

# CALCULATION ANALYSIS OF COST OF PRODUCTION USING THE FULL COSTING METHOD AS THE BASIS FOR DETERMINING THE SELLING PRICE OF TOFU PRODUCTS AT UD. TM MANADO

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**Abstract-**The full costing method is a method of calculating the cost of production, where the cost calculation is carried out in full so that it can help UD. TM, in calculating the cost of production, and can also help determine the selling price of its products in accordance with the theory of cost accounting. This study uses a quantitative descriptive method that aims to explain and describe more deeply the calculation of basic production prices using the full costing method. Based on the results of the study, it was shown that the method of calculating the cost of production per unit and the full costing method had a difference of IDR 6.76 per piece of tofu. In addition, the selling price of tofu products also experiences a difference between the two methods, which is IDR 12.8 per piece of tofu. So the researchers recommend that UD. TM can apply the full costing method so that it can detail precisely and accurately the cost of production.

**Keywords:** Cost of Production, Full Costing Method, Selling Price

## I. INTRODUCTION

Along with the development of the economy in every country, both in developed countries and those that are still developing, such as Indonesia. In Indonesia, the economy has increased, one of which is Micro, Small and Medium Enterprises (MSMEs). MSMEs are one of the main supports for the economic sector because they make national economic growth increase. MSMEs are part of the national economy that has an independent vision and has great potential to improve people's welfare. The government fully supports the existence of small business groups, as well as cottage industry activities.

Basically every company is founded to achieve a certain goal, or profit as much as possible. In order to provide satisfaction for customers, both service, trading and manufacturing companies must have good product quality so that consumers feel satisfied with the products sold, and become regular customers continuously, so they can compete in the market.

Companies both service, trading, and manufacturing need to calculate the costs that have been incurred. Especially for manufacturing companies, it is very necessary to calculate the production costs that have been incurred. Taking into account the correct, detailed cost of production can be the basis for determining the right product selling price. The cost of production is used by the company to determine the amount of profit earned, and also to determine the selling price (Sujarweni, 2015), in setting the selling price it can help the company calculate the desired profit, and what has been planned.

There are two ways to calculate the cost of production, namely by using the full costing method and variable costing. The difference between the two methods lies in the overall cost which is calculated as an expense against production costs. Full Costing is a method used to determine production costs, by calculating all production costs into production costs, which consist of raw material costs, direct labor costs, and factory overhead costs, both variable and fixed (Mulyadi, 2012). Meanwhile Variable costing is a method used to determine production costs that only takes into account all variable production costs into production costs, which consist of raw material costs, direct labor costs, and variable factory overhead costs (Mulyadi, 2012).

Darwis (2020) explains that determining the cost of production in large-scale industries is relatively more accurate, compared to Micro, Small and Medium Enterprises (MSMEs), because large-scale industries already have professional human resources, while MSMEs do not yet have human resources. Adequate Human Resources. In addition, the structural functions of MSMEs have not been properly implemented, such as managers, and several other parts taken over by company owners.

UD. TM is a home industry type trading business engaged in the food sector, namely tofu and tempeh. The basic ingredients of tofu and tempeh are soybeans which are processed using certain methods and methods to become finished products. Furthermore, it will be processed by consumers into various types of dishes. In this study, the researcher only chose one product to study, namely tofu, so that the research to be studied would be more focused. UD. TM sells tofu both in large quantities and in retail form, and is usually sold at the same market, and if in large quantities it can be delivered according to the order to the destination. UD. TM does not yet have detailed accounting records, so the owner only calculates the total income, and also expenses. Based

on the background above, UD TM still uses a simple method in calculating the cost of production, and is not in accordance with the applicable cost accounting theory, namely the cost of production based on both the full costing method and the variable costing method. In calculating the cost of production of UD. TM has not calculated factory overhead costs precisely, where the company has not calculated depreciation costs, as well as maintenance costs for machines, vehicles, buildings, and other factory overhead costs. So that the information that will be generated in determining the cost of production, and also the selling price becomes less precise and accurate

The reason for conducting this research is to assist companies in calculating and making the right and accurate decisions. Then the right method in calculating the cost of production of UD. TM, namely using the full costing method, this method is very appropriate to use because it calculates the cost of production of various types of food by charging all production costs, both fixed and variable, to the product. It is very important for a company to calculate all costs incurred in producing a product, and become the basis for determining the right and accurate selling price at a reasonable price.

Previous research related to the cost of production was carried out by Efendi (2018) at the Aliff Catering Company that the company has not determined the cost of production, and the selling price is only based on assumptions so that the selling price is set too low. The results of further research are also related to the cost of production using the full costing method carried out by Togas et al (2021) on Trendy Fried Chicken, it is concluded that in calculations using the full costing method, a higher cost of production is obtained, there are costs previously not taken into account by SMEs during the production period.

Based on the description above, the writer is interested in conducting research with the title "Analysis of Calculation of Cost of Production Using the Full Costing Method as a Basis for Determining the Selling Price of Tofu Products at UD TM Manado".

## II. RESEARCH METHODS

This research uses a quantitative descriptive method that aims to explain and describe more deeply the calculation of the cost of production using the full costing method. This technique was chosen to find out data regarding production costs from the research site. With these data, the researcher will apply the calculation of the elements of production costs using the full costing method in a systematic manner originating from the subject and research object. Sources of data collected in this research are primary and secondary.

Data collection techniques through observation, interviews and literature study.

The data analysis technique used in this paper is a quantitative descriptive analysis method, namely by describing the nature of objects based on data collected through field research, and analyzing the data, then drawing conclusions. The following are the steps carried out as follows:

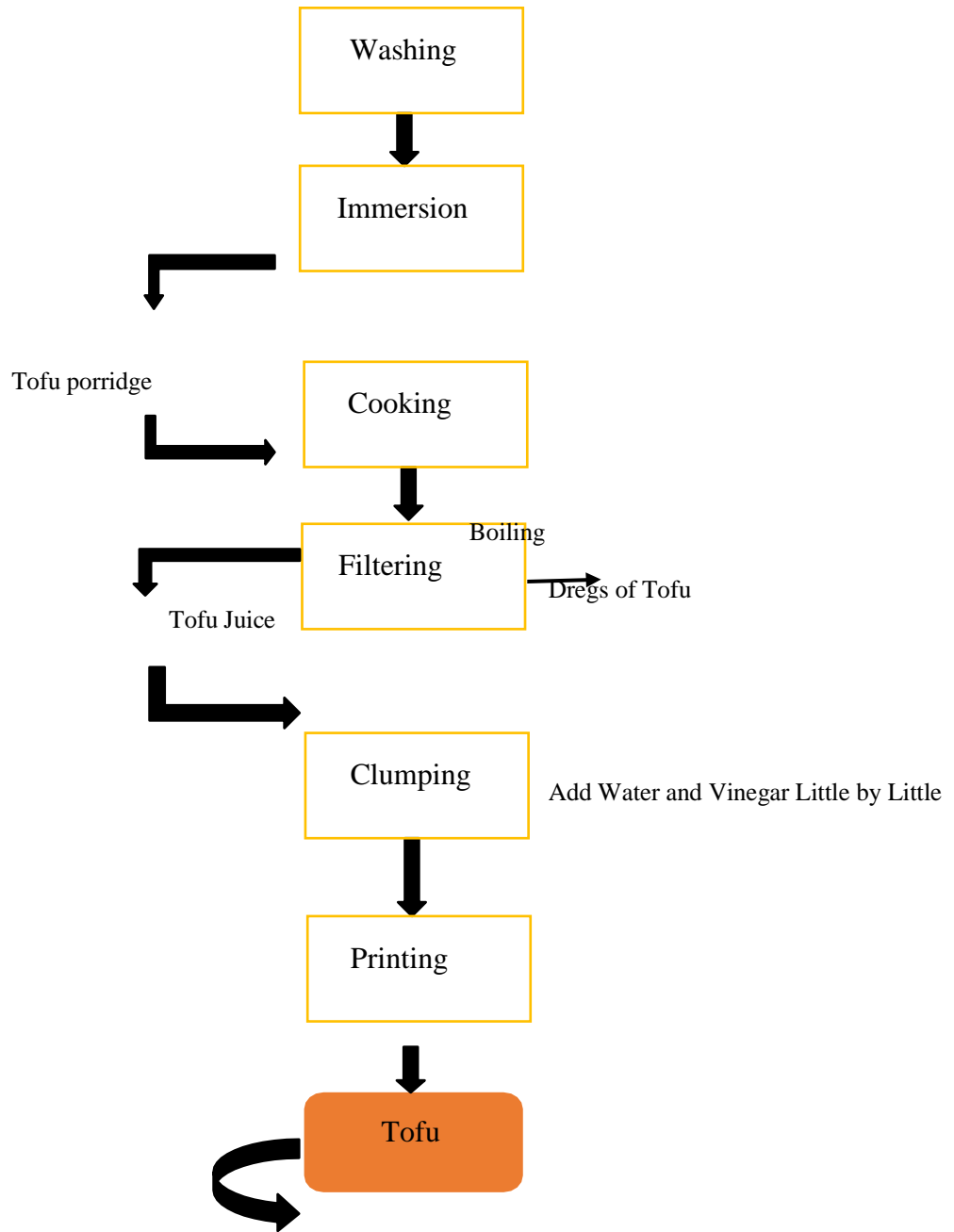
1. Describe the calculation of the company's cost of production, by describing the production costs incurred by the company in one month period.
2. Determine the cost of goods procedure according to the price of the full costing method, in the following way:
  - a. Collect production data for a certain period, and collect raw material costs, labor costs, and factory overhead costs for a certain period, to compile production costs, and calculate equivalent production in order to calculate the unit cost price.
  - b. Describe, and calculate the cost of production according to the full costing method.
3. Do a comparison of the application of the calculation of the cost of production.
4. Conclude how the difference in the application of the calculation of the cost of production carried out by the company with the calculation using the full costing method of production costs.

## III. DISCUSSION

### Tofu Production Process

In a day the company produces 8,400 pieces of tofu, and uses 210 kg of soybeans. In determining the size of the tofu, ie 1 piece of tofu costs Rp. 500, and the wholesale price per bucket is IDR. 80,000 to get 200 pieces of tofu in one bucket. Tofu production activities are carried out every day, from Monday to Sunday, starting from 01.00-17.00, and six times the tofu production process is carried out every day. The following is the production process. The production process can be seen in Figure 3.1 as follows.

Figure 3. 1 Tofu Production Process in Schematic Form



Ready to be sold either in retail or wholesale

Source: UD. TM Manado, 2022

a. Washing

In the production process washing soybeans is the initial process, before washing the soybeans are weighed as much as 35 kg each time they carry out production, and in a day the workers carry out 6 production activities, and the soybeans used are 210 kg. The purpose of this production process is to prevent dirt from entering during the production process and to ensure that the soybeans are completely clean prior to the next production stage.

b. Soaking

At this stage, the soybeans that have been washed before are then placed into the soaking place, then given enough hot water with a temperature below 55°C, depending on the amount of soybeans, and if the water temperature is above 55°C it will cause the soybeans to be half cooked. and soy juice produced is reduced or decreased. Soaking is done every morning, at 12 pm–3 am, or about 3 hours. The purpose of soaking is to soften the soybean seeds thereby reducing the energy used during milling, the soft shape of the soybeans also makes it easier during the process of extracting the juice from the dregs. In this section there is 1 worker who is paid IDR. 2,000,000 every month.

c. Milling

UD. TM in the milling process already uses a machine specially designed by the owner, the grinding machine used is electrically powered. The purpose of milling is to grind the soybean seeds to a fine powder, and produce soybean pulp. During the milling process, add water little by little to get the maximum slurry results.

d. Cooking / boiling

After the soybeans are ground, and produce mush, the next stage is cooking. In carrying out the cooking is done in a large cement tub that has been arranged in such a way by the owner, namely by using a steam heater. Hot steam comes from a boiler located at the back of the cement stove, and flows through an iron pipe. The fuel used during the cooking process is dry nutmeg skin, the reason the owner chooses dry nutmeg skin, as fuel because the factory does not yet have a blower to emit smoke, and to minimize thick smoke in the factory, the owner also chooses dry nutmeg skin as fuel. . In the process of cooking the soybean porridge, water is added again so that the slurry becomes runny. The cooking process itself begins by putting the water in the cement furnace, then heating it. In this process there are 2 workers where each gets a monthly salary of IDR. 2,000,000, so the salary cost for 2 workers is  $2 \times \text{IDR. } 2,000,000 = \text{IDR. } 4,000,000$ .

e. Filtering

Soybean porridge that has thickened will continue with the filtering process, using a filter cloth that has been fitted with a tool, in the form of an iron faucet that comes from under the heating furnace. Then it will flow to the filter cloth, then a filtering process will be carried out, the aim is to separate the dregs and tofu extract from soybean porridge that has been cooked and thickened in the previous process. If all of the slurry in the heating furnace has flowed, then the filtering process will begin. During the filtering process so that there are no solids left, add water continuously by pouring it over the edge of the filter. If it is deemed sufficient, the process of pouring water has also been completed. And the filter that still contains the dregs is squeezed dry, the dregs that have been squeezed are placed in sacks, and will be sold by the owner as animal feed.

f. Clumping/addition of vinegar

The clumping process, or the acidification process, is the process of separating the tofu protein from the tofu lumps which is done by means of water, added little by little with vinegar to form a precipitate, then separation will naturally occur. The precipitate that has been formed, then becomes the main ingredient that will be printed into tofu. Furthermore, the remaining water that has been mixed with vinegar will be stored for the production process. Furthermore, the remaining water that has been mixed with vinegar is usually called "sour seed". The tamarind seeds are collected in a bucket, then cooled to become pickling the next day or for further production, and usually can be used for up to 3 days. So that in one month of vinegar used only 1 glass bottle at a price of IDR. 9,000 per bottle. In this section there are 2 workers, where each gets a salary every month, namely IDR. 2,000,000, so the salary cost for 2 workers is  $2 \times \text{Rp. } 2,000,000 = \text{IDR. } 4,000,000$ .

g. Printing

After several processes of tofu production, printing and pressing become processes that are nearing the final stage. So tofu is printed in a mold made of wood that has been perforated around it. If it has been printed, the result will be covered with cloth, and then wood that is almost the same size is placed on top, or often called pressing, and the same thing is done the same amount of time. some arrangement of tofu molds. The time required for the printing and pressing process cannot be determined by the owner, nor can the workers estimate when they will open the cloth.

h. Cutting Tofu

When the printing process is finished, the formed tofu is removed from the wooden mold by turning the mold over, after which the cloth covering the tofu is opened. Tofu that has been formed is measured with a wooden ruler that already has its own size, and cut into pieces. After cutting the tofu, place it in the bucket slowly so that the tofu doesn't crumble and add water. In the tofu cutting section, there is 1 worker, whose salary is IDR 2,000,000 per month.

### Description of Calculation of Cost of Production by Company

#### Raw Material Costs

In the use of raw materials, soybeans are used every production, which is 35 kg, and every day there are 6 production processes. So, the total consumption of soybeans in a day, which is 210 kg. And the cost used to buy soybeans, which is IDR. 12,600 per kg, in a day tofu is produced as many as 8,400 pieces of tofu, or the equivalent of 42 buckets of tofu, and each bucket contains 200 pieces of tofu, and in a month it can produce 252,000 pieces of tofu. So the total costs incurred in a day, which is 210 kg x IDR. 12,600 = IDR. 2,646,000. So, the cost of soybean raw materials incurred in one month, namely IDR. 2,646,000 x 30 days = IDR. 79,380,000. In addition to soybeans, the raw materials used in the tofu-making process are dry nutmeg skin which is used as the main raw material in the soybean cooking process, and dried nutmeg skin used, which is 1 sack for 2 times the production/cooking process. so, in a day there are 6 times the finished production process. The total amount of nutmeg skin used is 3 sacks with a price per sack of IDR. 50,000 so that the total cost of dry nutmeg raw materials used is IDR. 150,000 , and in one month that is IDR. 150,000 x 30 days = IDR. 4,500,000. The following is the data presented in Table 3.1 as follows.

**Table 3.1 Cost of Raw Materials According to UD. TM**

Raw Material	Units	Unit	Total Cost
Soybeans	6.300 kg	IDR. 12.600	IDR. 79.380.000
Dried Nutmeg Skin	90 Sacks	IDR. 50. 000	IDR. 4.500.000
<b>Amount</b>			<b>IDR. 83.880.000</b>

Source: : UD. TM, 2022

#### Direct labor costs

In carrying out production activities the number of factory workers, namely as many as 6 people each gets the same salary, which is IDR. 2,000,000 per person, and in a month the costs incurred are IDR. 12,000,000. The following is the data presented in Table 3.2 as follows.

**Table 3.2 Direct Labor Costs According to UD. TM**

Person responsible	Employee	Wages (IDR)
Weighing Section	1	2.000.000
Clumping Section	4	8.000.000
Printing Section	1	2.000.000
<b>Amount</b>	<b>6</b>	<b>12.000.000</b>

Source: TM, 2022

#### Factory Overhead Cost

##### Cost of auxiliary materials

To produce a product into finished goods, not only use raw materials in the production process, but also use supporting materials to complement these raw materials, to become a finished product. In the tofu production process, the supporting materials used are water and vinegar. At UD. TM, the water used uses well water, which is extracted using a machine, so the cost of water is charged to electricity costs. And for vinegar acid in a day it is only poured little by little, so that the resulting tofu does not produce a sour taste. After that, the vinegar is poured into the water containing the tofu essence that has been filtered beforehand. And the remaining water from the settling of tofu, or what is commonly known as seedling, is collected in a barrel to be used for 3 days of production activities, so that one glass bottle of vinegar is used per month at a price of IDR. 9,000 per bottle. The following is the data presented in Table 3.3 as follows.

**Table 3.3 Auxiliary Material Costs According to UD. TM**

Fee Type	Quantity	Needs Per Month	Total Cost
Vinegar acid	1 bottle	IDR. 9.000	IDR. 9.000
<b>Amount</b>			<b>IDR. 9.000</b>

Source: UD. TM, 2022

Biaya listrik pabrik

UD. TM has made a separation of electricity, between the electricity used in factories, and in private homes. The electricity used in the factory uses an electricity meter, which pays a bill of IDR every month. 600,000, while the electricity used at home, which uses token electricity, where the monthly fee is IDR. 100,000 for use, for 3 months. The following is the data presented in Table 3.4 as follows.

**Table 3. 4 Factory Overhead Costs According to UD. TM**

Description	Amount (IDR)
Auxiliary Material	9.000
Factory Electricity Cost	600.000
<b>Amount</b>	<b>609.000</b>

Source: UD. TM, 2022

Based on the data obtained above, the following is the cost of production according to UD. TMi. The following is the data presented in Table 3.5 as follows.

**Table 3. 5 Cost of Production According to UD. TM**

Fee Type	Total (IDR)
Raw Material Costs	83.880.000
Direct labor costs	12.000.000
Factory Overhead Cost	609.000
<b>Total Cost of Production</b>	<b>96.489.000</b>
Number of Production Units	252.000
<b>Cost of Production Per Unit</b>	<b>383</b>

Source:: UD. TM, 2022

### Calculation Analysis, Cost of Production

#### Calculation of Cost of Production, According to the Full Costing Method

##### Raw Material Costs

The raw materials used in the tofu-making process are soybeans for each production, which is 35 kg, and there are 6 production processes every day. So the total use of soybeans in a day, which is 210 kg. And the cost used to buy soybeans, which is IDR. 12,600 per kg, in a day tofu is produced as many as 8,400 pieces of tofu or the equivalent of 42 buckets of tofu, and each bucket contains 200 pieces of tofu and in a month it can produce 252,000 pieces of tofu. So that the total cost incurred in a day is 210 kg x IDR. 12,600 = IDR. 2,646,000. So the cost of soybean raw materials incurred in one month, namely IDR. 2,646,000 x 30 days = IDR 79,380,000. In addition to soybeans, the raw materials used in the tofu production process are dry nutmeg skin which is used as the main raw material in the soybean cooking process, and dried nutmeg skin used, which is 1 sack for 2 times the production/cooking process. So in a day there are 6 production processes so the total nutmeg skin used is 3 sacks with a price per sack of IDR. 50,000 so that the total cost of dry nutmeg raw

materials used is IDR. 150,000 and in one month, that is IDR. 150,000 x 30 days = IDR. 4,500,000. The following is the data presented in Table 3.6 as follows.

**Table 3. 6 Raw Material Costs Using the Full Costing Method**

Raw Material	Units	Unit (IDR)	Total Cost (IDR)
Soybeans	6.300 kg	12.600	79.380.000
Dried Nutmeg Skin	90 karung	50. 000	4.500.000
<b>Amount</b>			<b>83.880.000</b>

Source: UD. TM, 2022

**Direct labor costs**

In carrying out production activities, the number of factory workers, namely as many as 6 people, each gets the same salary, which is IDR. 2,000,000 per person, and in a month the costs incurred are IDR. 12,000,000. The following is the data presented in Table 3.7 as follows.

**Table 3. 7 Direct Labor Costs Using the Method Full Costing**

Person responsible	Employee	Wages
Weighing Section	1	IDR. 2.000.000
Clumping Section	4	IDR. 8.000.000
Printing Section	1	IDR. 2.000.000
<b>Amount</b>	<b>6</b>	<b>IDR. 12.000.000</b>

Source: UD. TM, 2022

**Factory Overhead Cost**

Cost of auxiliary materials

To produce a product into finished goods, not only use raw materials in the production process, but also use auxiliary materials to complement these raw materials, to become a finished product. In the tofu production process, the supporting materials used are water and acetic acid. Vinegar is used in one month, as much as 1 glass bottle at a price of IDR. 9,000 per bottle. The following is the data presented in Table 3.8 as follows.

**Table 3. 8 Auxiliary Material Costs Using the Full Costing Method**

Fee Type	Quantity	Needs Per Month	Total Cost
Asam cuka	1 bottle	IDR. 9.000	IDR. 9.000
<b>Amount</b>			<b>IDR. 9.000</b>

Source: UD. TM,2022

Factory electricity costs

The electricity used at the factory uses an electricity meter which pays a bill of Rp. 600,000 every month, while for electricity used at home, it uses token electricity where the monthly fee is Rp. 100,000 for 3 months of use. The length of the factory is 15 x 7 m<sup>2</sup>, then the area of the tofu factory is 105 m<sup>2</sup>.

Factory building depreciation costs

The building has been used since the 70s, but in early 2020, a factory renovation was carried out. Private houses, as well as factories are separated by permanent partitions, which are made of concrete. The acquisition cost of the factory building, namely IDR. 120,000,000, useful life of 20 years. In calculating the depreciation rate using the straight line method. The factory building area is 15 m long and 7 m wide. Calculation of depreciation using the straight-line method without residual value.

**Calculation**

$$\text{Depreciation expense per year} = \frac{\text{Purchase price}}{\text{Economic age}} = \frac{\text{IDR } 120.000.000}{20} = \text{IDR } 6000.000$$

$$\text{Depreciation expense per month} = \frac{\text{IDR } 6.000.000}{12} = \text{IDR } 500.000$$

Printing board depreciation costs

The purchase price for 1 printed board is sold at IDR 50,000 per piece, and has 30 printed boards, or commonly known as a mall, so the purchase price is IDR. 1,500,000.

**Calculation**

$$\text{Depreciation expense per year} = \frac{\text{Purchase price}}{\text{Economic age}} = \frac{1.500.000}{5} = \text{IDR } 300.000$$

$$\text{Depreciation expense per month} = \frac{\text{IDR } .300.000}{12} = \text{IDR } 25.000$$

Biaya penyusutan mesin giling kedelai

Untuk harga perolehan mesin giling kedelai yaituseharga Rp.5.000.000

**Calculation**

$$\text{Depreciation expense per year} = \frac{\text{Purchase price}}{\text{Economic age}} = \frac{\text{IDR } 5.000.000}{4} = \text{IDR } 1.250.000$$

$$\text{Depreciation expense per month} = \frac{\text{IDR } 1.250.000}{12} = \text{IDR } 104.166$$

Cost of depreciation of water reservoirs. The purchase price for the water reservoir is IDR 1,500,000

**Calculation**

$$\text{Depreciation expense per year} = \frac{\text{Purchase price}}{\text{Economic age}} = \frac{\text{IDR } 1.500.000}{5} = \text{IDR } 300.000$$

$$\text{Depreciation expense per month} = \frac{\text{IDR } 300.000}{12} = \text{IDR } 25.000$$

The cost of depreciation of the water pump machine, for the purchase price of the dab water pump, is IDR .2,500,000

**Calculation**

$$\text{Depreciation expense per year} = \frac{\text{Purchase price}}{\text{Economic age}} = \frac{\text{IDR } 2.500.000}{5} = \text{IDR } 500.000$$

$$\text{Depreciation expense per month} = \frac{\text{IDR } 500.000}{12} = \text{IDR } 41.666$$

Cement tub depreciation costs

For the cost of cement tubs, it is IDR 1,500,000 per unit, and the tofu factory has 4 cement furnaces. So the total purchase price of the cement stove, which is IDR. 6,000,000.

**Calculation**

$$\text{Depreciation expense per year} = \frac{\text{Purchase price}}{\text{Economic age}} = \frac{\text{IDR } 6.000.000}{20} = \text{IDR } 300.000$$

$$\text{Depreciation expense per month} = \frac{\text{IDR } 300.000}{12} = \text{IDR } 25.000$$

Cement furnace depreciation costs

The purchase price for the cement stove is IDR 1,500,000.

**Calculation**

$$\text{Depreciation expense per year} = \frac{\text{IDR } 1.500.000}{20} = \text{IDR } 75.000 = \frac{\text{IDR } 75.000}{12} = \text{IDR } 6.250$$

Blue plastic drum depreciation cost

For the purchase price of plastic drums, namely IDR. 500,000 per unit, and UD. TM has 3 pieces. So the total purchase price of the plastic drum, which is IDR. 1,500,000.

**Calculation**



$$\text{Depreciation expense per year} = \frac{\text{Purchase price}}{\text{Economic age}} = \frac{\text{IDR 1.500.000}}{5} = \text{IDR 300.000}$$

$$\text{Depreciation expense per month} = \frac{\text{IDR 300.000}}{12} = \text{IDR 25.000}$$

The depreciation cost of the tofu dregs filtering machine, The purchase price for the tofu dregs screening machine is IDR 3,000,000

**Calculation**

$$\text{Depreciation expense per year} = \frac{\text{Purchase price}}{\text{Economic age}} = \frac{\text{IDR 3.000.000}}{5} = \text{IDR 600.000}$$

$$\text{Depreciation expense per month} = \frac{\text{IDR 600.000}}{12} = \text{IDR 50.000}$$

Water pipe depreciation costs

The size used by UD. TM, to drain the soybean juice that has gone through the cooking process to the filter, namely the 2 ends of the ¾ inch pipe. 1 end of the pipe the purchase price is IDR.50,000, so the total cost of the pipe is IDR.100,000

**Calculation**

$$\text{Depreciation expense per year} = \frac{\text{Purchase price}}{\text{Economic age}} = \frac{\text{IDR 100.000}}{50} = \text{IDR 2.000}$$

$$\text{Depreciation expense per month} = \frac{\text{IDR 2.000}}{12} = \text{IDR 166.6} = \text{IDR 167}$$

The cost of depreciation of iron pipes, for the acquisition price of 3 inch iron pipes, namely 1 piece costs IDR 520,000

**Calculation**

$$\text{Depreciation expense per year} = \frac{\text{Purchase price}}{\text{Economic age}} = \frac{\text{IDR 520.000}}{50} = \text{IDR 10.400}$$

$$\text{Depreciation expense per month} = \frac{\text{IDR 10.400}}{12} = \text{IDR 866.6} = \text{IDR 867}$$

The cost of depreciation of the soymilk extractor pump machine The purchase price for the soybean extract pump machine is IDR 5,700,000

**Calculation**

$$\text{Depreciation expense per year} = \frac{\text{Purchase price}}{\text{Economic age}} = \frac{\text{IDR 5.700.000}}{5} = \text{IDR 1.140.000}$$

$$\text{Depreciation expense per month} = \frac{\text{IDR 1.140.000}}{12} = \text{IDR 95.000}$$

Pickup vehicle depreciation costs

For the purchase price of pickup cars, namely IDR. 150,000,000

**Calculation**

$$\text{Depreciation expense per year} = \frac{\text{Harga Perolehan}}{\text{Economic age}} = \frac{\text{IDR 150.000.000}}{15} = \text{IDR 10.000.000}$$

$$\text{Depreciation expense per month} = \frac{\text{IDR 10.000.000}}{12} = \text{IDR 833.333}$$

Based on the results of the depreciation cost calculation above, the following are the results presented in Table 3.9 as follows

**Table 3.9 Cost of Depreciation/Depreciation of Fixed Assets Per Year**

Number	Description	Units	Price per unit (IDR)	Purchase Price (IDR)	Economic age	Annual Depreciation Expense (IDR)
1	Building	1	120.000.000	120.000.000	20	6.000.000
2	Tofu Printing Board	30	50.000	1.500.000	5	300.000

3.	Milling Machine	1	5.000.000	5.000.000	4	1.250.000
4.	Water Reservoir	1	1.500.000	1.500.000	5	300.000
5.	Water Pump Machine	1	2.500.000	2.500.000	5	500.000
6.	Cement Tub	4	1.500.000	6.000.000	20	300.000
7.	Cement Furnace	1	1.500.000	1.500.000	20	75.000
8.	Plastic Drum	3	500.000	1.500.000	5	300.000
9.	Tofu Dregs Filter Machine	1	3.000.000	3.000.000	5	600.000
10.	Plastic Water Pipe	2	50.000	100.000	50	2.000
11.	Iron Water Pipe	1	520.000	520.000	50	10.400
12.	Soybean Juice Pump Machine	1	5.700.000	5.700.000	5	1.140.000
13.	Car Pickups	1	150.000.000	150.000.000	15	10.000.000
<b>Amount</b>						<b>IDR.20.777.400</b>

Source: : Processed Data, 2022

**Table 3. 10 Fixed Asset Depreciation Costs Per Month**

Number	Description	Biaya Depresiasi Pertahun (IDR)	Biaya Depresiasi Perbulan (IDR)
1.	Building	6.000.000	500.000
2.	Tofu Printing Board	300.000	25.000
3.	Milling Machine	1.250.000	104.166
4.	Water Reservoir	300.000	25.000
5.	Water Pump Machine	500.000	41.666
6.	Cement Tub	300.000	25.000
7.	Cement Furnace	75.000	6.250
8.	Plastic Drum	300.000	25.000
9.	Tofu Dregs Filter Machine	600.000	50.000
10.	Plastic Water Pipe	2.000	167
11.	Iron Water Pipe	10.400	867
12.	Soybean Juice Pump Machine	1.140.000	95.000
13.	Car Pickups	10.000.000	833.334
<b>Amount</b>			<b>.1.731.450</b>

Source: Processed Data, 2022

**Table 3. 11 Factory Overhead Costs for One Month**

Description	Amount (IDR)	
<b>Factory Overhead Cost (Variable)</b>		
Auxiliary Material	9.000	
Factory Electricity Cost	<u>600.000</u>	
<b>Total Factory Overhead Cost (Variable)</b>		<b>609.000</b>
<b>Factory Overhead Cost (Fixed)</b>		
Building Depreciation Cost	500.000	
Depreciation Cost, Tofu Board	25.000	
Milling Machine Depreciation Cost	104.166	
Depreciation Cost, Water Reservoir	25.000	
Cost of Depreciation of Dab Water Pump Machine	41.666	
Depreciation Cost, Cement Tub	25.000	
Depreciation Cost, Cement Furnace	6.250	
Plastic Drum Depreciation Cost	25.000	
Shrinkage Cost, Tofu Dregs Screening Machine	50.000	
Plastic Pipe Depreciation Cost	167	
Iron Pipe Depreciation Cost	867	
Depreciation Cost. Soybean Juice Pumping Machine	95.000	
Cost of depreciation. Pick up car	<u>833.334</u>	
<b>Total Factory Overhead Cost (Fixed)</b>		<b><u>1.731.450</u></b>
<b>Total Factory Overhead Cost</b>		<b><u>2.896.004</u></b>

Source: Processed Data, 2022

**Table 3. 12 Cost of Production Using the Full Costing Method**

Fee Type	Total (IDR)
Raw Material Costs	. 83.880.000
Direct labor costs	12.000.000
Factory Overhead Cost (Variable)	609.000
Factory Overhead (Fixed)	1.731.450

<b>Total Cost of Production</b>	<b>98.220.450</b>
Number of Production Units	252.000
<b>Cost of Production Per Unit</b>	<b>389,76</b>

Source: Processed Data, 2022

### Calculation of the Selling Price Using the Cost Pricing Method Using the Full Costing Method

In determining the selling price there are several ways, one of which is by using the cost plus price method. How to calculate the selling price with this method, namely calculating the total cost per unit plus the desired markup. The added markup serves to cover non-production costs and to generate the desired profit. The following is the formula used in determining the selling price using the full cost method, plus the markup presented in Table 3.13 as follows.

**Table 3. 13 Cost Plus Pricing Formula (Cost Pricing Method)**

Raw material costs	IDR. xxx
Direct labor costs	IDR. xxx
Factory overhead costs	IDR. xxx
Fixed overhead costs	<u>IDR. xxx</u>
Amount	IDR. xxx
Markup=..... % x Rp. xxx	<u>IDR.xxx</u>
Selling price per product unit	IDR. xxx

Source:: Processed Data, 2022

Based on the formula above, in calculating the selling price using the cost plus price method, the company wants a profit of 25% to make a profit.

$$\text{Selling Price} = \text{Production Cost} + (\% \text{markup} \times \text{Production Cost})$$

$$= \text{IDR.}98.220.450 + (25\% \times \text{IDR.}98.220.450)$$

$$= \text{IDR.} 98.220.450 + \text{IDR.} 24.555.112,5$$

$$= \underline{\text{IDR.}122.775.562,5252.000}$$

$$= \text{IDR.}487,2$$

Based on the results known above, it can be seen that the selling price obtained based on the above method is IDR.487.2 or can be rounded up to IDR.500. So it can be concluded that the selling price used by UD. TM of IDR.500 per piece of Tofu, is right in setting the selling price.

### Income statement

The income statement is an element of the financial statements produced in an accounting period, explaining the elements of income or sales, as well as expenses generated by the company, resulting in a report on profits (gains) and losses (losses). If the income is greater than the expenses, then the result of the report is profit, on the other hand, if the income is less than the expenses, the result of the report is a loss. The following is the data presented in Table 3.14 as follows.

**Table 3. 14 Profit/Loss Reports Using the Full Costing Method**

<b>UD. TM Manado - Profit/Loss Report</b>	
<b>Period July 2022 (IDR)</b>	
Sale	126.000.000
Cost of goods sold	
Initial inventory	0

Production cost		<u>98.220.450</u>
Goods Ready for Sale		<u>98.220.450</u>
Ending Finished Goods Inventory		(0)
Cost of goods sold	( . 98.220.450)	
Business costs:		
Marketing & administration and general expenses (fixed)::		
Salary Cost, Section. Marketing		4.000.000
Marketing and general administration costs (variable)::		
Gasoline Cost		1.500.000
Cost of Plastic Bags		900.000
Cost of Office Stationery (Notes, Pens)		<u>100.000</u>
Total Business Costs	( 6.500.000)	
Gross profit	. 21.279.550	
Monthly Business Tax		( 50.000)
Net Profit		<u><u>21.229.550</u></u>

Source: Processed Data, 2022

From table 3.14 which is presented in the profit/loss report above, it can be seen that some of the data that the researcher obtained is as follows.

- a) Sales are obtained from the total product produced in one month multiplied by the selling price set by the company, which is 252,000 units x IDR.500 = IDR.126,000,000.
- b) Production costs are obtained from the calculation of the cost of production using the full costing method, namely IDR. 98,220,450
- c) Marketing salary costs, namely salary costs paid to workers who market/sell tofu in the market, in this case, namely 2 owners each IDR.2,000,000 per month, so 2 people x IDR.2,000,000 = IDR.4,000 .000.
- d) Gasoline costs, namely costs incurred to assist the process of selling tofu at the market, without having to rent a place per day of gasoline used, which is IDR 50,000. so that for one month, that is IDR. 50,000 x 30 days = IDR. 1,500,000.
- e) Cost of plastic bags, namely costs used as a place for retail buyers of the price of plastic used in a day, which is IDR 10,000 so the cost of plastic incurred for 1 month is IDR 30,000 x 30 days = IDR 900,000.
- f) Office Stationery, namely costs incurred to support the sale/purchase transaction, and office Stationery used, namely notes, as well as pens and costs incurred in a month, namely IDR 600,000, so in a month the business tax issued is IDR 50,000. The business tax that is paid annually is IDR.600,000, so in a month the business tax that is issued is IDR.50,000

#### Comparison of Cost of Production and Selling Price of Tofu Products UD. TM Using Full Costing Method

After conducting an analysis regarding the research on the cost of production, and the selling price, the results of the comparison can be seen in Table 3.15 as follows.

Table 3. 15 Comparison of Researched Results

Number	Description	Cost of Production (IDR)	Selling price (IDR)
1.	According to UD. TM	383	500
2.	According to Full Costing	389,76	487,2
<b>Difference</b>		<b>6,76</b>	<b>12,8</b>

Source: Processed Data, 2022

Based on the table above, it can be seen the difference in calculations using the method from UD. TM, and the full costing method. It can be seen that the comparison of the cost of production, based on the two methods above, shows the difference in results, both the cost of production and the selling price. According to the company's method, the calculation of the cost of production shows a result of IDR.383, while according to the full costing method it shows a result of IDR.389.76, and there is a difference of IDR.6.76 per piece of tofu. In addition to the calculation of the cost of production which has a different calculation, the selling price of tofu products also experiences a difference in the results of the calculation of the selling price used by UD. TM is IDR.500 per piece of tofu, while the selling price is using the full costing method, which is IDR.487.2 per piece of tofu. So there is a selling price difference between the two methods, which is IDR 12.8 per piece of tofu.

The difference that occurs between the method used by the company and the full costing method turns out to be no significant difference between the two methods because the difference obtained is very small, namely for the cost of production of IDR.6.76 while for the selling price of IDR.12.8. So it can be concluded that the calculation is done

#### IV. CONCLUSION

Based on the results of this study, it can be concluded as follows:

1. UD. TM in calculating the cost of production still uses a simple method. Where are the costs calculated by UD. TM, only costs that are normally incurred for the Tofu manufacturing process, and not in accordance with applicable cost accounting principles, both using the full costing and variable costing methods. In his calculations, the results of calculating the cost of production per unit according to UD. TM, which is IDR .383 per piece of tofu with a selling price of IDR.500 per piece of tofu.
2. Calculation of the cost of production using the full costing method at UD. TM, calculated by classifying all costs incurred in full during the tofu production process. Where the costs incurred are more detailed. The calculation results obtained are the cost of production per unit using the full costing method, which is IDR 389.76 per piece of tofu with a selling price of IDR. 487.2 per piece of tofu.
3. Based on the research that the researchers conducted, it turned out that there was no significant difference between the method used by the company and the full costing method, the difference between the two methods was relatively small, for the cost of production the difference was IDR. 6.76, while the selling price is IDR 12.8. So it can be concluded that the calculations made by the company are very good even though they are not in accordance with cost accounting theory.

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