GARMENT PRODUCT COST CALCULATIONS BY METHOD FULL COSTING

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Abstrak

PT. XXX is a large company in the garment industry, which carries out production activities based on orders. The calculation of the cost of products that has been carried out by the company still has the classification of production costs that are not exactly in accordance with the existing theory, therefore it is necessary to have a full costing method to determine an effective product selling price. By conducting this research, we can find out whether there is a difference between the full costing method of calculating the Cost of Product and the calculations that have been done by the company. This study took 4 clothing models to be examined, including the rob shirt, top blouse, trauser elli and mash jumpsuit. The results of previous research that the rob shirt model gained a profit of 10.8%, after using the full costing method it became 41.6%, the previous top blouse model gained a profit of 0.7%, after using the full costing method it became 35.8%, the Elli model The previous trauser made a profit of 24.8%, after using the full costing method it became 88.3%, the previous mash jumpsuit model gained a profit of 1.4%, after using the full costing method it was 36.6%. These results are proven, that using the full costing method the company gets greater profits than before, because the calculated costs for calculating the cost of goods are more detailed and carried out effectively according to the needs for production.

Keywords: Cost of Products, Garment, Full Costing Method, Selling Price.

Introduction

The calculation of the cost of the product is very important for the company in facing business competition with other companies because the correct, correct and correct calculation of the cost of the product will certainly affect the selling price. The benefits of calculating the cost of goods according to Mulyadi (2010) are to find out the selling price of the product, to monitor the realization of the use of production costs, to calculate loss or profit periodically, and to determine the cost of goods sold for finished products and products that are still in the production process. The importance of the cost of production in determining the correct, precise and accurate selling price can help companies compete in market share, because the selling price is one of the factors that influence marketing so that the company's goals can be achieved.

PT. XXX is a company engaged in the garment industry, which carries out production activities based on orders. PT. XXX produces various styles of clothing such as shirts, army jackets, blouses, various police uniforms, TNI uniforms, corpri shirts, pants, and jumpsuits. PT. XXX calculates the cost of product based on company decree and has been running until now; however, there is still an inaccurate classification of production costs and factory overhead costs that are not included in the calculation of the cost of product according to the existing theory. Therefore, order products produced by PT. XXX have a competitive selling price and the profit that has been planned by management can be realized. Of course, the correct and precise calculation of the cost of the product must be carried out.

Production activity in companies is known as cost of goods sold (COGS), commonly known as cost of goods sold (HPP). COGS at PT. XXX are an important part of production, because it will affect sales costs. In the words, COGS can be interpreted as all costs incurred by the company to produce products and services, starting from the stage of the product manufacturing process until the product is ready for distribution. Included in the COGS

component costs include inventory costs, labor costs and overhead costs. The components of these costs are useful for calculating the selling price and also calculating the profit and loss of the product.

The system for calculating the cost of goods at PT. XXX which has been implemented so far only includes the cost of allocating cloth, accessories, transportation load, sewing or services and maintenance. One example is the results of the calculation of model C, the profit the company gets is Rp 22.495 or 24.8% of the cost of the product per pcs. The 24.8% profit can meet all company expenses.

According to Tri Elia Ningsih (2018) with the title Analysis of Cost of Production Determination as the Basis for Determining the Selling Price of Chips at UD Juwadi Java Pagu Kediri. Therefore, it aims to analyze the calculation of the cost of production of crackers carried out by UD Juwadi Jaya, to analyze the calculation of the cost of production of crackers with the full costing method at UD Juwadi Jaya, and to analyze the differences between the full costing methods and the methods used by UD Juwadi Jaya and their effects on selling price. The results of data analysis showed that the calculation of the cost of goods manufactured by UD Juwadi Jaya for crackers was Rp. 8,250.58 analysis results obtained that the calculation of the cost of goods manufactured using the full costing method for crackers is Rp. 8,363.42. So that there is a difference in the calculation of the cost of goods manufactured by the company with the full costing method, that is, there is a difference in the cost of goods manufactured by Rp. 112.84 by determining the selling price through the full costing method of Rp. 12,594. Based on this research it is necessary and important to analyze the cost of goods at PT. XXX to be more effective by using the full costing method. The system for calculating the cost of goods that has been implemented so far only includes the cost of allocating fabrics, accessories, transportation costs, sewing or services and maintenance. One example is the results of the calculation of Elli Trauser's model, the profit the company gets is Rp. 22,495. This profit is obtained from the selling price determined by the company of Rp. 113,000 minus the allocation fee per pcs of Rp. 90,504. With these calculations, it can be seen that the benefits of the Elli Trauser model obtained by the company so far are 24.8% of the cost of the product per pcs.

Based on the above background, it is necessary to use the full costing method to calculate the cost of the product, so that it will be known whether there is a difference between companies with the full costing method. The purpose of this study is to determine the difference between the cost of goods calculation using the full costing method and the calculations that have been carried out by PT. XXX.

Research Method

The place and object under study

As a place in this research is at PT. XXX is a company that produces in the garment industry. The objects that the authors observe are the production, administration and purchase sections.

Data Collection Methods

Collecting data on research obtained from PT. XXX is carried out directly on the object under study, such as the number of sewing operators, materials used, production processes, labor productivity, equipment used in production and auxiliary materials used for 4 clothing models A, B, C, D. The data needed in this research include (1) supporting data, including production systems and products, (2) Basic data, including types and quantities of raw materials needed, records of production costs (raw material costs, labor costs and factory overhead costs), data for calculating COGS by company and sales records.

Data Processing Methods

The stages carried out in this research are:

1. Determining Research Objectives

The purpose of this study was to determine whether there is a difference between the calculation of the cost of the product to determine the selling price that has been done by PT. XXX with calculations using the full costing method.

2. Data Collection

The data needed in this study are data related to the type and quantity of raw materials, labor costs, variable factory overhead costs and fixed factory overhead costs. Data obtained from observations at PT. XXX Garment and interviews with the parties concerned. The data required include:

- a. Supporting data needed for research, namely:
- 1) Production System
- 2) Product Results
- b. The main data of this research are:
- 1) The type and quantity of raw materials required

- 2) Records of production costs
 - a) Cost of raw materials
 - b) Labor Costs
 - c) Factory overhead costs
- c. COGS calculation data by company
- d. Sales Records

Data Processing

The data that has been obtained is then calculated the cost of goods to determine the selling price of the product using the full costing method. The results of the calculation are then analyzed to be used as the basis for determining the cost of goods manufactured, which is the most effective and efficient for the company. Calculation using the full costing method requires data in the form of quantity and cost of raw materials needed, direct and indirect labor costs, fixed factory overhead costs and variable factory overhead costs. The data were obtained from observations at the time of the study. The purpose of this method is to calculate the cost of goods for 4 clothing models exactly as they are available. Determination of raw material costs is obtained from the quantity of raw materials needed for production, then direct labor costs are obtained from UMK Karanganyar Regency, while indirect labor costs are obtained from the average salary of labor costs in garment companies throughout Indonesia. The determination of factory overhead costs is still obtained from research data at PT. XXX, while the variable factory overhead costs are obtained from observations. The data is then added up to find out the cost of product models A, B, C, D.

Framework

The frame of mind is shown in (picture 1):



RESULTS AND DISCUSSION Types and Quantities of Raw Materials Required

1. Main Raw Materials

No	Model	Order	Raw Material	Quantity	Unit
1.	А	1.863 Pcs	Fabric	2.790	Meter
		1.863 Pcs	Yarn	47	Cone
2.	В	7.651 Pcs	Fabric	13.380	Meter
2.		7.651 Pcs	Yarn	245	Cone
3.	С	2.113 Pcs	Fabric	2.640	Meter
		2.113 Pcs	Yarn	152	Cone
4.	D	63.859 Pcs	Fabric	143.680	Meter
		63.859 Pcs	Yarn	5.109	Cone

Sumber : PT. XXX

2. Auxiliary Raw Material

Table 2. Type and Quantity Auxiliary Raw Material					
Model	Order	Raw Material	Quantity	Unit	
	1.863 Pcs	Interlining	177	Yrd	
	1.863 Pcs	Button	15.053	Pcs	
	1.863 Pcs	Size label	1.863	Pcs	
	1.863 Pcs	Main label	1.863	Pcs	
	1.863 Pcs	Duct Tape	112	Rol	
	1.863 Pcs	Packed Polybag	1.863	Pcs	
А	1.863 Pcs	Polybag gaset	30	Pcs	
	1.863 Pcs	Tissue Paper	200	Pcs	
	1.863 Pcs	Stiker	115	Pcs	
	1.863 Pcs	Pin tag	1.863	Pcs	
	1.863 Pcs	Cardboard	29	Pcs	
	1.863 Pcs	Superdry	57	Kg	
	7.651 Pcs	Interlining	62	Yrd	
	7.651 Pcs	Button	28.561	Pcs	
	7.651 Pcs	Elastic	3.477	Yds	
	7.651 Pcs	Renda	3.998	Yrd	
	7.651 Pcs	Size label	7.651	Pcs	
	7.651 Pcs	Main label	7.651	Pcs	
В	7.651 Pcs	Pin tag	7.651	Pcs	
	7.651 Pcs	Packed Polybag	7.651	Pcs	
	7.651 Pcs	Polybag gaset	59	Pcs	
	7.651 Pcs	Tissue Paper	50	Pcs	
	7.651 Pcs	Cardboard	59	Pcs	
	7.651 Pcs	Stiker	345	Pcs	
	7.651 Pcs	Superdry	118	Kg	
	2.113 Pcs	Interlining	256	Yrd	
	2.113 Pcs	Button	4.268	Pcs	
	2.113 Pcs	Hook and Bar	4.226	Pcs	
	2.113 Pcs	Zipper	2.113	Pcs	
	2.113 Pcs	Size label	2.113	Pcs	
	2.113 Pcs	Main label	2.113	Pcs	
С	2.113 Pcs	Pin tag	2.113	Pcs	
	2.113 Pcs	Packed Polybag	2.113	Pcs	
	2.113 Pcs	Polybag gaset	45	Pcs	
	2.113 Pcs	Duct Tape	170	Rol	
	2.113 Pcs	Cardboard	44	Pcs	
	2.113 Pcs	Stiker	174	Pcs	
	2.113 Pcs	Superdry	87	Kg	

	63.859 Pcs	Interlining	21.400	Yrd
	63.859 Pcs	Button	574.731	Pcs
	63.859 Pcs	Elastic	44.701	Yds
	63.859 Pcs	Size label	63.859	Pcs
	63.859 Pcs	Main label	63.859	Pcs
	63.859 Pcs	Hangtag	5.687	Pcs
D	63.859 Pcs	Duct tape	6.318	Rol
	63.859 Pcs	Ppacked polybag	63.859	Pcs
	63.859 Pcs	Polybag gaset	1.669	Pcs
	63.859 Pcs	Cardboard	1.620	Pcs
	63.859 Pcs	Tag pin	63.859	Pcs
	63.859 Pcs	Stiker	7.480	Pcs
	63.859 Pcs	Superdry	4.837	Kg

Production cost records a. Main Raw Material Costs

The main raw materials used for these 4 models are cloth and yarn. The total cost of fabric and yarn for the production of model A is Rp. 39.426.535, model B of Rp. 132.373.012, model C of Rp. 81.417.650, and model D of Rp. 7.283.854.000. The total cost of the main raw material is obtained from the total cost required for fabric plus the total cost required for yarn.

b. Direct Labor Costs (BTKL)

Table 3. Direct Labor Costs (BTKL)

No	Model	Order	Amount TK	BTKL / day	Need of time (day)	Amount BTKL
1.	А	1.863 Pcs	39	Rp. 70.500	2	Rp. 5.499.000
2.	В	7.651 Pcs	40	Rp. 70.500	8	Rp. 22.560.000
3.	С	2.113 Pcs	38	Rp. 70.500	3	Rp. 8.037.000
4.	D	63.859 Pcs	47	Rp. 70.500	67	Rp. 222.004.500

c.Fixed Factory Overhead Costs

No	Model	Vehicle Insurance	Company insurance	Wifi	Electricity	Amount BOP
1.	А	Rp. 185	Rp. 172,5	Rp. 33,6	Rp. 2.275	Rp. 2.666
2.	В	Rp. 4,6	Rp. 690	Rp. 134,6	Rp. 9.103	Rp. 9.932
3.	С	Rp. 18,5	Rp. 259	Rp. 50,4	Rp. 3.413	Rp. 3.741
4.	D	Rp. 155	Rp. 5.780	Rp. 1.100	Rp. 76.241	Rp. 83.276

Fixed factory overhead costs that are charged for clothing model A amounting to Rp. 2.666, model B of Rp. 9.932, model C of Rp. 3.471, and model D of Rp. 83.276

d. Variable Factory Overhead Costs

1) Cost of auxiliary materials

The cost of auxiliary materials that is charged for model A is Rp. 4.374.525, model B of Rp. 72.174.395, model C of Rp. 14.497.540, and model D of Rp. 441.877.779.

2) Indirect Labor costs

The calculation of indirect labor costs charged for model A results in Rp. 5.614.884, model B obtained results of Rp. 21.402.076, model C obtained results of Rp. 8.522.332, and model D of Rp. 188.098.259.

3) Cost of depreciation

The machine depreciation fee charged for each clothing model, namely model A is Rp. 119.600, model B of Rp. 366.960, model C for Rp. 255.920, model D for Rp. 3.324.640.

No	Model	HPP	Selling Price	Advantage	Precen- tage
1.	А				
	a. Company	Rp. 39.600	D= 42.000	Rp. 12.900	41,6%
	b. Full Costing Method	Rp. 31.000	Rp. 43.900	Rp. 14.150	47,5%
2.	В	-		-	
	a. Company	Rp. 45.700	D 46 000	Rp. 12.150	35,8%
	b. Full Costing Method	Rp. 33.850	Rp. 46.000	Rp. 13.300	40,6%
3.	С	1		1	
	a. Company	Rp. 90.504	D 112.000	Rp. 22.495	24,8%
	b. Full Costing Method	Rp. 60.000	Rp. 113.000	Rp. 53.000	88,3%
4.	D	Ĩ		1.	,
	a. Company	Rp. 173.200		Rp. 2.500	1,4%
	b. Full Costing Method	Rp. 128.600	Rp. 175.700	Rp. 47.100	36.6%

1.1 Calculation Results of Company COGS and Full Costing Method Table 5. Calculation Results of Company COGS and Full Costing Method

Analysis and Discussion

Based on the results of the calculations in table 5 above, it can be analysed in relation to company policies with the full costing method. The calculation of the cost of products that the company has done so far by applying company allocation costs such as costs for raw materials for fabrics and accessories, maintenance costs, sewing or service costs, transportation costs, etc. These costs are then processed to determine the cost of good sold and the selling price of the product, without considering in detail, whether this application can meet the needs borne by the company such as labor costs and factory overhead costs, therefore it is necessary to apply an effective method for calculating the price. Principal and selling of a product within the company. The method applied to calculate the cost of product is the full costing method, by including the cost of raw materials, labor costs and factory overhead costs. These costs are processed in detail for the effective calculation of the cost of product. The results of the calculation of the cost of goods per company and the full costing method are as follows.

The analysis of the above calculations can be concluded that by using the full costing method the profits obtained are higher than the profits set by the company. This is because the costs calculated for the cost of the product are more detailed and carried out effectively according to production needs. Calculations in the company of raw material costs, labor costs and factory overhead costs are not calculated according to production needs so that the costs are greater, while with the full costing method the cost of raw materials, labor costs and overhead costs are calculated according to the needs for production so that costs can be more efficient.

Conclusion

Based on the results of research and discussion that has been done at PT.XXX, it can be concluded that there is a difference between the cost of goods determined by the company and the calculation using the full costing method, as follows:

- Cost of product for model A from Rp. 39,600/pcs decreased to Rp.31,000/pcs with the same selling price of Rp.49,900/pcs. Profit obtained from 10.8% to 41.6%. Model B from Rp. 45,700/pcs decreased to Rp. 33,850/pcs with the same selling price of 57,000/pcs. Profits obtained from 0.7% to 35.8%. Model C from Rp. 90,504/pcs decreased to Rp. 60,000/pcs with the same selling price of Rp. 113,000/pcs. Profits obtained from 24.8% to 88.3%. Model D from Rp. 173,200/pcs decreased to Rp 128,600/pcs with the same selling price of Rp. 216,200/pcs. Profits obtained from 1.4% to 36.6%. So that with the full costing method the cost of product can be lower than the cost of goods set by PT.XXX.
- 2. The cost of the product set by the company is greater than the calculation of the cost of the product using the full costing method, because the cost of raw materials, labor costs and factory costs are not calculated according to production needs so that costs are greater, whereas with the costing method raw materials, labor costs and overhead costs are calculated according to the need for production so that costs can be more efficient.

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