey (2002)⁸, cost control is very

⁶ Yazdifar, H., Askarany, D. (2012). A comparative study of the adoption and implementation of target costing in the UK, Australia and New Zealand. *International Journal of Production Economic*, Vol.135, p. 382-392.

⁷ Baharudin, N., Jusoh, R. (2015) Target Cost Management (TCM): A case study of an automotive company. *Procedia-Social and Behavioral Sciences*. Vol. 172, p. 525-532.

⁸ Lockey, K. (2002). Factory and production (4th ed.). London: Dp Publisher.

important for every business because it helps the businesses to obtain their pre-determined objectives. However, there is a difference between cost reduction and cost control method. Cost reduction is considered successful when the overall cost of the entity are on an adequate level, while the cost control is applied in order to plan the budget. Therefore, cost control techniques refer to the methods that are applied for controlling the costs and they are composed of budgetary control, standard costing and material control⁹.

Budgetary control refers to the efficient use of resources in order to achieve the goals that have been previously set. This technique uses the budgets as a source of planning and controlling costs. It is worth mentioning that budgeting should not be seen as a decision but rather as a process that includes all the management activities for budget preparation and execution. Budgeting is also a system that includes the formation of revenues, expenses and various other economic categories and without it there is no efficiency and effectiveness in managing the organization. Budgeting is also the basis of all management functions because it involves planning, resource allocation and enables the process of achieving the company's goals. Budgeting serves as an instrument of employee motivation, assist the company in terms of attribute and supports planning which leads to better performance of the entity¹⁰. Moreover, another cost control technique is the standard costing, which is used for overcoming the existing limitations of historical costing. According to Lucey (1996)11, standard costing analyzes the standard cost of each product separately compared to the actual cost in order to determine the competence of the operation and if necessary, remedial actions to be taken. Standard costing is very useful in making accurate plans and forecasts, especially during the preparation of budgets. It is also used in controlling the organization and any difference between the budgeted costs and revenues with the actual results are sign that something has to be improved. Notwithstanding, standard costing is of crucial importance for the manufacturing companies because it assist them in inventory valuation, valuation of raw materials, work-in progress and finished goods inventory. Considering all the benefits of standard costing, various organizations use different types of standard costing, such as ideal standard, attainable current, loose, basic or historical standard. De-

⁹ Akeem, L. B. (2017) Effects of cost control and cost reduction techniques in organizational performance. *International Business and Management*. Vol. 14, No. 3, p.19-26.

¹⁰ Czerny, M. (2016). Budgetary control as a method of financial management on the example of housing community. Poznan University of Economics. No. 503, p. 179-194.

¹¹ Lucey, T. (1996). Management accounting (4th ed.). London: Contimium Publisher.

spite its advantages, standard costing has also some limitations because it is more of an internal rather than external cost measure. Today's focus of the companies is more related to the quality of the products and the customer satisfaction rather than minimization of costs. Because of the frequent, dynamic and continuous change of the companies, standards very quickly become out of date (Akeem, 2017). Furthermore, material control is also very important technique in cost control because it ensures economy in the cost of production. Its main objective is to ensure un-interrupted supply of materials for normal flow of production. When material control system is implemented, two techniques can be used 'Always Better Control' analysis and 'Vital Essential Desirable' analysis and both of them ensure minimal loss and wastages. The basis of these techniques is to avoid holding of idle stock and having available only the amount of raw materials that are needed¹². To sum up, all these methods and techniques are vital for the operation of the business, planning the future, controlling the current activities and analyzing the prior effectiveness of the managers, the employees and all of the related segments to the business.

3. STRATEGIC COST MANAGEMENT

Changes in the business environment have led to the need to define a modern cost management system or strategic cost management. Unlike traditional cost management models that focus only on measuring and controlling the cost of producing products and services, this model provides a modern system of information needed to adapt to economic and technological developments. The goal of strategic cost management is to produce a continuous cycle of information on short- and long-term activities, all in order to increase value in the eyes of the consumers and to reduce costs. The benefits of using strategic cost management models are reflected in reduced business risk, increased benefits and reduced financial costs. The main purpose of cost management is to use a set of tools to generate information for planning, decision-making and control in the short and long term, to assist the management of the company by creating products and providing services in a more efficient way than competitors. Strategic cost management tools contain techniques necessary for successful implementation of the strategic cost management system, value chain analysis, competitive advantage analysis, SWOT analysis, accurate on-time inventory management system, balanced assessment and continuous improvement and

¹² Sikka, T. R. (2003). Fundamentals of cost accounting (5th ed.). India Viva Books. Private Ltd.

modern cost management models: activity-based cost management, targeted costs, total quality management, repetition and constraint theory. Regardless of the company's management, for successful implementation of the cost management model it is necessary to motivate all organizational units to act as a team for the company (top management, finance, accounting, production, marketing, etc.). When implementing a cost management model, the manufacturing company should define the objectives, identify the activities that result in benefit, define the indicators of financial and non-financial performance and each organizational department must carefully analyze its activities and costs¹³.

4. TRADITIONAL MODEL OF PRODUCTION COST MANAGEMENT

The traditional cost management model is the oldest model for calculating and managing operating costs, and has been used in practice for over a hundred years. The main purpose of this model is reflected in the measurement of quantities of consumed inputs in relation to the number of individually produced product. This system is based on the division of production costs into the following basic groups:1. costs for direct material; 2. direct labor costs; 3. depreciation costs; 4. overhead costs for production; 5. administrative costs.

The traditional cost management model monitors and controls the costs of direct material and direct labor through each type of product, or per unit of product or service, while overhead and administrative costs are related to direct costs by applying a certain basis. Namely, for overhead and administrative costs, the place of the cost is known, but not the real effect, so the problem arises as to what should be determined as a basis for allocating the general costs to the holders. The cost that burdens the performance should be more precisely distributed, close to the actual overhead costs that this performance causes.

The traditional cost management model does not distinguish between the costs of different production and administrative activities that occur in a particular product group. If large parts of the operating costs are not included in the production volume and if the company produces a wide range of products in different quantities and at different degrees of complexity, the traditional model results in an inaccurate presentation of costs. It is also possible that the calculation of overhead and administrative costs based on the cost of direct labor distorts the realistic picture of the price of individual products, especially

¹³ Temelli, F., Cinar, O. (2019). Strategic cost management. Cambridge Scholars Publishing

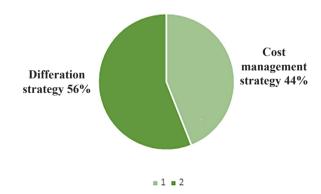
if the share of the cost of direct labor in total costs is small. These features are a big problem for business decision makers and are one of the biggest drawbacks of the traditional cost management model. Therefore, the application of this model is in a relatively stable business environment, where work is the dominant factor of production, technology is known, the quantity of products is limited and in companies that have several similar products or services or more customers. As the above production characteristics no longer correspond to a dynamic business environment, the traditional cost management model is increasingly abandoned and replaced by a strategic cost management system¹⁴.

5. COST MANAGEMENT ANALYSIS IN SMALL AND MEDIUM PRODUCTION ENTERPRISES IN REPUBLIC OF N. MACEDONIA

The cost management analysis in small and medium production enterprises is based on the results of the empirical research on cost management in production companies of the Republic of N. Macedonia conducted in December 2020. This research was conducted with a questionnaire for structural research of a sample of 50 small and medium production enterprises.

When choosing a strategy for gaining a competitive advantage, the research showed that SMEs prefer a cost management strategy (56%) to a differentiation strategy (44%) (Chart number 1).

Chart 1: SME strategy for gaining competitive advantage

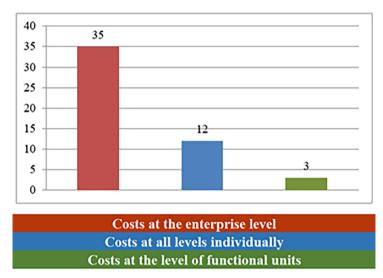


Source: Developed by the authors

Agrawal, S.P., Mehra, S., Siegel, P.H. (1998). Cost Management System: An Operational Overview, Managerial Finance, Vol. 24, No. 1, p.60.
 14

Every company that wants to achieve certain competitive advantages in the market by using a cost management model, should monitor costs at all levels, both organizationally and the company as a whole (Chart no. 2). The results of the empirical research showed whether small enterprises mostly follow the costs at the enterprise level (35%) and at all levels in the company individually (12%), while it is a very rare situation to follow the costs only at the level of functional units (3%).

Chart 2: Cost management model



Source: Developed by the authors

Small and medium-sized businesses are best acquainted with the traditional cost management model (56%), while the rest know different modern models (Chart no. 3). Although at first glance it seems that N. Macedonian small entrepreneurs are very well acquainted with different models of cost management, a more detailed analysis shows that 60% know only one model of cost management.

Modern models

Traditional models

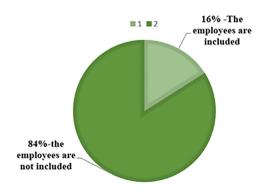
0 5 10 15 20 25 30 35

Chart 3: Familiarity and use of cost management models

Source: Developed by the authors

Unfortunately, N. Macedonian small and medium enterprises still do not realize that the implementation of any cost management model is a success and requires the support and involvement of all employees (Chart 4). Only 16% of small businesses involve all their employees in the cost management process, while as many as 84% believe that success in cost management alone is enough for the company owner or the company's management to commit.

Chart 4: Involvement of the employees in the process of managing the cost management model



Source: Developed by the authors

Considering the previously obtained results from the knowledge of the cost management model and the involvement of the employees in the cost management process, it can be expected that the owners of small and medium businesses do not pay too much attention to the cost management education, as for themselves., as well as for its employees. Only 13% of surveyed small businesses "send" their employees to additional cost management training.

Conclusion

Cost management enables the company to achieve a better competitive position in the market. In conditions of fierce competition, in the end the manufacturer with the lowest costs always wins. Thanks to cost management, the company can use a strategy to protect itself from competition by reducing the selling price of the product.

Cost management is a reliable set of methods that can be used at the individual level to support a particular decision or to manage the organization as a whole, called cost management systems or models. We distinguish between traditional method and strategic cost management.

The analysis of the cost management of small and medium production companies in the Republic of N. Macedonia showed that the majority of Macedonian owners and / or managers at the head of the production companies believe that cost savings can be achieved. The results showed that N. Macedonian manufacturing companies, in order to achieve a competitive advantage in the market, give priority to the cost management strategy over the differentiation strategy.

According to the above data, the vast majority of manufacturing companies use at least one of the cost management methods. Small and medium-sized businesses are mainly oriented towards traditional business cost management models that, as already mentioned, are not a good basis for achieving a competitive advantage in modern business conditions. This is because they assume a relatively stable business environment, work as a dominant factor of production and known technology.

Using explicit traditional cost management models involves thinking about costs only at the enterprise level, and it is known that at the enterprise level they intertwine different outcomes but also the costs of individual organizational units, so it is almost impossible to identify and remove the so-called "Bottlenecks". The data collected in this way is not a good basis for management to make strategic decisions.

References

- 1. Agrawal, S.P., Mehra, S. and Siegel, P.H. (1998). Cost Management System: An Operational Overview, *Managerial Finance*, Vol. 24, No. 1, p.60.
- 2. Akeem, L. B. (2017) Effects of cost control and cost reduction techniques in organizational performance. *International Business and Management*. Vol. 14, No. 3, p.19-26.
- 3. Baharudin, N. and Jusoh, R. (2015) Target Cost Management (TCM): A case study of an automotive company. *Procedia-Social and Behavioral Sciences*. Vol. 172, p. 525-532.
- 4. Clough, R. H. (1986). Construction contracting. John Wiley & Sons, Inc.
- 5. Czerny, M. (2016). Budgetary control as a method of financial management on the example of housing community. Poznan University of Economics. No. 503, p. 179-194.
- 6. Groth, J. and Kinney, M. (1994). Cost Management and Value creation. *Management decision*. Vol. 32, No. 4, p. 52-57.
- 7. Hilton, R. W., Michael W. M. and Frank H. S. (2000). Cost Management, Strategies for Business Decisions, International Edition, Irwin & McGraw-Hill, Boston, p. 1.
- 8. Lockey, K. (2002). Factory and production (4th ed.). London: Dp Publisher.
- 9. Lucey, T. (1996). Management accounting (4th ed.). London: Contimium Publisher.
- 10. Mihm (2010). Incentives in new product development projects and the role of target costing. *Management Science*, Vol. 56 No. 8, pp. 1324-1344.
- 11. Sikka, T. R. (2003). Fundamentals of cost accounting (5th ed.). India Viva Books. Private Ltd.
- 12. Temelli, F. and Cinar, O. (2019). *Strategic cost management*. Cambridge Scholars Publishing .
- 13. Yazdifar, H. and Askarany, D. (2012). A comparative study of the adoption and implementation of target costing in the UK, Australia and New Zealand. *International Journal of Production Economic*, Vol.135, p. 382-392.