# ANALYSIS OF CALCULATION OF PRODUCTION'S COST BY USING JOB ORDER COSTING METHOD AT UD. SIDO MAKMUR 

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#### Abstract

UD Sido Makmur is a business engaged in snack food services in the form of taro chips UD Sido Makmur was established in 2018 and until this year has 23 employees with salary payments every day. This study was conducted to evaluate the role of the Job Order Costing Method in determining the company's cost of goods manufactured. The cost of production must be determined accurately so that the company does not suffer losses. Companies must be able to accumulate production costs, both raw material costs, direct labor costs, and factory overhead costs. This research is a type of descriptive qualitative research where this study looks at the effectiveness of the extent to which the application of the Job Order Costing Method in determining the Cost of Production at UD Sido Makmur. From the results of the research and discussion above, the writer concludes that the method of imposing Factory Overhead Costs by UD Sido Makmur is not appropriate.


## INTRODUCTION

A company basically has a goal to be achieved. The purpose of establishing a business is to get maximum profit with minimal expenses. In order to achieve this goal, the company must try to control production costs. If the company wants to know the amount of costs that have been incurred in producing a product, the company must calculate the cost of production of a product produced. The company must be precise in determining the costs that must be incurred so that the costs incurred in the production process will show the cost of the product itself (Irwanto et all, 2017). The cost of production determines the profit or loss of a company. Cost of production is an important component to assess the level of success of a company. The existence of this information on the cost of production can help the management to make decisions about a product that is produced, both about the selling price and other decisions. If the company is not careful in determining the cost of production, it will result in errors in determining the profit and loss obtained by the company.

According to Mulyadi (2012) the cost of production is the sacrifice of economic resources measured in units of money that occurs or is likely to occur to earn income. Benefits in determining the cost of production, which can help determine the selling price of products, monitor the realization of production costs, calculate periodic profit and loss, determine the cost of inventories of finished products and products in process presented in the balance sheet. Meanwhile, the components of the cost of production include all direct materials, direct labor, and factory overhead costs incurred to produce goods or services. According to Mulyadi (2012), the method of collecting production costs can be divided into two, namely, the job order cost method and the process cost method. Companies that produce based on orders carry out their production processing on the basis of orders (orders) received from parties outside the company. Meanwhile, companies that produce processes/mass carry out their production processes to meet warehouse inventory.

The characteristics of the cost-of-order method include: (1) The company produces various kinds of products according to specifications, (2) The customer and each type of product need to calculate the cost of production individually. (3) Production costs should be classified according to their relationship to the product. (4) Production costs are divided into two groups, namely direct production costs (raw material costs and direct labor costs) and indirect production costs (factory overhead costs). (5) The direct production costs are calculated as the cost of production of certain orders based on the actual costs incurred, while the factory overhead costs are calculated into the cost of goods orders based on the rates determined in advance. (6) The cost of product per unit is calculated when the order is completed. (7) By dividing the total production costs incurred for the order by the number of product units produced in the order concerned. (Bastian Bustami,et.all, 2010)

Someone who owns a business can help develop the capacity of micro, small and medium enterprises (MSMEs). The MSME business can be run well, tough, independent, and increase income and economic structure. Because with the increasing number of companies and jobs, this will reduce the high unemployment, and also improve the structure of the economy, as well as improve the income of every individual in Indonesia. In addition, MSMEs also help reduce poverty gaps and income differences that are owned by each individual in Indonesia. As is the case with UD. Sido Makmur who has provided opportunities for the surrounding community to be able to contribute to the business he founded.

UD. Sido Makmur carries out the production process based on orders from distributors, and occasionally produces for orders from the public or resellers. In the practice of calculating the cost of production, UD Sido Makmur has several shortcomings because in its reporting, UD Sido Makmur does not yet have a clear record of production costs, both raw material costs, labor costs, and factory overhead costs, causing the costs to be accurately identified. which has been issued. In addition, some costs have not been included in the components of production costs, so this affects the calculation of the cost of production. In calculating factory overhead costs, UD Sido Makmur still uses a simple method because the records regarding existing transactions are considered incomplete so that the calculation of the cost of goods manufactured is still inaccurate. To assist in this problem, it is necessary to have an accurate calculation process regarding production costs. The method that the researcher proposes to use by UD Sido Makmur in calculating production costs can use the Job Order Costing method. Because by using this method, business owners can monitor the costs of producing products for each order.

## METHOD

The object of this research is UD. Sido Makmur which is engaged in snack food services in the form of taro chips. UD Sido Makmur was established in 2018 and until this year has 23 employees with salary payments every day. UD Sido Makmur is located at Jl Sampang, Sukorejo Village, Tirtoyudo District, Malang Regency.

## Data Types and Sources

The type of data used in this study is primary data, namely research data obtained directly from the original source (not through intermediaries). The primary data source is information obtained from the owner of UD Sido Makmur. Sources of data obtained through observation, interviews, and studying various literatures and reference books that are used as guidelines for calculating the cost of goods manufactured.

## Data Collection Method

The method of collecting data is by conducting passive observations directly at UD Sido Makmur and taking data and information by means of interviews and direct discussions with related parties, namely the owner, regarding the calculation of the cost of production.

## Analysis Method

The analytical method used in this research is descriptive quantitative analysis, namely by calculating the cost of production that should be, where this method is described in the form of numbers. In this research the author uses quantitative data in the form of production cost data, including raw material costs, labor costs, and factory overhead costs as well as calculating the cost of production using the job order costing method.

## FINDINGS AND DISCUSIONS

This research activity was carried out in several stages including the following:

1. Conduct a pre-survey, to find out a general picture of the business to be researched.
2. Analyzing the problems that will be discussed in this study, namely the calculation of the cost of production
3. Collecting data on production costs consisting of raw material costs, labor costs, and overhead costs
4. Analyzing data regarding the cost of production of sweet potato chips
5. Calculating the cost of goods manufactured using the calculation method commonly used by the owner and the job order costing calculation method.

Fitriani (2014), The formula for calculating the cost of goods manufactured using the job order costing method according to cost accounting is:

Table 1 Job Order Costing Calculation Method

| Informatio | Total Cost |
| :--- | :--- |
| Order production cost: |  |
| Raw material cost | Xxx |
| Direct labor costs | Xxx |
| Factory overhead cost | Xxx |
| Total production cost | Xxx |
| Non-production costs |  |
| Administration and general fee | Xxx |
| Marketing fee | Xxx |
| Total non-production cost | Xxx |
| Total cost of orders | xxx |

Calculation of cost of goods manufactured by company:

Table 2 Raw Material Cost by Company

| Raw <br> Material | Nedds/Month | Price | Total |
| :--- | :---: | :---: | :---: |
| Taro | 2 ton | Rp. 2.500 .00 | Rp. 5.000 .000 |
| Oil | 16 cardbox | Rp. 154.000 | Rp. 2.464.000 |
| Salt | 4 kg | Rp. 13.500 | Rp. 54.000 |
| Sugar | 1 kg | Rp. 12.500 | Rp. 12.500 |
| Msg | 2 kg | Rp. 35.000 | Rp. 70.000 |
|  |  |  | Rp. 7.600 .500 |

Tabel 3 Labor costs by company

| Type of Work | Number of Employees | Salary in a day | Salary total |
| :--- | :--- | :--- | :--- |
| Stripping | 4 | Rp. 60.000 | Rp. 240.000 |
| Chopping | 4 | Rp. 60.000 | Rp. 240.000 |
| Frying | 4 | Rp. 60.000 | Rp. 240.000 |
| Packing | 4 | Rp. 60.000 | Rp. 240.000 |
| Fireplace | 3 | Rp. 60.000 | Rp. 180.000 |
| Delivery | 4 | Rp. 60.000 | Rp. 240.000 |
|  |  |  |  |
|  |  |  | Rp. 1.380 .000 |

Table 4 Marketing Costs by company

| Information | Need <br> Orders/Week | Need <br> Orders/Month | Unit price | Total Cost |
| :---: | :---: | :---: | :---: | :---: |
| Plastic <br> 3kg | 84 pcs | 336 | Rp. 28.000 | Rp. 9.408.000 |
| Rp. 9.408.000 |  |  |  |  |

Tabel 5 Miscellaneous expense

| Information | Cost/Month |
| :---: | :---: |
| Water | Rp. 15.000 |
| Electricity | Rp. 200.000 |
| Vehicle | Rp. 500.000 |
| TOTAL | Rp. 715.000 |

Table 6 Calculation of the Cost of Production of Chips by company

| Information | Total Cost |
| :--- | :--- |
| Raw Material Cost | Rp. 7.600 .500 |
| Labor costs | Rp. 1.380 .000 |
| Marketing Fee | Rp. 9.408 .000 |
| Miscellaneous expense | Rp. 715.000 |
| Total Cost of Production per Month | Rp. 19.103 .500 |
| Order Quantity | 300 |
| Total Cost of Production Per Fruit | Rp. 63.678 |

Calculation of the cost of production according to the Job order costing method:

Table 7 Raw Material Cost

| Raw <br> material | Needs/Month | Price | Total |
| :---: | :---: | :---: | :---: |
| Taro | 2 ton | Rp. 2.500.00 | Rp. 5.000.000 |
| Oil | 16 Cardbox | Rp. 154.000 | Rp. 2.464.000 |
| Salt | 4 kg | Rp. 13.500 | Rp. 54.000 |
| Sugar | 1 kg | Rp. 12.500 | Rp. 12.500 |
| Msg | 2 kg | Rp. 35.000 | Rp. 70.000 |
|  |  |  |  |
|  |  |  | Rp. 7.600.500 |

Table 8 Labor costs by company

| Type of work | Number of <br> employee | Salary/month | Total <br> production | Cost/ <br> Pack | Total Salary |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stripping | 4 | Rp. 240.000 | 336 | Rp. 2.857 | Rp. 857.100 |
| Chopping | 4 | Rp. 240.000 | 336 | Rp. 2.857 | Rp. 857.100 |
| Frying | 4 | Rp. 240.000 | 336 | Rp. 2.857 | Rp. 857.100 |
| Packing | 4 | Rp. 240.000 | 336 | Rp. 2.857 | Rp. 857.100 |
| Fireplace | 3 | Rp. 180.000 | 336 | Rp. 1.607 | Rp. 482.100 |
| Delivery | 4 | Rp. 240.000 | 336 | Rp. 2.857 | Rp. 857.100 |
|  |  |  |  |  |  |
|  |  |  |  | Rp. $\mathbf{1 5 . 8 9 2}$ | Rp. 4.767.600 |

Cost/Pack $=$ (number of employees x monthly salary): total production
Total Salary $=$ cost $/$ pack x order quantity
The calculation of the allocation of costs charged to the chip's product is:
$\xrightarrow{\text { order quantity }} \times 100 \%=\frac{300}{336} \times 100 \%=89 \%$
total production

Table 9 Miscellaneous expense

| Information | Cost/month | Cost (89\%) |
| :---: | :---: | :---: |
| Water | Rp. 15.000 | Rp. 13.350 |
| Electricity | Rp. 200.000 | Rp. 178.000 |
| Vehicle | Rp. 500.000 | Rp. 445.000 |
|  |  |  |
|  | Rp. $\mathbf{7 1 5 . 0 0 0}$ | Rp. $\mathbf{6 3 6 . 3 5 0}$ |

Table 10 Equipment Maintenance Fee

| Information | Total Machines | Cost Machines | Cost (89\%) |
| :---: | :---: | :---: | :---: |
| Wok | 5 | Rp. 100.000 | Rp. 89.000 |
| Stove | 5 | Rp. 150.000 | Rp. 133.500 |
| submissive | 4 | Rp. 150.000 | Rp. 133.500 |
|  |  |  | Rp. 356.000 |

Tabel 11 Equipment Depreciation Cost

| Information | Total Machines | acquisition cost | Residual value | Economic value | Depreciation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | In a year | In month | In month (89\%) |
| Wajan | 5 | Rp. 3.294.995 | 0 | 5thn | 100.000 | 12.500 | 11.125 |
| Kompor | 5 | Rp. 2.250.000 | 0 | 7thn | 150.000 | 20.000 | 17.800 |
| Pemasrah | 4 | Rp. 600.000 | 0 | 6thn | 100.000 | 15.000 | 13.350 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 42.275 |

Table 12 Factory Overhead Calculation

| Information | Total Cost |
| :---: | :---: |
| Miscellaneous expense | Rp. 636.350 |
| Equipment Maintenance Fee | Rp. 356.000 |
| Equipment Depreciation Cost | Rp. 42.275 |
|  |  |
| Total Overhead Cost | Rp.1.034.625 |

Table 13 Marketing Cost

| Information | Total Production | Unit Price | Total Cost |
| :---: | :---: | :---: | :---: |
| Plastic 3kg | 336 | Rp. 28.000 | Rp. 8.400.000 |
|  |  |  |  |
|  |  |  | Rp. 8.400.000 |

Table 14 Calculation using Job Order Costing

| Information | Total Cost |
| :--- | :---: |
| Production cost : |  |
| Raw materia cost | Rp. 7.600 .500 |
| Labor cost | Rp. 4.767.600 |
| Overhead cost | Rp. 1.034 .625 |
| Total Production Cost | Rp. 13.402.725 |
| Non-Production Costs: |  |
| Marketing Fee | Rp. 8.400.000 |
| Total Non-Production Cost | Rp. 8.400.000 |
| Total Cost of Production | Rp. 21.802 .725 |
| Order Quantity | 300 |
| Total Cost of Production Per Fruit | Rp. 72.675 |

Table 15 Comparison of Calculation of Cost of Production by Factory Method and Monthly Job Order Costing Method

| Information | Cost Calculation |  | Difference |
| :--- | :--- | :---: | :---: |
|  | Factory | Job Order Costing |  |
| Raw Material Cost | Rp. 7.600 .500 | Rp. 7.600 .500 | 0 |
| Labor costs | Rp. 1.380 .000 | Rp. 4.767 .600 | Rp. 3.387.600 |
| Overhead Cost | 0 | Rp. 1.034.625 | Rp. 1.034.625 |
| Marketing Fee | Rp. 9.408.000 | Rp. 8.400.000 | Rp.1.008.000 |
| Miscellaneous expense | Rp. 715.000 | 0 | Rp. 715.000 |
| Cost of Order | Rp. 19.103 .500 | Rp. 21.802.725 | Rp. 2.699.225 |
| Cost of orders/pieces <br> Per month | Rp. 63.678 | Rp. 72.675 | Rp. 8.997 |

In calculating the cost of production, UD Sido Makmur still uses a simple calculation, only calculating the cost of raw materials, labor costs, electricity costs, telephone costs, speedy costs, and marketing costs so that the calculations are less accurate. Based on the calculation of the cost of production using the job order costing method, it is Rp. 21,802,725. The cost of production using the job order costing method is higher than the calculation according to the company which is only Rp. 19,103,500, the difference is Rp. 2,699,225. The difference is emphasized on direct labor costs that have been proportioned in the job order costing method, while the company does not calculate it based on proportion. There is a difference in the calculation of the cost of the order per month, which is Rp. 8,997. The calculation of the cost of orders according to UD Sido Makmur is Rp. 129,905, while the calculation of the cost of orders according to the calculation of the job order costing method is higher, which is Rp. 231,200. these results prove that the job order costing method provides a more accurate value than the method previously used by UD Sido Makmur

## CONCLUSION

According on the results of the analysis of the calculation of the job order costing method, conclusions can be drawn, among others:

1. In calculating the cost of production, UD Sido Makmur still uses a simple calculation, only calculating the cost of raw materials, labor costs, electricity costs, telephone costs, speedy costs, and marketing costs so that the calculations are less accurate.
2. Based on the calculation of the cost of production using the job order costing method, which is Rp. 21,802,725. The cost of production using the job order costing method is higher than the calculation according to the company which is only Rp. 19,103,500, the difference is Rp. 2,699,225. The difference is emphasized on direct labor costs that have been proportioned in the job order costing method, while the company does not calculate
it based on proportion.
3. There is a difference in the calculation of the cost of the order per month, which is Rp. 8,997. The calculation of the cost of orders according to UD Sido Makmur is Rp. 129,905, while the calculation of the cost of orders according to the calculation of the job order costing method is higher, which is Rp. 231,200.

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