

Analysis of the Application of Target Costing as a Production Cost Control System Empirical Study on CV Cahaya Gemilang Teknik

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Abstract. Costing target is a method of profit planning and cost management that is focused on products and takes into account the manufacturing process in order to strive for cost control. The goal of this study is to examine how the costing target method is used to control production costs and to evaluate how it compares to other cost control methods currently in use by businesses. This kind of study employs descriptive qualitative methods. The information gathered for this study was based on both primary data interviews and obsevations and secondary data documentation. By taking into account the cost of product quality and profits realized, the costing target method can assist management in redesigning products and is a good method for reducing production costs. The Costing Target method is a good alternative to pressing some costs, it can be known that the production costs before applying the costing target for the cabinet with three doors are about Rp.3,266,500,- and the 311 selini sofa they are about Rp.3,480,500,- per unit, the Costing Target Method has a positive impact on achieving the profits. The profit before using the target costing method is Rp.1,233,500,- for a cabinet with three doors and Rp.1,019,500,- for a sofa, but the profit after using the target costing method is Rp.1.350.000,- and Rp.1.125.000,- per unit for cabinets with three doors and sofas.

Keywords: Cost Control · Costing Target

1 Introduction

1.1 Background

As technology advances, the variety of products available expands, as does competition in all business lines, particularly in the furniture industry. In addition, the company's current issues will be more complicated, and it must be able to compete with other furniture manufacturers. Although the famous furniture industry from Indonesia is a furniture company from Jepara, Central Java, which is famous for its distinctive carving art, even so, furniture products in other regional furniture industries also have their own uniqueness and have their own characteristics.

Companies that want to grow in the furniture industry must be able to produce a large volume of high quality products. To be able to obtain such a product, the company must pay attention to pricing and try to reduce the costs that must be incurred during the manufacturing process. As a result, the main issue facing business and the furniture industry today is how to produce goods with fixed selling prices while still generating enough profit margins. This requires the company's management to determine an action by choosing various alternatives and wisdom in making the best decisions so that the company's goals for profit optimization can be achieved.

One of the methods or tools used to set cost reduction goals during the product design stage is costing targets. The idea of a cost target is excellent, and because competition is growing and supply is outpacing demand by a wide margin, market forces are having a greater impact on price levels. So by using the target costing method, the company will achieve its goal of determining the cost of goods in accordance with the desired (target) as the foundation for determining the product's selling price, which will affect market pricing.

According to the above description, the researcher is interested in researching the furniture industry company CV Cahaya Gemilang Teknik with the title "Analysis of the Application of Target Costing as a Production Cost Control System on CV Cahaya Gemilang Teknik". This is very good for the company to use so that it can manage costs well and achieve its goals. By using costing target drivers, it is expected to be used as a means of controlling production costs on CV.Cahaya Gemilang Teknik.

1.2 Problem Formulation

The problem formulation for this research is how costing targets can be used as a tool to control production costs on CV.Cahaya Gemilang Teknik?

2 Bibliography

2.1 Definition of Cost

Mursyidi (2010) defines "cost" as a sacrifice in a production activity that can reduce assets or cash to achieve a specific goal that can be burdened now or in the future. In other words, cost is a sacrifice that can reduce cash or order assets to achieve the goal, both at this time and in the future. Costs are described by Prawironegoro and Purwanti (2012), the classification of costs for the fulfillment of objectives is classified into five categories: the classification of costs on the basis of the object of expenditure, the classification of costs based on decision making, the classification of costs on the basis of the relationship of costs with something financed, the classification of costs according to the behavior of costs in relation to changes in the volume of activities, and the classification of costs on the basis of the term of benefit.

2.2 Production Cost

Cost associated with turning raw materials into finished goods are referred to as production costs, according to Sutrisno (2008: 3). The calculation of costs or services needs

to be considered in advance in the calculation system that will be used in calculating production costs for the object of study, so as to reflect the cost of the resources that will be used to produce a product. The scope of production costs contains three elements, including raw materials, direct labor, and factory overhead. Later, these costs will be taken into account per unit of product, making it easier to calculate and make profit figures.

2.3 Costing Target

Supriyono (2002: 152) defines costing target as a system to support the cost reduction process in the development and planning stages of a particular new model product, a full model change, or a minor model change. Samryn (2012) argues that the use of costing target can be justified for the reason that many companies exercise less control over prices as they think, observation is the largest cost component of a design stage product. With costing target made first and then the product designed, the target cost becomes a target that must be achieved.

2.4 Control

Control is a management strategy that aims to accomplish the objectives that have been carried out by regularly contrasting actual performance with predetermined plans (Dunia and Abdullah, 2009). The purpose of controlling is to conform the plan to the realization, and it's used as an improvement if there is a deviation (Hasibuan, 2011).

2.5 Cost Control

Cost control, according to Sondang. S.Giagian (1999: 16), is a systematic process or effort that sets implementation standards aimed at planning, feedback information systems, compares actual implementation with planning, determines and regulates deviations, and makes corrections to improvements in accordance with the established plan, so that goals are achieved effectively and efficiently in the use of costs.

2.6 Principles of Application of TargetCosting

Witjaksono (2006: 159) stated that the process of implementing costing target adheres to the following principles:

a. Price Led Costing

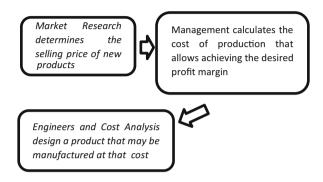
The selling price of products is difficult to determine due to the increasingly ferocious and intense competition. Since the market frequently determines the selling price, the target cost is calculated using the market price.

b. Focus to Customer

The product incorporates the customer's desire or need for quality, cost and functionality while also taking these factors into account when making decisions about its design and how much it will cost to buy the product. For customers, the advantages of the features and functions provided by the product must outweigh the price to acquire them (the selling price from the perspective of the entrepreneur).

c. Focus on product design and process design

During the stages of product design and production process design, Thus, any changes or engineering must be made before the production process, with the aim of reducing costs and reducing the "time-to-market", especially for new products.



Source: Witjaksono (2006:156).

2.7 Constraints Apply Target Costing

According to Witjaksono in Henry (2013: 866) the obstacles that are often complained about by companies that try to implement target costing:

- 1. Conflicts between groups and between group members.
- 2. Employees who experience burnout due to the demands of the job completion target.
- 3. Completion time targets that try to implement costing targets are forced to be increased.
- 4. It is difficult for companies to regulate various factors that determine the success of target costing.

2.8 Benefits Setting Costing Target

Target Costing has excellent benefits for companies, including:

1. Ensuring that profits can be achieved

One of the key benefits of setting target costs is that it can help ensure the expected profits for a particular product can be achieved.

2. Reduce production costs

Target costing can help companies reduce their production costs by shortening product cycle times and removing cycle measures that do not create value for customers. Using the target costing process, you can determine the most efficient way to create a product without sacrificing product quality.

3. Stay focused on the customer

The target costing process can also help companies stay customer-focused, as target costing bases product costs on the customer's expected price. Costing target can also allow customers to purchase products at affordable prices.

2.9 Previous Research

Several researchers have conducted research on the application of target costing, including Faiza (2018) who conducted a study entitled Analysis of the Application of Target Costing in an Effort to Control Production Costs: A Case Study on UD. Sumber Rejeki. In this study, the descriptive analysis method was employed, which entailed describing and explaining the data obtained from UD. Sumber Rejeki, as well as comparing the calculations based on the costing target with the traditional costing method. The study's findings revealed that if the costing target method was used to achieve the company's desired profit target, there was a significant decrease in production costs.

Dedy (2020) conducted a study entitled "Analysis of the Application of Target Costing as a Production Cost Management System Case Study on UD. Winda in Malino, Gowa Regency". This study's goal was to categorize the costs associated with producing furniture at UD. Winda, analyze the target costing approach in order to improve furniture cost efficiency and compare standard costs with the cost target. The findings of this study show that comparing the application of costing target with the company's production cost standards for costing target implementation is far more efficient than analyzing the calculation of costing target.

Malue (2013) with the title Analysis of the Application of Target Costing as a Production Cost Control System at PT. Celebes Mina Pratama. The goal is to compare the cost control system so far used by companies with the target costing method. The method used is comparative quantitative analysis. His research yielded the application of costing targets to PT. Mina Pratama is more efficient when compared to what the company has done so far.

3 Research Methods

3.1 Types of Research Data

The study's used qualitative descriptive data. The qualitative descriptive method, according to Sugiyono (2016: 9), is a research approach based on the philosophy of postpositivism used to examine the condition of natural objects (as opposed to experiments), where the researcher is a key instrument of data collection techniques used in triangulation (combined), data analysis is inductive or qualitative, and qualitative research results emphasize meaning instead of generalization. By carefully examining a single person, a group of people, or an event, qualitative descriptive research aims to describe, explain, and address the issue in more detail. According to Sugiyono (2010:11): "Descriptive research is research conducted to determine the value of a variable independently, either one variable or more without making comparison/connecting between one variables with other variables". In qualitative research, humans are research instruments and the results of their writing are in the form of words or statements that are in accordance with the actual situation.

3.2 Data Sources

The data source used in this study is the primary data source. The researcher should conduct observations and direct interviews with company employees, naming Mr. Dudin

as the company manager (not through intermediaries), and use secondary data sources in the form of raw material cost data, direct labor costs, factory overhead cost data, and other supporting data.

3.3 Research Approach

This research uses an empirical study approach that intends to explain the theory of epistemology, which considers that experience as a source of knowledge. So an empirical thing is based on experience or direct observation.

3.4 Data Collection Methods

In writing this study, the data and information obtained will be collected through the following stages:

1. Observation/observation

Make visits or observations directly on the object of study to obtain the necessary information.

2. Interviews

By holding a direct question and answer session with respondents regarding the existing data in accordance with the problem to be discussed.

3. Documentation.

Data recording is done through recordings. Recordings can be made using an audio tape (recorder), camera (visual). Recorded interviews are made to reinforce accurate news or data.

3.5 Data Analysis Techniques

Data analysis in this study uses the data triangulation technique, namely exploring the truth of certain information using various data sources such as documents, archives, interview results, observation results, or also by interviewing more than one subject who is considered to have different points of view.

According to Moleong (2010: 330), triangulation is a technique of checking the validity of data that utilizes something else outside of that data for checking purposes or as a comparison against that data.

The steps in analyzing the data are:

- 1. Describe the calculation of production costs carried out by the company.
- Analyze the application of production cost control with the target costing method, as follows:
- 3. Determining the gross profit desired by the company.
- 4. Calculating target costing with the formula:

Cost Target = Estimated selling price – Desired profit

- e. Use of cost reduction in target costing to identify ways to save production costs.
- f. To compare the analysis of cost calculations that were calculated using calculations that had been used by the company with the analysis of cost calculations after using cost target calculations.
- g. Draw Conclusions and Provide Suggestions to Be Used as Input for Company Management.

4 Results of Research and Discussion

How Target Costing Can Be Used as a Tool in Controlling Production Costs on CV.CahayaGemilang Teknik

According to Supriyono (2000: 97) cost control is a control that is carried out to assess performance by comparing actual costs with standard costs set so that efficiency can be determined in each department where products are processed.

Based on the results of research that explores information with an informant named Mr. Dudin as the manager of the company CV.Cahaya Gemilang Teknik, it can be seen that the problem that is being experienced by his company is the increase in the cost of production raw materials so that informants have difficulty determining the selling price. As expressed by Mr. Dudin, he said:

"Then yes, the problem is for the selling price here, well, consumers also know the price is so high, the price of the chair that you usually buy is so much. While the cost of the ingredients is also now on the rise, there is just something going up".

Supriyono (2002: 152) defines costing target as a system to support the cost reduction process in the development and planning stages of a particular new model product, a full model change or a minor model change. Samryn (2012) argues that the use of target costing can be done for the reason that many companies exercise less control over prices as they think, observation is the largest cost component of a design stage product. With target costing made first and then the product is designed so that thus the target cost becomes a target that must be achieved.

By followings is the result of an interview with an informat about the principles of implementing the costing target:

a. Price Led Costing

The selling price of products is difficult to determine due to the increasingly ferocious and intense competition. Since the market frequently determines the selling price, the target cost is calculated using the market price.

From the interview results, it was shown that informants would reduce production costs, namely by replacing raw materials that were cheaper, and that was the last resort because informants prioritized quality. Informants switch from expensive to cheaper raw materials if the initial raw materials, when calculated, can no longer provide benefits. As Mr. Dudin explained below:

"It could be reducing or replacing raw materials, for example from wood, there are also cheaper things besides teak wood, for example, I change it but I prioritize quality first."

b. Focus to customer

The customer's will or need for quality, cost, and functionality is simultaneously contained in the product and utilized in decision making regarding the design and calculation of the cost of goods. For customers, the benefits of the features and functions offered by the product must be greater than the cost of obtaining them (aka the selling price from the entrepreneur's point of view).

According of the findings of the interview, the informant received free shipping, implying that consumers received satisfactory shipping service, despite the fact that the price of the goods included \$250,000 in shipping cost. As Mr. Dudin put it:

"From here, so it's already included in the selling price; it already includes a shipping cost of about 250,000; the shipping cost is very close to parungkudacisaat that's all."

c. Focus on product design and process design

Cost control is emphasized during the product design and production process design stages. Thus any changes or engineering must be made before the production process, with the aim of reducing costs and the "time to market", especially for new products.

From the results of the interview, it was obtained that in the design of the production process, the informant had taken into account in detail the price of each material to be used to produce a cabinet or a set of sofas. Each informant product can take a profit of about 20% to 30%. As a result:

"About 20% to 30% per product. But I'd like it to be between 30% and 40% of what I'd like."

Based on the overall results of the interview, it can be seen that the principles of applying target costing have been carried out accidentally by the informant, namely that informants do not know about the theory of costing target, but have naturally applied the principle of costing target. As a result, the benefits of costing target are also realized by themselves, namely: 1. Ensuring that profits can be realized; 2. Lowering production costs; and 3. Remaining focused on customers, which allows customers to buy products at affordable prices in order to compete with other similar businesses.

4.1 Company Overview

CV.Cahaya Gemilang Teknik is a company engaged in the production of furniture that was established in 2020 during the Covid-19 pandemic. Initially, Mr. Dudin was a factory employee, but after about 10 years of work, he decided to stop being an employee and open this furniture business with Mr. Indra and Mr. Hendra with an initial capital of around Rp.50,000,000 as well as the equipment issued by Mr. Indra, but the overall

Description	Amount
Raw Material	Rp. 1.620.000,-
Labor Cost	Rp. 900.000,-
Factory Overhead Cost	Rp. 496.500,-
Marketing Cost	Rp. 250.000,-
Total	Rp. 3.266.500,-

Table 1. Production Cost of 3 Doors of Cabinet

Source: CV. Cahaya Gemilang Teknik

Table 2. Selini 311 Sofa Production Cost

Description	Amount	
Raw material cost	Rp. 2.000.000,-	
Labor Cost	Rp. 900.000,-	
Factory Overhead Cost	Rp. 330.500,-	
Marketing Cost	Rp. 250.000,-	
Total	Rp. 3.480.500,-	

Source: CV. Cahaya Gemilang Teknik

responsibility and management is borne by Mr. Dudin because he also know the basics of making furniture. With the passage of time and the tenacity possessed by the manager of CV.Cahaya Gemilang Teknik, the company is now able to develop by producing more and adding two permanent employees, so that the company now consist of four people. The most widely produced products CV.Cahaya Gemilang Teknik is sofas and cabinets.

4.2 Research Results

4.2.1 Analysis of Production Costs

Production costs incurred by the company are in the form of raw material costs, direct labor costs and factory overhead costs. Brikut is the production cost for 3-door cabinet products and selini sofa 1 set on CV.Cahaya Gemilang Teknik (Tables 1 and 2).

4.2.2 Determination of Profit Target

-The company's expected profit target per unit of a cabinets with three doors is:

Mark Up =
$$\frac{\text{Highest Profit} - \text{Biaya Fixed and Variable Costs}}{\text{Highest Profit}} \times 100\%$$

$$\text{Mark Up} = \frac{4.500.000 - 3.266.500}{4.500.000} \times 100\%$$

$$= 30\%$$

-The company's expected profit target from per sofa unit is:

Mark Up =
$$\frac{4.500.000 - 3.480.500}{4.500.000} \times 100\%$$

= 20%

4.2.3 Analysis of Target Costing Determination

The determination of Costing Target used in this study includes raw material costs, direct labor costs, and factory overhead costs that have been adjusted to the profit to be achieved by the company. According to Blocher et al. (2000; 170) when using the costing target method, the production costs that be seen using the following formula:

Target Costing = selling price – desired profit.

Where the Target Price or selling price of a cabinet with three doors is Rp.4,500,000, and the expected profit is 30%, for sofa products selini the target price is Rp.4,500,000, and the expected profit is 25%, so that:

-Cabinet with three doors

Target Costing =
$$4,500,000 - 30\%$$

= $3,150,000$

-Sofa Selini 311

Target Costing =
$$4,500,000 - 25\%$$

= $3,375,000$

After determining the Target Costing for production costs, the author then provides an alternative as a company consideration in making decisions. The alternative is in accordance with the principle of the costing target method, namely value engineering to meet the target cost in accordance with the profit expected by the company. Thus, the researcher provides input to the owner, namely:

- 1. Direct raw materials and auxiliary materials can be used to save money when cutting and discharging. For example, wood cutting, foam, and plywood adjust to the desired pattern so that the rest of the cutting can be reused on other product raw materials.
- 2. The use of shipping costs can create a delivery PO so that transportation costs are saved in two to three products sent (Tables 3 and 4).

4.3 Discussion

Comparison of enterprise production costs, alternatives and target costing (Tables 5 and 6)

5 Closing

5.1 Conclusion

Based on the results of the analysis, one can be draw to the following conclusions:

Marketing cost

Total

Description	Amount	
Raw material cost	Rp. 1.605.000,-	
Labor cost	Rp. 900.000,-	
Overhead cost	Rp. 496.500,-	

Table 3. Alternative Production Cost of 3-doors of Cabinet of three doors

Source: Data processed from CV.Cahaya Gemilang Teknik

Rp. 175.000,-

Rp. 3.176.500,-

Table 4. Sofa Alternative Production Cost

Description	Amount	
Raw material cost	Rp. 1.605.000,-	
Labor cost	Rp. 900.000,-	
Overhead cost	Rp. 496.500,-	
Marketing cost	Rp. 175.000,-	
Total	Rp. 3.176.500,-	

Source: Data processed from CV.Cahaya Gemilang Teknik

Table 5. Cost comparison by company, alternatives and target costing

Types of Production	Production Costs Company	Production Costs Alternative	Target Costing
3 Door Closet	Rp.3.266.500,-	Rp.3.176.500,-	Rp.3.150.000,-
Serini Sofa 311	Rp.3.480.500,-	Rp.3.405.500,-	Rp.3.375.000,-

Source: Data processed from CV.Cahaya Gemilang Teknik

- 1. Costing Target is the best alternative for CV.Cahaya Gemilang Teknik. The difference in the amount of production costs per unit of cabinets and sofas issued by the company before and after the implementation of the target costing method demonstrates this.
- 2. The use of the costing target method in controlling production costs is a good alternative for reducing costs at CV.Cahaya Gemilang Teknik.
- 3. By using the costing target method, it has proven to have a positive impact on achieving the company's profit. The costing target method is applied by reducing the costs that occur in the production process, so that the company's targeted profit can be achieved.

5.2 Advice

1. For Companies

Product Type	Selling Price Per Unit	Production Cost Before TC	Profit Before TC	Production Cost After TC	Profit After TC
3-door closet	Rp.4.500.000	Rp.3.266.500	Rp.1.233.500	Rp.3.150.000	Rp.1.350.000
SofaSelini 311	Rp.4.500.000	Rp.3.480.500	Rp.1.019.500	Rp.3.375.000	Rp.1.125.000

Table 6. Comparison of Profit Before and After the Implementation of Target Costing

Advice for companies to be able to re-analyze the costs incurred, especially with the costing target method, and pay more attention to costs so as to reduce production costs incurred.

2. Next Researcher

Advice for subsequent researchers is to vary the variables that can be linked to the costing target method.

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