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Review Article

Target Cost Method is Considered as a Model for Calculating Costs in the Production Process

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Abstract *- This article examines a new product development process and how costs are calculated in the production process. The emergence of new products in the competitive market is considered an important issue in ensuring business operations. The undertaking's decision to launch a new product must highlight the cost of the new product and must take into account the estimated cost of producing a product in the design phase. Therefore, production costs and management costs should be analyzed from the design stage and should be maintained throughout the lifetime of the product. The target cost method is considered a tool characterized by the cost management used to calculate the cost of new products in the design phase.*

Keywords *- New product development process, target cost method.*

INTRODUCTION

The competitive environment comprising the competitiveness of the undertakings concerned considers the cost as an important factor of power, competitive at the level of an undertaking, and as an amount of expenditure. Applying a SWOT analysis with uncertainty, opportunities, threats, strengths, weaknesses at the level of an enterprise helps to adapt it as easily as possible to any change. Rapid change and development in the competitive market oblige businesses to adapt to the requirements of the markets. Taking into account the quality and characteristics of the products, the low costs will allow businesses to consolidate their current position and increase their profitability while ensuring a relative advantage over competitors.

It has been noted that the current costs and management accounting systems of the undertaking are insufficient and must be updated continuously to be aware of market developments. The target cost method was developed in management accounting and used in the decision-making process when introducing new products to the market.

The introduction of new products on the market brings the industry's updating and needs to take into account the competitiveness of the enterprise. In a competitive environment, the enterprise has the ability to develop strategies that help to increase customer satisfaction; the enterprise produces and sells products with low and high-quality prices.

The process of introducing new products to the market has as its starting point market analysis, competitive analysis, and customer analysis. Conducting these analyses generates costs of research, development, design as well as costs of market research needs. The financial situation must take into account the evaluation studies. The feasibility study at the beginning of the lifetime cost projection of a product comprises two components: the cost of all activities used to produce a product from launch to marketing and the cost of the product (costs of Distribution costs of the product placed on the market).

I. TARGET COST METHOD

A. Determination of market-level target cost

Determining the target cost at the market level takes into account the needs of the customer and uses the cost concept that is under pressure from the competitive markets of the product suppliers. The process of determining the target cost at the market level carries out effective analysis of the new product taking into account the following: Customers, preferences, and products of competing enterprises. This analysis plays an important role in determining the target sales price for the new product. Once the idea of a new product is launched, we need to analyze the target sales price for the product in question. The target selling price is determined by the use of various forecasting techniques. The objective of determining the target cost is the choice of a price to ensure customer satisfaction. A business may influence the increase in sales price if the value of their products exceeds competing products. In a business, the emphasis is on determining the prices as realistic as possible. Companies must create the price, given the estimated market conditions that launch the new product on the market. In the formation of the target selling price, an account should be taken of internal and external factors, which include the location of the new product model and the objectives it must achieve.

The goal of determining the target cost is to ensure that the business follows the most appropriate long-term profit-making plan. In general, managers responsible for production lines are accountable for reaching the target profit. The target profit combines business-level plans with the level of product at the enterprise level, taking into account overall activity. The business plan used is produced at the product level for each product. The main purpose of launching a product is not to destabilize the market but even to improve the current profitability of the cash flows of the business determined with the help of target dividers.

II. CALCULATION OF ACCEPTABLE COST

The calculation of the acceptable cost shall be made after determining the target selling price and the target dividers. The acceptable cost highlights the relative position of the competitive business market and is intended to be the target cost of the product. Often the target cost of the product exceeds the acceptable cost. The acceptable cost shall not take into account the design or reduction of the costs of the company's suppliers. Assuming that a business cannot reach an acceptable cost, the business must create a high cost in the process of target cost method at the product level (Kaygusuz, 2000, p. 146).

Acceptable costs = Sales Price – Target Profit

A. Determination of target cost at the product level

After calculating acceptable costs, it is determined to determine the target cost at the product level. As a component of the target cost method are efforts to reduce product-level costs. Customers expect a product to increase quality and not to reduce the price so as to maintain profitability.

Cost reduction must take into account two characteristics, namely: reducing target costs and reducing strategic costs. Reducing product-level target costs is between the actual cost and the target cost. The actual cost includes the features, quality requirements of the new product. Cost reduction is the difference between the actual cost and the target cost. The reduction of strategic costs must be deprived of the target costs. The difference between the target cost at the product level and the acceptable cost defines the decrease in profit when the product designers do not reach the acceptable cost and indicate that the business is not adequately effective under competitive conditions (Cooper and Slagmulder, 1997a, p. 111-112).

Acceptable cost = Estimated price – Estimated Profit

B. Determining the target cost at the execution level

After determining the target cost at the product level, the target costs are generated for each execution of a product part. The target cost method at the execution level transfers the competitive cost to vendors. The undertaking's target cost method system determines the selling price of parts purchased from suppliers. The relationship between the customer and the supplier must be reliable, effective collaboration, compliance with contractual deadlines, etc. If suppliers offer a valid reason not to accept target costs, businesses above the supply chain also try to weaken the target costs (Cooper and Yoshikawa, 1994, p. 60-62). The cost of each executed piece purchased by vendors has a value greater than the estimated cost, which leads to a cost reduction plan through collaboration with suppliers. The reduction plan should consider reducing the material, how the undertaking is structured, the manufacturing process of the supplier. Suppliers shall develop new ideas replacing a part where production comes from the target cost. However, this change cannot cause changes in functionality (Kaygusuz, 2000, p. 156).

C. Creating target Cost

Starting from the determination of the target cost of the difference between the target price and the target profit, it comprises the expenditure, the work done to produce the product, the materials and expenditure generated by production, and the costs of sales, Design, and management. In calculating the target cost, the most important role holds is the target price. The determination of the selling price starts at the cost of the design phase of the product requiring research on the sales prices of products on the market.

The estimated profit for the business, calculated by the difference between the estimated target selling price and the target estimated cost. We must mention that the estimated cost cannot be calculated as the target cost; the estimated cost has a variable value.

Estimated Profit = Estimated sales price – estimated cost

or

Estimated Sales price = Estimated Cost + estimated profit

Determining the cost of the target profit on the lifecycle of a product sets out: When a product enters the market and stays on the market for a short period of time, it causes consistent investments, or if the selling price and costs will change Continue, surely then the profit will change as well depending on changes. The purpose of launching a product on the market is to ensure a lifetime return on the product, but if it does not generate enough revenue, then the business will be in danger of bankruptcy, not generating income for the rest Life of the product

D. Structuring the target cost system

The operation of the target cost method varies from business to business and depends on the industry, work done, business size, and other factors. The starting point of each business is to determine the target cost just before the product design phase. Are the following the cost calculation steps on the most applied product in the target Cost method system? (Sakurai, 1990, p 251).

Target cost = Target sales revenue – target profit

Target sales revenue = Target Sales quantity x target price

Target Profit = Revenue from target sales x target profit action

Profit = (Target sale price – Target variable Cost – Target fixed Cost) ÷ target sales price

Target cost = variable target Cost + target fix Cost

Target unit Cost = Target Cost ÷ target sales quantity

E. Organisational structure of target cost method

The studies on the target cost method so far have been carried out on the organizational level and the level of profitability of the senior management. Still, before the launch of the products, according to the target method, the product must fully satisfy the needs of customers. In order to achieve this, the account should be taken of specialists in design, cost specialists, system vendors, marketing specialists who are included in the format teams to carry out studies on the cost method Target. These experts combine their work in a team to improve quality and control costs (Albright, 1998, p. 15).

1) Regardless of the calculation structure of the target cost method to be created, the following three elements play an important role in the success of Target Cost method applications (Kim and Ansari, 1999, p. 47-48): Team dependency, the team must be Functional and Team authority.

2) A business that uses the target cost method must hold a central team with the power of decision and authority in the organization. Once the team has been selected, its members must be spread across all business compartments and perform the rotation of the team members. Relationships and resources must be used in such a way as to facilitate the realization and development of new products and processes. Team members must use their skills, creative spirit, be open to new information to ease the work of the enterprise. Team members ' rotations should not be carried out very often, as they must know each activity within each department in detail. The target cost method highlights the experience and capacity of each team member who determines the problems arising from a different perspective and establishes solutions and proposals to solve the problems that arise.

F. Practical application of Target cost method

A new product is to be marketed in the production business. It is a kitchen element, namely an electric coffee machine, to be produced and will be included in the segment of small household appliances of the enterprise. The electric coffee machine will not have the coffee grinder function. However, it is not considered a very efficient device. Research estimates show that the product will remain on the market for 3 years and will go through three phases, namely: release, growth, and maturity.

The maximum production capacity of the enterprise is 50,000 units, this capacity being exploited at 70% in the release phase, 90% in the growth phase, and 100% in the maturity phase.

The selling price of the product is 60 lei, but it is stipulated that due to the emergence of similar products on the market, it will be reduced by 15% in the maturity phase. The management of the enterprise aims to obtain a margin on the sales price of 10% in the launch phase, 20% in the growth phase, and 20% in the maturity phase.

Calculation of the target cost on all 3 phases, namely:

Desired margin: Release 60 x 10% = 6 Increase 60 x 20% = 12 Maturity 60 x 20% = 12
Target Cost = Sales Price – desired margin
Target Cost: Release 60 – 6 = 54 Lei Increase 60 – 12 = 48lei Maturity 60 – 12 = 48lei
Phase production: Release 50,000 x 70% = 35,000 pcs. Growth 50000 x 90% = 45,000 pcs
Maturity 50,000 x 100% = 50,000 pcs.
Total Product Lifetime production: 3 x 50,000 = 1.5 million pieces
AS estimated = Production completed x selling price
AS Estimated release = 35,000 x 60 = 2.1 million lei
AS Estimated growth = 45,000 x 60 = 2.7 million lei
AS Estimated maturity = 50,000 x 60 = 3 million lei
Estimated total Cost = output x estimated unit Cost
Total estimated cost of release = 50,000 x 54 = 2.7 million lei
Estimated total Cost increase = 50,000 x 48 = 2.4 million lei
Total estimated cost of maturity = 50,000 x 48 = 2.4 million lei
Estimated result = AS estimated – Estimated total cost
Estimated Release result = 2.1 million – 2.7 million =-600,000 lei
Estimated growth result = 2.7 million – 2.4 million = 300,000 lei
Estimated maturity result = 3 million – 2.4 million = 600,000 lei

III. CONCLUSION

Companies, when intend to launch a new product on the market, they follow the sales to make the most of the profit. In order to be the profit as high as possible, the cost of the product should be as low as possible according to customers ' needs, taking into account the positive or negative reactions on the market. The aim is to make the target cost method easy to use in an enterprise. The target cost method is a model for determining the cost of a product taking into account the quality and properties of the products to be sold on profitability during its lifetime. The target cost method uses the cost of a product at the production entry and does not depend on the cost of the output from production. The target cost method follows the objectives of sales and long-term profit. The purpose of using the method is to determine the target cost and to achieve the requirements of long-term strategic planning of business profit. From the above app, it can be found that the target cost is useful in determining costs, but it is also considered a profit-planning tool. If the target cost is not accepted, then there may be a decrease in the level of profitability. Business management analyses the results in the above application and notes that in the launch phase, the estimated result is negative, which is recovered in the maturity phase.

REFERENCES

[1] Sait Y. Kaygusuza – Target Costing for New Product Development Process, Business and Economics Research Journal, 2(4) (2011) 19-36.

[2] Albright, Tom .,The Use of Target Costing in Developing the Mercedes- Benz M_ Class, International Journal of Strategic Cost Management, Sonbahar (1998).

[3] Bayou, Muhamed E.ve Reinstein, Alan, Three Routes for Target Costing, Managerial Finance, 24(1) (1998);

[4] Bonzemba, Ekutu ve Okano, Hirashi , The Effects of Target Costing Implementation on an Organizational Culture in France, Second Asian Interdisciplinary in Accounting Conference, Japonya, (1998) 4-6.

[5] Cooper, Robin ve Slagmulder, Regine, Target Costing and Value Engineering, Edward Brothers, A.B.D., (1997a).

[6] Cooper, Robin ve Slagmulder, Regine, Factors Influencing Target Costing Process : Lessons From Japanese Practice,Manchester Business School, 25 (1997b).

[7] Cooper, Robin ve Slagmulder. Regine, Develop Profitable New Products With Target Costing, Sloan Management Review, (1999);

[8] Cooper, Robin ve Yoshikawa, Takeo, Inter-Organizational Cost Management Systems: The Case of The Tokyo-Yokphama-Kamakura Supplier Chain, International Journal of Production Economics, 37 (1994);

[9] Cooper, Robin, When Lean Enterprises Collide: Competing Through Confrontation, Harvard Business School Press, USA, (1995);

[10] Ibusuki, Ugo ve Kaminski, Paulo Carlos, Product Development Process With Focus on Value Engineering and Target Costing: A Case Study In An Automotive Company, International Jorunal Of Production Economics, 105 (2007);

[11] Oprea C. Contabilitatea de gestiune şi calculaţia costurilor. Bucureşti, Editura Genicod, (2002) 197;

[12] Scorțe Carmen, Fărcaș Mariana – Target costing, o nouă posibilitate de calculație a costurilor, Universitatea Oradea, 307, 308.