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Analysis Of The Calculation Of The Cost Of Production (Case Study On Millie Chips Msmes)

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Abstract: "Analysis of the Cost of Goods Production (Case Study of UMKM Millie Chips), supervisors Andi Marlinah and Nur Rachma This research aims to (a) determine the calculation of the cost of production at Millie Chips MSMEs. (b) to determine the net profit obtained from sales using a predetermined method. This research collects data personally by researchers by going directly into the field and trying to collect the necessary information and data. The type of research is qualitative. This research evaluates two calculation methods, namely the full costing method and the variable costing method, as well as the comparison between the two in determining product selling prices. Based on the research results, it shows that there are significant differences in calculating the cost of production and net profit between the full costing and variable costing methods. By using the full costing method, MSMEs can determine a more competitive selling price, while the variable costing method provides a clearer picture of the contribution of each variable cost to profits.

Keywords: Cost of Production; Full costing method; Variable costing method; MSMEs; selling price determination;

A. Introduction

Currently, there is a sharp increase in economic growth, especially in Indonesia. The acceleration of economic growth encourages the expansion of development in various fields with the aim of improving the welfare of the people of Indonesia. The emergence of commercial prospects caused by the free market is an indication of the development of Indonesia's economy. When entering the free market and facing competition in a tighter business environment, entrepreneurs must have a proper survival plan in place to keep their companies afloat. Competition between industries will be increasingly fierce due to

the increasing number of industrial companies growing, starting from those engaged in trade and manufacturing. In the development of Human Resources (HR) for small producers, the Government carries out policies to prioritize economic growth based on objects. Micro, Small and Medium Enterprises (MSMEs) are on the scale of the manufacturing sector that provide job opportunities for the local community. It is also an effort that can help small-scale communities achieve economic growth and improve their standard of living. (Nawawi et al., 2023).



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Micro, Small, and Medium Enterprises (MSMEs) play an important role in the economy, becoming the backbone for local and national economic growth. MSMEs are often faced with unique challenges, one of which is related to production costs. A deep understanding of the cost of production is the key to success for MSMEs in maintaining their competitiveness, efficiency, and profitability (Harefa et al., 2022). In this context, the application of the right cost of production method can help MSMEs to detail and manage production costs more effectively, allowing them to make strategic decisions related to selling price determination. By combining expertise in production cost management and smart pricing strategies, MSMEs can strengthen their position in the market, provide added value for consumers, and contribute significantly to overall economic growth.

Cost of production is the direct and indirect costs incurred by a company for a production process with a certain period. The cost of production is a very important element in a company in the process of manufacturing a product (Harjanti et al., 2021). Determining the cost of goods is how to calculate the cost of a service or product which can be done by including all production costs or only including the variable production cost element. The cost of production has two methods, namely *the full costing method* and *the variable costing method*. *Full costing* is a method in determining the cost of production by taking into account all costs in the production process, such as direct raw material costs, direct labor costs, and *variable factory overhead costs* and *factory overhead costs* as important indicators of profit in calculating the cost of production (COGS). While *Variable Costing* is a method that only takes into account production costs that change according to the volume of business activities, *factory overhead costs* are not taken into account as production costs but

as period costs that will be charged in the current income statement (Haliza et al., 2023).

Research conducted by (Ifana & Yuliarini, 2020) analyzed the application of *the variable costing* method in determining the cost of production in MSME actors (a case study on alpujabar MSMEs that are members of the Putat Jaya batik house) obtained results where determining the cost of production using *the variable costing method* is more effective because it includes more accurate information.

(Anggreani & Adnyana, 2020) also conducted a study entitled Determining the Cost of Production with the Full Costing Method as the Basis for Determining the Selling Price of SMEs Knowing An Anugrah Then the results of the research suggest that the SMEs use *the full costing* method because the calculation results are more precise and accurate so that they can provide benefits both now and in the future for business development because the method includes all elements of production costs.

The calculation of the cost of production is the most important step needed by a company to determine the selling price of a product. Important things in the calculation of the cost of production are the cost of raw materials, labor costs, and factory overhead costs. These three factors must be calculated correctly. An accurate selling price is of course the result of an accurate calculation of the cost of production.

In a business world, it is necessary to have a goal, and maximizing profits is one of them. A company's profit margin can be a benchmark or an indicator of its progress. Mistakes in determining the cost of production can result in higher or lower selling prices (zulfadli, 2019). Accuracy is very necessary in calculating the cost of production (COGS), therefore a company needs to use the calculation of the cost of production correctly to determine the right

selling price and obtain the expected profit. One of the aspects that has a high influence on selling prices is the cost of production.

Millie Chips MSMEs, which are run by Mrs. Siska Puspita, have been established since 2016 and are located in Makassar City. In calculating the cost of production to find out the net profit, the company still uses a simple method and has not calculated it with a method according to accounting by

recording production costs in detail. In this case, the researcher needs to know the calculation of the cost of production in order to determine the maximum selling price and net profit obtained by the business.

Based on the background of the above problem, the author is interested in conducting research on "**Analysis of Cost of Production Calculation (Case Study on Millie Chips MSMEs)**".

MINDSET

Figure 1. Mindset



B. Materials and Methods

The object or location of this research is the Millie Chips MSME Business which is located at Jalan Jipang Raya, Bumi Palem

Complex Block R4, Rappocicni District, Makassar City. The duration of this study lasted for ± 1 month. In this study, data was

collected personally by researchers by collecting data from various sources, also focusing on existing phenomena and trying to collect the necessary information and data.

Company Facilities

Millie Chips MSMEs have several assets and facilities in making chips. The Millie Chips MSME facilities are as follows:

1. Chip Production House, The chip production house is used as a place for the chip processing process and this chip production house is used as a storage place for machines and tools used during the production process.
2. Transportation, In carrying out activities during the production process, MSMEs often use transportation in the form of cars to pick up raw materials and deliver orders to customers.
3. The grater machine, used as a tool to grate the sweet potato into a finer one.
4. A 2-burner stove, functions as a tool for boiling shredded sweet potatoes and also as a tool for frying if the raw materials are ready to be fried.
5. Plastic Mold, functions as a tool to print sweet potatoes so that they are flatter than they are.
6. Sarlon nets, used as a tool to dry sweet potatoes that have been boiled and molded.
7. Basin, a storage place for sweet potatoes that have been produced so that they are in the form of thin chips that are ready to be fried.
8. Frying strainer, used to drain the oil after frying the raw materials of chips.

9. Sealer, a very important tool used in the production process to maintain the quality of chips.

Production

The product produced by Millie Chips is a snack made from sweet potatoes. Meanwhile, the additional ingredients are cooking oil and seasonings. The production process generally takes 3 to 5 days to produce dried sweet potato chips that have not been fried. The manufacturing process is:

1. First, grate the peeled sweet potato then wash it thoroughly and then drain it,
2. Then the sweet potato is molded using a special plastic dough, after which the dough is steamed until cooked
3. The cooked dough is then dried in the sun until dry and then cut into small pieces.
4. After the chips are cut into small scissors, then the chips are dried again for \pm 1 hour.
5. Pieces of chips that have been sun-dried are fried in oil and then drained
6. The chips that have been fried are then sprinkled with spices according to taste, after which the chips are ready to be packaged.

Data Presentation

Based on the research that the author has conducted on Millie Chips MSMEs obtained from the results of interviews, the costs incurred in the production process are several costs, namely:

1. Raw material cost
2. TKL Fee
3. *Factory overhead costs*

The following is the data for the calculation of the cost of production of Millie Chips:

Table 1. Production Cost Elements

No	Elements of production costs	Sum
1	Grating Machine	Rp. 500.000,00
2	Kompor	Rp. 1.000.000,00
3	Sealer	Rp. 240.000,00
4	Plastic Mold	Rp. 30.000,00
5	Sieve	Rp. 110.000,00
6	Jumbo Basin	Rp. 450.000,00
7	Jaring Sarlon	Rp. 75.000,00
8	Sweet potato peeler	Rp. 50.000,00
9	Spatula	Rp. 155.000,00
10	Employee Wages	Rp. 150.000,00
11	Electricity	Rp. 600.000,00
12	Water	Rp. 150.000,00
	Total Cost	Rp. 3.510.00,00

Source: (Results of the interview with the owner of Millie Chips MSMEs)

As can be seen in table 4.1 above, the production cost incurred by Millie Chips MSMEs is Rp 3,510,000.00. These costs are all total cost prices that are included in the production process such as raw material costs, labor costs and factory *overhead* costs, but do not include all other costs in detail.

1. Analysis of Cost Elements of Cost of Production

Determining the cost of production means identifying the three things that are

the cost elements, namely the cost of raw materials, direct labor costs and *factory overhead* costs. The following is a detailed data on the cost of production:

2. Analysis of Raw Material Cost Calculation

The details of the cost of raw materials used during the production process of Millie chips for 1 month can be seen in the following table:

Table 2. Raw Material Costs as of November 2023 Millie Chips

No	Information	Price	Sum	Total
BAHAN BAKU				
1	Ubi	Rp 200,000.00	1 karung	Rp 200,000.00
2	Cooking oil	Rp 36,000.00	6ltr	Rp 255,000.00
3	Seasoning	Rp 184,000.00	5 box	Rp 920,000.00
TOTAL RAW MATERIALS				Rp 1,375,000.00

Source: Millie Chips MSMEs (Data processed by researchers)

We can see in table 2. Above that the cost of raw materials used for a month is Rp 1,375,000.00 with the use of raw materials as recorded in the table, Millie chips can produce ±350 packs of chips

measuring 50g/pack. This cost is the cost of raw materials that can change at any time depending on price conditions in the market and consumer buying interest

3. Analysis of Direct Labor Cost Calculation

Table 3. Labor Costs Per November 2023 Millie Chips

No	Information	Price	Sum	Total
DIRECT LABOR COSTS				
1	Employees (2 people)	Rp 150,000.00	Minggu	Rp 1,200,000.00
TOTAL LABOR COSTS				Rp 1,200,000.00

Source : MSME Millie Chips (Data processed by researchers)

As for what we can see in table 4.3 above, the cost incurred to pay Millie Chips workers/employees is Rp 1,200,00.00 for each month. Each of these workers/employees gets Rp 150,000.00 / week. So a salary for two people is required Rp.600,000 /month.

related to the manufacture of a particular product, but are necessary to run the overall operation of a factory or production facility. These *overhead* costs are usually costs that are often incalculable in determining the cost of production. The following are the *factory overhead* costs used in Millie Chips MSMEs:

4. Analysis of Factory Overhead Cost Calculation

Factory *overhead* costs are production costs that are not directly

Table 1. Millie Chips Factory Overhead Costs for November 2023

No	Information	Price	Sum	Total
FACTORY OVERHEAD COSTS				
1	<i>Standing Pouch</i>	Rp 110,000.00	4pax	Rp 440,000.00
2	Plastic kiloan	RP 80,000.00	1pax	Rp 80,000.00
3	Brand stickers	RP 16,000.00	6roll	Rp 96,000.00

4	Flavor stickers	RP 16,000.00	5roll	Rp 80,000.00
5	Plastic bag	RP 13,000.00	2pax	Rp 26,000.00
6	Water			Rp 145,000.00
7	Electricity			Rp 600,000.00
TOTAL FACTORY OVERHEAD COSTS				Rp 1,467,000.00

Source : MSME Millie Chips (Data processed by researchers)

As we can see in table 4.4 above, Millie Chips MSMEs use factory overhead costs of IDR 1,467,000 per month. The cost included in the details of the factory overhead cost is the cost of a standing pouch of Rp 110,000/pax and for those used in one month ±4 pax, the monthly use of standing pouches is Rp 440,000. The use of kilos of plastic for packing costs Rp 80,000/pax every month. Millie Chips also uses brand stickers for packaging for Rp 16,000/roll and in a month is used approximately 6 rolls, the total cost for the use of brand stickers is Rp 96,000 in addition to the use of brand stickers Millie Chips also uses flavor stickers to make it easier for consumers to recognize what flavors exist, the price of flavor stickers /

senila rolls is Rp 16,000 and what is needed in a month 5 rolls, the cost for flavor stickers per month is Rp 80,000. There is also the use of plastic bags worth Rp 13,000/pax and in a month 2pax is used, so the cost used per month is Rp 26,000. Meanwhile, the cost of electricity that has been used is Rp 600,000 and the cost used for water is Rp 145,000.

To find out the depreciation cost of the machine, the first step is to know the acquisition price and the estimated economic life of the equipment used. This is done using the straight line method, the formula is depreciation price divided by economic life. The types and ages of the equipment used are as follow ;

Table 5. Types and Lifespans of Millie Chips Production Equipment

No	Machine / Tool Type	Age	Price
1	Grating Machine	6 Years	Rp 950,000.00
2	Kompor	5 Years	Rp 1,000,000.00
3	Sealer	3 Years	Rp 640,000.00
4	Washbasin	5 Years	Rp 225,000.00
5	Frying Strainer	2 Years	Rp 150,000.00
6	Jaring Sarlon	5 Years	Rp 75,000.00
TOTAL PRICE			Rp 3,040,000.00

Source : MSME Millie Chips (Data processed by researchers)

From the results of the interview about the type and age of Millie Chips production equipment conveyed by Mrs. Siska Puspita as follows:

"Each equipment used by Millie Chips has a different lifespan or shrinkage of production tools, even though the production tools used to produce Millie

chips are not too many and of course all have their own shrinkage periods."

The following is the depreciation value of equipment without using residue is as follows:

Table 6. Fixed Plant Overhead Depreciation Costs

1.	Depreciation Cost of Grating Machine			
	Procurement price	Rp 950,000.00		
	Economical life	6 Tahun		
	Depreciation		Rp 158,000.00	
2.	Stove Depreciation Cost			
	Procurement price	Rp 1,000,000.00		
	Economical life	5 Tahun		
	Depreciation		Rp 200,000.00	
3.	Sealer Depreciation Cost			
	Procurement price	Rp 640,000.00		
	Economical life	3 Tahun		
	Depreciation		Rp 213,000.00	
4.	Basin Depreciation Cost			
	Procurement price	Rp 225,000.00		
	Economic age	5 Tahun		
	Depreciation		Rp 45,000.00	
5.	Fryer Strainer Depreciation Cost			
	Procurement price	Rp 150,000.00		
	Economical life	2 Tahun		
	Depreciation		Rp 75,000.00	
6.	Sarlon Net Depreciation Cost			
	Procurement price	Rp 75,000.00		
	Economical life	5 Tahun		
	Depreciation		Rp 15,000.00	
	Total depreciation costs per year			Rp 706,000.00
	Total depreciation costs per year			Rp 58,833.00

Source : MSME Millie Chips (Data processed by researchers)

Based on table 4.6 in accordance with what has been calculated by the researcher, the total depreciation of all machines per

year is Rp 706,000.00 where the monthly depreciation cost is Rp 58,833.00. Assuming an average per day at all production sites

that produce finished products around 350 packs of chips per month.

5. Cost of Production Cost Calculation

After the identification of production costs, then an analysis of the cost of production cost data is analyzed. The following is an analysis of the calculation of the cost of production.

1. Calculation of Cost of Production According to Millie Chips MSMEs

The calculation of the cost of production carried out by Millie Chips MSMEs is very simple and manual. The calculation of the cost of production by Millie Chips MSMEs does not have a complete record that covers all costs used in the production process. The following is the calculation of the cost of production carried out by Millie Chips MSMEs which is presented in the following table:

Table 7. Calculation of Cost of Production in November 2023 According to Millie Chips MSMEs

No	Information	Unit Price	Number of Needs	Total Fees
1	Raw Materials			
	Ubi	Rp 10.000,00	20kg	Rp 200.000,00
	Cooking oil	Rp 36.000,00	6 liter	Rp 225.000,00
	Seasoning	Rp 184.000,00	5 dus	Rp 920.000,00
2	Direct Labor			
	Employees (2 people)	Rp 600.000,00	4 Minggu	Rp 1.200.000,00
3	Factory overhead costs			
	<i>Standing Pouch</i>	Rp 110.000,00	4 pax	Rp 440.000,00
Total Production Cost				Rp 2.985.000,00
Number of Chips Production per Month				350
Cost of production of chips per pack				Rp 8.582.00

Source : MSME Millie Chips (Data processed by researchers)

From table 7 above, we can find out the total production cost of Millie Chips MSMEs of Rp 2,985,000.00 per month and Millie Chips MSMEs produce approximately 350 packs every month so that the cost of production obtained in the calculation according to Millie Chips MSMEs is Rp 8,528,- per pack. The result of the cost of production is obtained by dividing the total cost by the amount of production. In table 4.7, we can also see that Millie Chips MSMEs still use simple calculations.

2. Calculation of Cost of Production with Full Costing Method

The *full costing method* is an approach to calculating the cost of production that includes all production costs, including direct raw materials, direct labor, and factory overhead costs (variable and fixed). Factory overhead costs are allocated to product units on a specific allocation basis. This ensures that all production costs are considered in setting the selling price of the product. The following is a table for calculating the production cost of Millie Chips MSMEs using *the full costing method*.

Table 8. Calculation of Cost of Production in November 2023 Full Costing Method for MSME Millie Chips

Information	Unit Price	Number of Needs	Total Fees
Raw Materials			
Ubi	Rp 10.000,00	20kg	Rp 200.000,00
Cooking oil	Rp 36.000,00	6 liter	Rp 225.000,00
Seasoning	Rp 184.000,00	5 dus	Rp 920.000,00
Total Raw Material Cost			Rp 1.345.000,00
Direct Labor			
Employees (2 people)	Rp 600.000,00	4 Minggu	Rp 1.200.000,00
Total Direct Labor Costs			Rp 1.200.000,00
Factory Overhead Costs			
Variable Plant Overhead Costs			
<i>Standing Pouch</i>	Rp 110.000,00	4pax	Rp 440.000,00
Plastic kiloan	Rp 80.000,00	1pax	Rp 80.000,00
Brand stickers	Rp 16.000,00	6roll	Rp 96.000,00
Flavor stickers	Rp 16.000,00	5roll	Rp 80.000,00
Plastic bag	Rp 13.000,00	2pax	Rp 26.000,00
Water			Rp 145.000,00
Electricity			Rp 400.000,00
Total Variable Plant Overhead Cost			Rp 1.467.000,00
Fixed Factory Overhead Costs			
Machine Depreciation Cost			Rp 58.833,00
Total Fixed Factory Overhead Costs			Rp 58.833,00
Total Factory Overhead Costs			Rp 1.525.833,00
Total Production Cost			Rp 4.070.833,00
Number of Chips Production Per Month			350 bungkus
Cost of Chips Production per Pack			Rp 11.565,00

Source : MSME Millie Chips (Data processed by researchers)

In table 8 above, the calculation of the cost of production uses *the full costing*

method to produce 350 packs of chips at Millie Chips MSMEs by incurring a

production cost of IDR 4,070,833 with a cost of production of IDR 11,565 per pack. Using the *full costing* method, the costs generated are higher than the costs calculated by Millie Chips MSMEs. There is a large difference between the results of the calculation carried out by Millie Chips MSMEs and the calculation using the *full costing* method of Rp 3,037 per pack. This happens because Millie Chips MSMEs do not calculate all raw material costs and overall factory *overhead* costs.

3. Calculation of Cost of Production Using the Variable Costing Method

The variable costing method only includes direct raw material costs, direct labor, and variable overhead costs in the calculation of the cost of production. Fixed overhead costs are not included. In Millie Chips MSMEs, we will also use the *variable costing* method to calculate the cost of production.

Table 9. Calculation of Cost of Production in November 2023 Millie Chips MSME Costing Variable Method

No	Information	Unit Price	Number of Needs	Total Fees
1	Bahan Baku			
	Ubi	Rp 10.000,00	20kg	Rp 200.000,00
	Cooking oil	Rp 36.000,00	6 liter	Rp 225.000,00
	Seasoning	Rp 184.000,00	5 dus	Rp 920.000,00
	Total Raw Material Cost			Rp 1.345.000,00
2	Direct Labor			
	Employees (2 people)	Rp 600.000,00	4 Minggu	Rp 1.200.000,00
	Total Direct Labor Costs			Rp 1.200.000,00
3	Factory Overhead Costs			
	Variable Plant Overhead Costs			
	<i>Standing Pouch</i>	Rp 110.000,00	4pax	Rp 440.000,00
	Plastic kiloan	Rp 80.000,00	1pax	Rp 80.000,00
	Brand stickers	Rp 16.000,00	6roll	Rp 96.000,00
	Flavor stickers	Rp 16.000,00	5roll	Rp 80.000,00
	Plastic bag	Rp 13.000,00	2pax	Rp 26.000,00
	LPG			Rp 200.000,00
	Electricity			Rp 400.000,00
	Total Variable Plant Overhead Cost			Rp 1.467.000,00
	Total Production Cost			Rp 4.012.000,00
	Monthly Production Amount			350
	Cost of Production Per Pack			Rp 11.462,00

Source : MSME Millie Chips (Data processed by researchers)

In table 9 above, the cost of production of Millie Chips MSMEs with the *variable costing* method is Rp 11,462,-

where the price is obtained from the cost of raw materials, direct labor and factory *overhead* costs. So that there is a difference

between the *full costing* method and *variable costing* of Rp 103,- and the calculation of the company difference of Rp 2,934,-

by Millie Chips MSMEs with the *full costing* method and the *variable costing method*, of course, there is a difference between the three. The following is a comparison table of the calculation of the cost of production.

Comparison of Cost of Production Calculation

Comparison of the calculation of the cost of production between those calculated

Table 10 Comparison of Cost of Production Calculations Applied by Millie Chips, Full Costing and Variable Costing Methods in November 2023

No	Types of Production Costs	Calculation Method		
		Millie Chips	Full Costing	Variabel Costing
1	Raw Material Cost	Rp 1.345.000,00	Rp 1.345.000,00	Rp 1.345.000,00
2	Labor Costs	Rp 1.200.000,00	Rp 1.200.000,00	Rp 1.200.000,00
3	Factory <i>overhead</i> costs	Rp 440.000,00	Rp 1.525.833,00	Rp 1.507.000,00
	Total Production	Rp 2.985.000,00	Rp 4.070.833,00	Rp 4.052.000,00
	Production Quantity	350	350	350
	Cost of Production Per Pack	RP 8.528,00	Rp 11.565,00	Rp 11.462,00

Source : MSME Millie Chips (Data processed by researchers)

Based on table 10 above, it can be assessed that from the comparison of the cost of production using the calculation of Millie Chips MSMEs, the *full costing method*, the *variable costing method*, there is a difference in the value of the cost of production. Based on the calculation of the cost of production, according to MSMEs, Millie Chips gets the lowest figure compared to the *full costing* and *variable costing methods*. This is because business owners do not know the special calculation for the cost of production. Millie Chips MSME owners do not include depreciation costs and *factory overhead*

costs. The difference in costs can be seen in the calculation of the cost of production in November 2023. Where the calculation of the cost of production with the calculation of Millie Chips MSMEs of Rp 2,985,000 is lower than the *full costing* and *variable costing* methods which produce Rp 4,070,833 and Rp 4,052,000 respectively. And there is a difference in the cost of production of Rp 1,085,833 and Rp 1,067,000. It can also be seen from the results of the cost of production of packaged chips where the calculation of the cost of production of Millie Chips MSMEs of Rp 8,528 per pack is lower

than the *full costing method* with a value of Rp 11,565 and *variable costing* with a value of Rp 11,462 which there is a difference in the value of the cost of production per pack of Rp 3,037 and Rp 2,934 This difference occurs because the Millie Chips MSME method does not

calculate all raw material costs and *factory overhead* costs. Meanwhile, the difference between *full costing* and *variable costing* is due to the fact that *variable costing* does not calculate the overhead cost of a fixed factory

Tabel 11. calculation of net profit/loss carried out by Millie Chips MSMEs

Millie Chips MSME Profit and Loss Report for November 2023	
Information	Millie Chips
Sales Results	350
Price per pcs	9.000,00
Sales	3.150.000,00
HPP	Rp 2.985.000,00
Gross profit	165.000,00
Operational costs	
Fixed production costs	Rp 58.833,00
Fixed production costs	500.000,00
Variable marketing costs	
ADM & general fees	527.000,00
ADM & common variable costs	
Total operational costs	Rp 1.085.833,00
Net profit and loss	- (920.833,00)

From table 4.11, we can conclude that the calculation of net profit/loss carried

out by Millie Chips MSMEs reached a loss of (Rp 920,833)

5 Analysis of Profit and Loss Calculation in Millie Chips MSMEs

The author tries to present a calculation of profit and loss from the sale of chips to Millie Chips MSMEs during the

month of November. In this case, we compile a profit and loss calculation according to Millie Chips MSMEs, *the full costing method*, and *the variable costing method*. The following is a table of profit and loss calculations presented :

**Table
 Millie
 MSME
 and**

Information	Variabel Costing
Sales Results	350
Price per pcs	9.000,00
Sales	3.150.000,00
HPP	Rp 4.052.000,00
Gross profit	- 862.000,00
Operational costs	
Fixed production costs	Rp 58.833,00
Fixed marketing costs	
Variable marketing costs	
ADM & general fees	
ADM & common variable costs	
Total operational costs	Rp 58.833,00
Net profit and loss	- (920.833,00)

**12
 Chips
 Profit
 Loss**

Statement with Company Method

Source : Processed by researcher

From table 4.12, we can conclude that the calculation of net profit/loss carried out using the *variable costing* method

reaches a loss of (Rp 920,833). This happens because the cost of production is higher than the sales results.

6. Cash Flow in Millie Chips MSMEs for the November 2023 period

The author tries to present cash flow to Millie Chips MSMEs during the November 2023 period in accordance with existing

sales. The following is a table of cash flows presented:

Table 13 Millie Chips MSME Cash Flow Report for November 2023

Information	Amount (RP)
Cash Inflow	
Sales (350 x Rp 9.000)	3.150.00
Total Cash Inflow	3.150.000
Cash Out	
Cost of Goods Sold (COGS)	2.985.000
Fixed Production Costs	58.833
Fixed Marketing Costs	500.000
Administrative & General Fees	527.000
Total Cash Out	4.070.833
Net Cash Flow from Operating Activities	
Cash Inflow	3.150.000
Cash Out	4.070.833
Net Cash Flow	- (920.833

Source : Processed by researcher

In table 4.13 above, you can see an overview of the cash flow that occurred during November 2023 during Millie Chips MSME activities with the sale of chips for IDR 9,000 and generated the difference between cash inflows from sales and total cash outflows resulting in cash flow of IDR (920,833), -

7. Analysis of Selling Price Calculation

Regarding knowing the selling price, it is certainly necessary to find out how much it costs to produce a product and how much it costs to produce it. By knowing the right selling price, businesses can assess production costs by applying the right calculation techniques and the right selling price = Total cost + margin (%profit)

$$\begin{aligned} \text{Selling price} &= \text{Rp } 2.985.000 + (\text{Rp } 2.985.000 \times 30\%) \\ &= \text{Rp } 2.985.000 + (\text{Rp } 895.500) \\ &= \text{Rp } 3.880.500 \end{aligned}$$

$$\text{Harga jual per potong} = \frac{\text{Harga jual}}{\text{Jumlah per bungkus}}$$

$$\text{Harga jual per potong} = \frac{3.880.500}{350}$$

$$= \text{Rp } 11.087$$

From the calculation of the selling price according to Millie Chips MSMEs of Rp 9,381 per pack, this result was obtained because Millie Chips MSMEs wanted a profit of 30% of production costs.

Meanwhile, with the calculation of the cost of production using *the full costing* method, Millie Chips MSMEs produce 350

price. Business actors can assess production costs by applying appropriate calculation techniques. To allow the product to compete in its market. Manufacturing Cost Accounting has an important role in providing concise and systematic information to report users (Al Mutawakkil, 2023.) .

In the calculation of the cost of production, according to MSMEs, Millie Chips produces 350 packs of chips per month. The total cost incurred for a month is IDR 2,985,000 from the total cost incurred in determining the selling price of chips by expecting a profit of 30% of the total production for a month. Here are the calculations:

packs per month, the total production cost incurred is Rp 4,088,000.00 for one month, the total cost can be determined by determining the selling price of chips by expecting 10% of the total production cost. In determining the selling price, it is presented in the form of a full costing statement of profit and loss of manufacturing business :

$$\text{Selling price :} \quad \text{Rp } 3.150.000$$

$$\text{Rp } 9.000 \times 350$$

Cost of products sold:	
11.565 x 350	<u>Rp 4.047.750 -</u>
Gross Profit	Rp (897.750)
Non-production costs	<u>Rp 500.000 -</u>
Net profit	Rp (1.397.750)
Desired net profit	Rp 1.221.249
30% x 4.070.833	

The following is the calculation of the selling price using *the full costing approach* :

$$Markup = \frac{\text{Biaya non produksi} + \text{laba yang diharapkan}}{\text{Biaya produksi}}$$

$$Markup = \frac{\text{Rp 500.000} + \text{Rp 1.221.249}}{4.070.833}$$

Markup Presentation = 0.30 atau 30%

Selling price = Production cost + *Markup*

Production cost	= Rp 4.070.833
Markup 30% x Rp 4.088.000	= <u>Rp 1.221.249 +</u>
Total selling price	= Rp 5.292.082
Production volume	= <u>350 Bungkus :</u>
Selling price of wrappers	= Rp 15.120,- perbungkus.

Based on the calculation above, the selling price of wrapped chips is Rp 15,120,- the result obtained from the use of *the full costing* selling price calculation method, the profit expected by the owner is 30%, then it is expected to cover the loss of the costs incurred to produce the product and get the desired profit.

In determining the cost of production, not only does it use *full costing* calculations, but the researcher also uses *the variable costing method* in determining the cost of production and the amount obtained by Millie Chips MSMEs is Rp 4,052,000,-. The following is the calculation of the selling price according to *the variable costing* method in determining the selling price, it is presented as follows:

Selling price :	= Rp 3.150.000
Rp 9.000 x 350	
Cost of products sold = <u>Rp 4.011.700 -</u>	
11.462 x 350	

Profit contribution = Rp (861.700)

Fixed fees = Rp 58.833 –

Net profit = Rp (802.867)

Expected net profit = Rp 1.215.600

30% x Rp 4.052.000

As for the profit generated, the markup calculation is as follows :

$$\text{Markup} = \frac{\text{Biaya tetap} + \text{laba yang diharapkan}}{\text{Biaya produksi}}$$

$$\text{Markup} = \frac{\text{Biaya tetap} + \text{laba yang diharapkan}}{\text{Biaya produksi}}$$

Mark up = 0.30 atau 30%

So that the selling price set is

Selling price = variable cost + Markup

Calculation of the selling price:

Variable fees = Rp 4.052.000

Mark up 30% x Rp 4.052.000 = Rp 1.215.600 +

Total selling price = Rp 5.267.600

Production volume = 350 pcs :

Selling price = Rp 15.050,- /pcs

Based on the calculation above, the selling price of wrapped chips is Rp 15,050 where this result is obtained using *the*

variable costing method. For the amount of profit obtained, the owner wants 30% of the total production cost per month.

C. Resultand Discussion

1. Cost of Production and Selling Price

The cost of production is all costs incurred by the company in a certain period, both direct costs and indirect costs in the production process of materials into a product. The calculation of the cost of production is very important to determine the selling price of a product and this calculation is also carried out to ensure

whether during the production process the company is able to generate profits or incur losses.

The calculation of the cost of production carried out by Millie Chips MSMEs still uses a simple and manual method where Millie Chips MSMEs only calculate the costs they incur during the production process. In the calculations he made, there are still many costs that have

not been recorded, but these costs are included in the production process so that the results of the calculations carried out according to Millie Chips MSMEs are very low.

The following are the costs incurred by Millie Chips MSMEs:

1. Direct raw material costs are costs incurred by a business in a production process that are of course directly related. The raw materials used by Millie Chips MSMEs are Sweet Potatoes. Millie Chips calculates the large cost of raw materials used in the production process.
2. Direct labor costs are employee wages paid to workers directly in the production process. Millie Chips calculates monthly wages where the number of employees owned is 2 workers.
3. Factory *overhead* costs are costs that are not directly related to the production process. The *factory overhead costs* recognized by Millie Chips MSMEs are advertising costs, electricity costs and water costs. There are also costs that have not been recognized, such as transportation costs.

The calculation uses the method of determining the cost of production, namely the *full costing* and *variable costing methods*. Where the results of the calculation of the cost of production carried out by *the full costing* and *variable costing methods* produce a greater value than the calculation of Millie Chips MSMEs. This result is obtained because the method of determining the cost of production calculates all costs in the production process.

In the results of the data analysis that has been carried out, there is a difference from the calculation of the cost of production according to Millie Chips MSMEs

using *the full costing* and *variable costing methods*. This difference occurred because Millie Chips MSMEs did not include all costs contained in the cost of raw materials and factory *overhead* costs.

The calculation of the cost of production at Millie Chips MSMEs certainly has a difference in the calculation of the cost of production using the method of determining the cost of production. As conducted by the previous research conducted (Eldy Irhas Saputra, 2022), the results were obtained that the analysis of the calculation of the cost of production at the tofu factory using the *costing* process method obtained greater results than the cost of production according to the company. This happens because there is a difference in factory *overhead* costs which is also in the *costing process* method to include all costs while the company does not include all costs in the production process. The research was also conducted by (Al Mutawakkil, 2023.) analyzing the method of determining the cost of production in determining the selling price of Kartono tofu business in Bantaeng Regency It is known that the researcher made calculations using the method of determining the cost of production to obtain arena losses all cost elements that occur in the production process are all included so as to obtain significant and accurate results. And also the research conducted (Haliza, 2023) obtained the results that the cost of production price analysis using *the full costing method* in determining production prices at the Jambi City branch of Es Teh Nusantara MSMEs obtained more accurate production results because all costs incurred during the production process were calculated.

From the research conducted by the previous researcher, it was produced in the form of similarities, namely there was a difference in the calculation of the cost of production and selling price with the

company method and *the full costing* or *variable costing method*.

The determination of the selling price is also carried out to calculate all costs of the cost of production incurred and add to the presentation of the desired profit. According to the cost of production determined by MSMEs in setting the selling price is smaller than the *full costing* and *variable costing methods*.

2 Comparison of Business Profit/Loss Calculation with Full Costing and Variable Costing Methods

In the calculation of profit and loss carried out by the researcher who uses a comparison between the calculation method according to Millie Chips MSMEs, according to *the full costing* method and *variable costing* methods get the same result, namely the loss in the calculation. Each of these three methods has its own advantages and

disadvantages, but if examined further, the recommended method of determining the cost of production is to use the *full costing* method calculation by including all cost elements in the cost of production. This is certainly very useful for long-term planning. In contrast to the calculation of the cost of production using the *variable costing* method, of course, all costs are also taken into account, but only include *variable* factory *overhead* costs and do not include fixed costs. In the calculations carried out by Millie Chips MSMEs, they do not calculate all the cost elements that occur in the production process, Millie Chips MSMEs only include important cost elements in their calculations so that researchers get losses when calculating using the Millie Chips MSME calculation method because the cost elements that occur in the chip production process are all included and then an accurate result is obtained

D. Conclusion

Based on the analysis of data and research results, the author can draw several conclusions as follows:

1. Millie Chips MSMEs calculate the cost of production, not counting all costs incurred during the production process. The calculation is only based on the cost of raw materials, direct labor costs and factory *overhead* costs but these costs are not all calculated. The calculation of the cost of production according to the company is smaller than the cost of production with the calculation of *full costing* and *variable costing methods*.
2. From the calculation of profit and loss, both according to Millie Chips MSMEs and the calculation of profit and loss, *the full costing* and *variable costing*

methods both produce losses caused because the cost of production incurred is higher than the sales results received. There is a difference from the selling price calculation carried out by Millie Chips MSMEs with the calculation of the selling price using *the full costing* and *variable costing methods*. Therefore, in determining the selling price, you should not be arbitrary in determining it and also selling it at a relatively cheap price so that consumers are interested because we do not necessarily achieve profits.

SUGGESTION

Based on the results of the research that has been carried out with a comparison between

methods, the following suggestions can be given:

1. The difference that occurs in the calculation of the cost of production must be a special concern for Millie Chips MSME owners in determining the cost of production. The step that should be taken is to re-examine the

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