

IMPROVE MANAGERIAL ACCOUNTING THROUGH TARGET COSTING

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Abstract. *The target cost method was designed as a comprehensive set of cost management tools, cost planning and cost control. It is part of a strategic approach in which each cost carrier is analyzed throughout its lifecycle. This method is based on the idea that the sales price of a product is fixed on the market. The price does not therefore depend on the cost. The target-costing method is not only a cost calculation method but also a modern management method that uses techniques such as value analysis, market study, manufacturing technology, diversity reduction, and partnership with suppliers.*

Keywords: managerial accounting, target cost, target price, modern method modifications

1. Introduction

Under the current environment, in order to cope with international competition, economic entities must have as their primary objectives the continuous increase in the quality of production, the reduction of costs and the timing of products among other measures, the achievement of these objectives involves improving and adapting production processes, identifying and using new production methods to meet customer demand for deliveries. Thus, enterprises tend to replace traditional production systems with advanced production systems such as: Kaizen Costing, Target Costing, Activity Based Costing, and Activity Based Management. An optimal solution for businesses to meet their goals is to implement the target-costing method.

2. The context of the target-costing approach

Target cost or objective cost is a concept of cost management, used and developed by Japanese enterprises since the 1970, is part of a global approach to management born in Japan, being used especially in the automotive industry. To define the notion of target costing, we will start from three opinions belonging to one american author and two japanese authors:

„• Sakurai (1989): Target cost is a cost management tool that allows the total cost

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of a product to be reduced over its entire life cycle due to production, research and development, marketing, accounting;

- Tanaka (1991): describes the Toyota cost system: it is not an engineering method used for better cost estimation, but an activity closely linked to the overall quality of the process and part of the overall improvement of functions and The quality of a product in parallel with the cost reduction;
- Cooper (1992): shows that the target cost object is to identify the production cost of a product, so once sold, it generates the expected margin.” [4]

The Target Cost method is a strategic approach, with each cost carrier being analyzed throughout the life cycle. The "cost target" concept was based on the following changes: - Implementation of new automation-based technologies (CIM Computer-Integrated Manufacturing Systems), the need to produce smaller series to meet market needs, and the introduction of new methods of organizing production (Just-In-Time).

3. Objective of the target - costing method

The main objective of the target - costing method is to "optimize the situation of product - related results through a reduction in standard costs towards certain costs in line with the competitive situation"[3].

Objective of target-costing is based on the following six general principles [12]:

- Costs for future products are evaluated in a series of subsequent revenue provided for marketing;
 - Target costs required are based on the formula costs, shall be assessed by cropping from the selling price of the desire profit margin taking into account a risk;
 - Overall costs are determined by difference ,the selling price-the desire margin + share of risk, are spread across the various components of the corresponding value of products against customer functions;
 - Cost elements for the entire product chain serve the task of creating value from research and development , sourcing, manufacturing and disposal;
 - Through bank-marketing and through the analysis of standard costs and awarding costs target is identified at the level of product components, the potential for optimization;
 - The value chain provides sales outlets through product outlets, both by analyzing the value and by optimizing material and processing costs, to fix the measures to be taken.
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4. Implementation of the Target-Costing Method at A S.R.L.

The case study on the practical process of applying the Target-Costing method can be done on the example of A S.R.L. The main stages for applying the "objective" or Target-Costing cost method are the following:

Stage I - Study of the opportunity of changing an existing product or of entering a new product in the portfolio;

Taking into account the competition aspects in the field, the core study of the economic entity's external economic environment noted that it is appropriate to study the acceptance of a new product, namely "toothed pinion" in its own portfolio. The main purpose of the strategic plan is to exploit existing market opportunities, minimize the negative effects induced by market threats, and take into account potential domestic resources. Knowing the (relatively low) tendency of supply (increasing), the choice is considered to be justified and the product will sell well in a relative time. On the other hand, it is appreciated that the economic entity has the possibility to adapt to the manufacturing technology without additional investment.

Stage II - Setting the target price for the product retained in the previous phase;

The actions under this phase are:

a) *Extensive study on newly retained product* The subject presented in the previous step is the subject of the study. Essential characteristics are determined to set a target cost, starting from the target price and expected margin. In order to determine the value of the product, first of all, it will be the aspects related to the usefulness of its functions to customers. The nomenclature of technical characteristics and their functions shall be established as follows in Table 1.

Table 1. The technical characteristics and functions of "Toothed Pinion"

<i>Symbol</i> <i>Function</i>	<i>Function name</i>	<i>Function type</i>	<i>Technical feature</i>
X	Reliability	Objective	Period of use
Z	Technical aesthetics	Objective	Diameter, shape, finish
W	Durability	Objective	Specific resistance
V	Microclimate resistance	Objective	Quality of treatments and raw materials applied

The order of importance of functions, following specialists' assessments, is given in the following table (table 2).

Table 2. The Importance of Product Functions "Toothed Pinion"

<i>Function</i> <i>Indicators</i>	<i>X</i>	<i>Z</i>	<i>W</i>	<i>V</i>	<i>TOTAL</i>
The level of importance (Minimum importance - 1 Maximum importance -5)	4	3	4	4	15
Weight in product value (%)	26,67	20,00	26,67	26,67	100

It is noted that the functions "reliability", "durability", "microclimate resistance" have the same weight of 26.67%, followed by the "technical aesthetic" function with a weight of 20%

b) Target price targeting by product and product features

If starting from the establishment of an objective unit price of 70 lei / piece, slightly lower than the market price, the value in lei of each function of the analyzed product can be determined as follows:

$$P_{ti} = P_{ttotal} \times k$$

where: P_{ti} - target price for function "i"; P_{ttotal} –The target or target price of the product; k – weight of functions in the value of the use of the product, "toothed pinion".

Table 3. Target price assignment by product features

<i>Function</i> <i>Indicators</i>	<i>X</i>	<i>Z</i>	<i>W</i>	<i>V</i>	<i>TOTAL</i>
The share in the value of the product (%)	26,67	20,00	26,67	26,67	100
Target price (ron)	18,66	14,00	18,66	18,66	70

Stage III - Target cost fixation can be achieved by completing the following steps:

a) Establishing the correlation between the above-described product functions and the technological flow of the product

The technological process of the "Gear Pinion" product consists of three essential operations, namely: Primary Processing, Forging and Thermal Treatment. The functions that these operations perform, but also the extent to which each function is assured by the operations envisaged are set out in Table 4.

Table 4. The correlation between customer perceived functions and technological flow operations
The "Toothed Pin"

<i>Indicators \ Function</i>	<i>X</i>	<i>Z</i>	<i>W</i>	<i>V</i>
Primary processing	X(0,45)	X(0,55)	X(0,35)	X(0,55)
forging	X(0,35)	X(0,45)	X(0,35)	-
Treatment thermal	X(0,20)	-	X(0,30)	X(0,45)

The Primary Processing operation therefore contributes to ensuring functions in terms of reliability, technical aesthetics, durability and microclimate resistance; forging contributes to the reliability, technical aesthetics and durability of the product; the thermal treatment applied to the product can mainly ensure its reliability, durability and resistance to microclimate.

On the other hand, the X function is assured 45% of the primary processing, 35% of the forging operation and the 30% is ensured after the heat treatment operation. In the same way, the other values in brackets will be interpreted, which are the same as the other functions.

b) Turning on the contribution of product manufacturing operations

Valuation is based on the target price determined in the previous phase, for each function, depending on the level of profit margin to be obtained. This margin is 10% of the sales price excluding VAT. The situation of total and partial target costs is presented in Table 5.

Table 5. The unit target cost per operations and functions of the "Toothed pinion"

<i>Functions \ Operations</i>	<i>X</i>	<i>Z</i>	<i>W</i>	<i>V</i>	<i>Target unit cost per operations (RON / piece)</i>
Primary processing	7,55	6,93	5,87	9,23	29,58
forging	5,87	5,67	5,87	0	17,41
Treatment thermal	3,35	0	5,03	7,55	15,93
Target cost per unit (ron / piece)	16,77	12,6	16,77	16,78	62,9

The assignment of the target costs of each function per operation was made taking

into account the contribution of each operation to ensuring the functions of the toothed pinion product.

c) Fixing the target cost of the product

An essential step in setting the objective cost of a product may be to set partial costs according to the related items of expenditure. From these partial costs, production and supply activities can be organized, as the economic entity falls within the limits of the costs set as objectives.

For the determination of the partial target costs, the following approximate weights of the costs that form the full cost of the VIMET TEHNOLOGIE S.R.L. companies can be used as follows:

- Raw materials, consumables and energy... 70%
- Direct labor 15%
- Indirect Production Expenses (by Section)..... 10%
- General administration expenses..... 5%
- Total 100%

Based on these weights the target costs for each operation and expenditure items are determined according to the table 6.

Table 6.The unit target cost status of the toothed pin product, On operations

<i>Elements Operations</i>	<i>Raw materials, auxiliary materials, fuel and energy</i>	<i>Direct labor</i>	<i>Indirect expenses of production</i>	<i>General administration expenses</i>	<i>Total Target Cost (RON / piece)</i>
Primary processing	20,70	4,43	2,95	1,47	29,55
Forging	12,18	2,61	1,74	0,87	17,4
Treatment Thermal	11,15	2,38	1,593	0,796	15,919
Total Target cost (ron / piece)	44,03	9,42	6,28	3,13	62,9

The enterprise will try to fit consumption limits based on these partial target costs. The following actions are required: the careful organization of the supply of raw materials and auxiliary materials, given the significant share of the cost of these elements in the total cost; efficient management of the consumption of raw materials, auxiliary materials, especially in the primary processing operation; fuel and energy consumption efficiency, especially in the heat treatment operation.

Conclusions

Method Target Costing it involves a major change of mentality, Romania's economic enterprises, accountants, manager, accustomed to operating in a business environment where we accept regular price growth in previous years. Worldwide, these entities are most affected by increasing the pressure, and the competitive environment in this period, it may respond more quickly the benefits and approaches offer by method of Target Costing.

Economic entities that do not appear to be affected can react as quickly as they can or can fall by earning benefits through past costing, but especially management costs, and studying their impact on profitability and market position. The main reason for adopting the method of Target Costing involves its use in designing or planning costs of products before placing them in the production process, and in ensuring that products whose profit margins are not generating insufficient introduced into production process.

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