

Preparation of Operational Budget for MSME Tempe Mendoan Ngapak Khas Banyumas

Nessa Lestari¹, Divianto², Agung Anggoro Seto³

¹²³ Sriwijaya State Polytechnic

Corresponding Author e-mail:

nessalestari18@gmail.com, divianto@polsri.ac.id, agung.anggoro.seto@polsri.ac.id

Article History:

Received: 04-08-2026

Revised: 03-09-2026

Accepted: 03-09-2026

Keywords: *Budgeting, Financial Planning, Micro Small and Medium Enterprises, Operational Budget, Profit Planning*

Abstract: *Micro, Small, and Medium Enterprises (MSMEs) play a vital role in Indonesia's economy, yet many lack systematic operational budgeting, resulting in suboptimal financial planning and control. This study aims to design and describe a comprehensive operational budget for MSME Tempe Mendoan Ngapak Khas Banyumas. Using a quantitative descriptive approach, historical sales data from 2023 to 2025 were analyzed to forecast 2026 performance. Data were collected through observation, interviews, and documentation, then processed using Microsoft Excel to prepare budgets for sales, production, raw materials, direct labor, factory overhead, operating costs, cost of goods sold, and profit and loss. Results indicate a 2026 sales target of 2,989 packs, generating revenue of Rp53,802,000, with cost of goods sold at Rp46,429,175 and an estimated net profit of Rp4,972,825 (9.24% profit margin). The study concludes that systematic operational budgeting enables more structured financial planning, serving as a foundation for cost control, target setting, and informed financial decision-making. This research provides a practical framework for MSMEs seeking to improve financial management and sustainability.*

How to Cite: Nessa Lestari, Divianto, Agung Anggoro Seto. (2026). Preparation of Operational Budgets for MSMEs Producing Tempe Mendoan Ngapak, a Typical Banyumas Specialty. 4(2). pp. 138-150 <https://doi.org/10.61536/escalate.v4i02.636>



<https://doi.org/10.61536/escalate.v4i02.636>

This is an open-access article under the [CC-BY-SA License](#).

Introduction

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in the Indonesian economy, contributing over 60% to the national Gross Domestic Product (GDP) and employing nearly 97% of the workforce. MSMEs also operate across various sectors, particularly retail trade, culinary arts, creative industries, and services (Coordinating Ministry for Economic Affairs, 2025). This demonstrates that sound financial management is crucial for business sustainability and competitiveness.

One important aspect of financial management is the preparation of an operational budget. A budget is a financial plan used as the basis for planning and controlling business activities (Muhtarom, 2016). An operational budget encompasses sales, production, costs, and profit and loss planning, helping



businesses manage costs and improve operational efficiency (Sasongko & Parulian, 2023; Angraini, 2025).

In practice, many MSMEs still lack a systematic operational budget. This situation was also found in the MSME Tempe Mendoan Ngapak Khas Banyumas. Observations showed that financial records were limited to monthly sales without recording all operational costs. Furthermore, business owners lacked a thorough understanding of budgeting, making it difficult to estimate costs, production, and revenue.

This problem was exacerbated by a decline in sales from 2023 to 2025 due to the lack of sales forecasting to base targets. Furthermore, raw material purchase records were rudimentary, and selling prices were based solely on estimates, making it impossible to accurately calculate operating profit.

Previous research has shown that operational budgets play a role in improving financial management, cost efficiency, operational control, and business sustainability (Angraini et al., 2024; Nur'aidah et al., 2023; Refacaroline et al., 2024; Pratiwi et al., 2022; Waru et al., 2024; Wulandari, 2025; Railis, 2022). Therefore, this study aims to compile and describe the operational budget of the MSME Tempe Mendoan Ngapak Khas Banyumas. This research is important as a guideline for financial planning and control, with the novelty of compiling a comprehensive operational budget for MSMEs that have never implemented an operational budget as the basis for their business management.

Method

This study uses a quantitative descriptive approach to compile and describe the operational budget of the Tempe Mendoan Ngapak Khas Banyumas MSME. The research focuses on budgeting for sales, production, raw materials, direct labor, factory overhead, operational costs, cost of goods sold, and profit and loss based on the operational budget concept (Widajatun, 2021).

The research population is all operational data of MSME Tempe Mendoan Ngapak Khas Banyumas, while the sample is sales data from 2023 to 2025. The data used consists of primary data obtained from the business owner and secondary data from books, journals, websites, and supporting documents (Balaka, 2022).

The research instruments included observation, interviews, and documentation. Data collection was conducted through literature review (Sugiyono, 2019), observation, interviews with business owners (Fauzi et al., 2019), and documentation of sales and production activity records (Sugiyono, 2020). The data were then analyzed using Microsoft Excel by preparing a budget for sales, production, raw materials, direct labor, factory overhead, operating costs, cost of goods sold, and profit and loss based on Sasongko and Parulian (2023).

The research began with problem identification, literature review, and data collection through observation, interviews, and documentation. The data was then processed to compile all components of the operational budget, resulting in a profit and loss budget as the basis for financial planning and control of the Tempe Mendoan Ngapak Khas Banyumas MSME.

Results and Discussion

Manufacturing Data

Table 1 Sales Data for Tempe Mendoan Ngapak 2023-2025

Year	Sale	Price (Rp)
2023	4,936	17,000
2024	4,276	18,000
2025	3,641	18,000

Based on Table 1, above, sales of mendoa tempoh are not always decreasing from 2023-2025 and experience price changes every year.

Table 2 Sales Forecast for the 2026 Period (%)

2026 (Percentage)				TOTAL	%
Month	2023	2024	2025		
January	537	350	311	1198	9%
February	352	371	239	962	7%

March	525	381	418	1324	10%
April	449	344	320	1113	9%
May	424	451	348	1223	10%
June	386	342	309	1037	8%
July	429	353	332	1114	9%
August	401	466	303	1170	9%
September	402	360	335	1097	9%
October	332	257	270	859	7%
November	318	334	217	869	7%
December	381	267	239	887	7%
TOTAL	4,936	4/276	3,641	12,853	100%

Table 2 shows the monthly sales forecast for 2026, expressed as a percentage. The author determined the forecast by estimating sales conditions from the previous year.

Table 3 Raw Material Data for Tempe Mendoan

Product Usage Standards	
Soya bean	10 kg
Yeast	1 Pack

Table 3 The figure shows the raw materials used in making tempeh mendoan. One batch of tempeh mendoan uses two raw materials: 10 kg of soybeans and 1 packet of yeast.

Table 4 Data on Purchase Prices of Raw Materials for Tempe Mendoan

Month	Unit Price	
	Soybeans (Rp)	Yeast (Rp)
January	9,800	3,500
February	9,800	3,500
March	9,800	3,500
April	9,800	3,500
May	9,800	3,500
June	9,800	3,500
July	9,800	3,500
August	9,800	3,500
September	9,800	3,500
October	9,800	3,500
November	9,800	3,500
December	9,800	3,500

Based on table 4 shows the purchase price data for raw materials used in making tempeh mendoan from January to December. The business owner reported that the price per unit of raw materials was relatively stable, with soybeans priced at Rp 9,800 per kilogram and yeast at Rp 3,500 per package.

Table 5 Direct Labor Data

	Production	Packing
Fried Tempeh	1.5 Hours	1.5 Hours
Rate/Month	Rp. 600,000	Rp. 400,000

Based on Table 5, presents data on the direct labor required in the production of tempeh mendoan. Based on the table, tempeh mendoan production requires 3 hours of work for production

and packaging. The production stage costs Rp 600,000 per month, and the packaging stage costs Rp 400,000 per month. The business owner has five employees: one in production and four in packaging.

Sales Budget

**Table 6 Least Square Method Number of Units $X \neq 0$
Ngapak Mendoan Tempe Products in 2026**

Year	Sales (Y)	X	X ²	XY
2023	4,936	0	0	0
2024	4,276	1	1	4,276
2025	3,641	2	4	7,282
Σ	12,853	3	5	11,558

Based on the data in Table 6, it can be calculated using the following formula:

Formula:

$$b = \frac{n \sum xy - \sum x \sum y}{n \sum x^2 - (\sum x)^2}$$

$$a = \frac{\sum y}{n} - b \frac{\sum x}{n}$$

$$Y = a + bx$$

Where Y is the variable whose value is being sought, while X is the time variable used in the forecast. Using the X value pattern, namely 0, 1, 2, and so on.

Referring to table 6, the values of a and b are obtained through the following calculations:

Looking for b:

$$b = \frac{n \sum xy - \sum x \sum y}{n \sum x^2 - (\sum x)^2}$$

$$b = \frac{3 \times 11.558 - 3 \times 12.853}{3 \times 5 - (3)^2}$$

$$b = \frac{34.674 - 38.559}{15 - 9}$$

$$b = \frac{-3.885}{6}$$

$$b = - 648$$

Once the value of b is obtained, the next step is to calculate the value of a, with the following calculation:

Looking for a:

$$a = - b \frac{\sum y}{n} \frac{\sum x}{n}$$

$$a = - (-648) \frac{12.853}{3} \frac{3}{3}$$

$$a = 4.384 - (-648)$$

$$a = 4.932$$

Once the values of a and b are known, we can calculate the sales forecast for 2026. Where the value of X is a continuation of the pattern from table 4.6, the calculation is as follows:

Looking for Y:

$$Y = a + bx$$

$$Y = 4.932 + (-648)X$$

$$Y = 4.932 + (-648) (3)$$

$$Y = 2.989$$

So, based on the calculation above, it can be seen that the sales forecast for Tempe Mendoan Ngapak for 2026 using the least square method $x \neq 0$ is 2,989 packages.

**Table 7 Least Square Method Number of Units Unit $X=0$
Ngapak Mendoan Tempe Products in 2026**

Year	Sales (Y)	X	X ²	XY
2023	4,936	-1	1	-4,936

2024	4,276	0	0	0
2025	3,641	1	1	3,641
Σ	12,853	0	2	-1.295

Based on the data in Table 7, it can be calculated using the following formula:

Formula:

$$a = \frac{\Sigma y}{n}$$

$$b = \frac{\Sigma xy}{\Sigma x^2}$$

$$Y = a + bx$$

Where Y is the variable whose value is being sought, while X is the time variable used in the forecast. Using the X value pattern, namely -1, 0, 1, and so on.

Referring to table 4.7, the values of a and b are obtained through the following calculations:

Looking for a:

$$a = \frac{\Sigma y}{n}$$

$$a = \frac{(12.853)}{3}$$

$$a = 4.284$$

After the value of a is obtained, the next step is to calculate the value of b, with the following calculation:

Looking for b:

$$b = \frac{\Sigma xy}{\Sigma x^2}$$

$$b = \frac{-1.295}{2}$$

$$b = -648$$

After obtaining the values of a and b, the next step is to calculate the sales forecast for 2026. Where the value of X is a continuation of the pattern from table 4.7, the calculation is as follows:

Searching for Y:

$$Y = a + bx$$

$$Y = 4.284 + (-648)X$$

$$Y = 4.284 + (-648)(2)$$

$$Y = 2.989$$

So, based on the calculation above, it can be seen that the sales forecast for Tempe Mendoan Ngapak for 2026 using the least square method X=0 is 2,989 packages.

**Table 8 Trend Moment Method
Ngapak Mendoan Tempe Products in 2026**

Year	Sales (Y)	X	X ²	XY
2023	4,936	0	0	0
2024	4,276	1	1	4,276
2025	3,641	2	4	7,282
Σ	12,853	3	5	11,558

Source: Data Processing, 2026

Based on the data in Table 4.8, it can be calculated using the following formula:

Formula:

$$Y = a + bx$$

$$\Sigma y = na + b \Sigma x$$

$$\Sigma xy = a \Sigma x + b \Sigma x^2$$

To find the values of a and b in this forecasting method, we use the elimination method. The calculation is as follows:

Elimination method:

$$\sum y = na + b \sum x$$

$$\sum xy = a \sum x + b \sum x^2$$

$$12,853 = 3a + 3b \quad (X5)$$

$$11,558 = 3a + 3b \quad (X3)$$

$$29,591 = 6a$$

$$a = 4.932$$

After obtaining the value of a, the calculation of the value of b can be done using the following equation:

$$\sum y = na + b \sum x$$

$$12,853 = 3a + 3b$$

$$12,853 = 3(4,932) + 3b$$

$$12,853 = 14,796 + 3b$$

$$12,853 - 14,796 = 3b$$

$$-1.943 = 3b$$

$$b = -648$$

Based on the values of a and b that have been obtained, an equation is then obtained to calculate the sales forecast for 2026. Where the value of X is a continuation of the pattern in table 8, the following is the calculation:

Equality:

$$Y = a + bx$$

$$Y = 4.932 + (-648) X$$

$$Y = 4.932 + (-648) (3)$$

$$Y = 2.989$$

So, based on the calculations above, it can be seen that the sales forecast for Tempe Mendoan Ngapak for 2026 using the trend moment method is 2,989 packages.

Table 9 Sales Budget for Tempe Mendoan Ngapak in 2026

Month	Percentage (%)	Sale	Selling price	Number of Product Sales
January	9%	279	Rp. 18,000	Rp5,014,766.67
February	7%	224	Rp. 18,000	Rp4,026,882.75
March	10%	308	Rp. 18,000	Rp5,542,196.22
April	9%	259	Rp. 18,000	Rp4,658,961.02
May	10%	284	Rp. 18,000	Rp5,119,415.39
June	8%	241	Rp. 18,000	Rp4,340,828.91
July	9%	259	Rp. 18,000	Rp4,663,146.97
August	9%	272	Rp. 18,000	Rp4,897,560.10
September	9%	255	Rp. 18,000	Rp4,591,985.84
October	7%	200	Rp. 18,000	Rp3,595,730.02
November	7%	202	Rp. 18,000	Rp3,637,589.51
December	7%	206	Rp. 18,000	Rp3,712,936.59
	100%	2989		Rp. 53,802,000.00

Based on the results of the forecast of the sales budget for Ngapak mendoan tempeh in 2026, it is estimated that 2,989 mendoan tempeh will be sold with total sales of Rp. 53,802,000.

Production Budget

Table 10: Tempe Mendoan Ngapak Production Budget 2026

Month	Sale	Ending inventory of finished goods	Total finished goods required	Beginning inventory of finished goods	The number of finished goods to be produced
January	279	0	279	0	279
February	224	0	224	0	224
March	308	0	308	0	308
April	259	0	259	0	259
May	284	0	284	0	284
June	241	0	241	0	241
July	259	0	259	0	259
August	272	0	272	0	272
September	255	0	255	0	255
October	200	0	200	0	200
November	202	0	202	0	202
December	206	0	206	0	206
Total	2,989	0	2,989	0	2,989

In Table 10, both ending and beginning inventory for tempe mendoan ngapak are calculated at zero because, although there is some leftover product, it is not resold to maintain quality. The calculation is as follows:

$$\begin{aligned}
 \text{Total requirements} &= \text{Sales} + \text{Ending inventory} - \text{Beginning inventory} \\
 &= 2.989 + 0 \\
 &= 2.989
 \end{aligned}$$

Based on the research results in table 8 of the 2026 Ngapak Mendoan Tempe production budget, the production of mendoan tempe is estimated at 2,989 packs.

Raw Material Budget

Table 11 Raw Material Requirements for Tempe Mendoan (Soybeans)

Month	Production (pack)	Soybean Standards	Standard Amount of Soybeans
January	279	0.50	139.30

February	224	0.50	111.86
March	308	0.50	153.95
April	259	0.50	129.42
May	284	0.50	142.21
June	241	0.50	120.58
July	259	0.50	129.53
August	272	0.50	136.04
September	255	0.50	127.56
October	200	0.50	99.88
November	202	0.50	101.04
December	206	0.50	103.14
Total			1495

One production run yields 20 packs (each pack contains 5 sheets) of tempeh mendoan, requiring 10 kg of soybeans. The following calculations are used to determine the raw material standard:

$$\text{Quantity of raw materials} / \text{Quantity produced} = 10/20 \\ = 0.50$$

So, the standard raw material required for one batch of tempeh mendoan is 0.50 kg of soybeans, with a total requirement of 1,495 kg of soybeans for 2026.

Table 12 Raw Material Requirements for Tempe Mendoan (Yeast)

Month	Production (pack)	Yeast Standard	Standard Amount of Yeast
January	279	0.05	14
February	224	0.05	11
March	308	0.05	15
April	259	0.05	13
May	284	0.05	14
June	241	0.05	12
July	259	0.05	13
August	272	0.05	14
September	255	0.05	13
October	200	0.05	10
November	202	0.05	10
December	206	0.05	10
Total			149

One production run yields 20 packs (each pack contains 5 sheets) of mendoan tempeh, which requires one packet of yeast. The following calculations are used to determine the raw material standard:

$$\text{Quantity of raw materials} / \text{Quantity produced} = 1/20 \\ = 0.05$$

So, the standard raw material required for one batch of tempeh mendoan is 0.05g of yeast, with a total requirement of 149 packets of yeast for 2026.

After determining the raw material requirements budget, the next step is to prepare a raw material purchasing budget by calculating the raw material requirements, beginning inventory, ending inventory, and unit price. In this calculation, beginning and ending inventories are assumed to be zero, so that the total purchases equal the total raw material requirements.

Table 13 Purchase of Raw Materials for Tempe Mendoan (Soybeans)

Month	Need	Ending Inventory	Temporary Needs	Initial Inventory	Unit Purchased	Price Per Unit	Amount (Rp)
January	139.30	0	139.30	0	139.30	9,800	Rp1,365,131
February	111.86	0	111.86	0	111.86	9,800	Rp1,096,207
March	153.95	0	153.95	0	153.95	9,800	Rp1,508,709
April	129.42	0	129.42	0	129.42	9,800	Rp1,268,273
May	142.21	0	142.21	0	142.21	9,800	Rp1,393,619
June	120.58	0	120.58	0	120.58	9,800	Rp1,181,670
July	129.53	0	129.53	0	129.53	9,800	Rp1,269,412
August	136.04	0	136.04	0	136.04	9,800	Rp1,333,225
September	127.56	0	127.56	0	127.56	9,800	Rp1,250,041
October	99.88	0	99.88	0	99.88	9,800	Rp978,838
November	101.04	0	101.04	0	101.04	9,800	Rp990,233
December	103.14	0	103.14	0	103.14	9,800	Rp1,010,744
TOTAL							Rp14,646,100

Table 14 Purchase of Raw Materials for Tempe Mendoan (Yeast)

Month	Need	Ending Inventory	Temporary Needs	Initial Inventory	Unit Purchased	Price Per Unit	Amount (Rp)
January	14	0	14	0	14	3,500	Rp48,755
February	11	0	11	0	11	3,500	Rp. 39,150
March	15	0	15	0	15	3,500	Rp. 53,882
April	13	0	13	0	13	3,500	Rp. 45,295
May	14	0	14	0	14	3,500	Rp49,772
June	12	0	12	0	12	3,500	Rp42,203
July	13	0	13	0	13	3,500	Rp. 45,336
August	14	0	14	0	14	3,500	Rp47,615
September	13	0	13	0	13	3,500	Rp44,644
October	10	0	10	0	10	3,500	Rp. 34,958
November	10	0	10	0	10	3,500	Rp. 35,365
December	10	0	10	0	10	3,500	Rp. 36,098
TOTAL							Rp. 523,075

Based on the calculations in Table 13 and Table 14, the total budget for purchasing raw materials spent by Tempe Mendoan Ngapak for 2026 is IDR 14,646,100 for purchasing soybeans and IDR 523,075 for purchasing yeast.

Direct Labor Budget

Table 15 Direct Labor Cost Budget for 2026

Month	Section Salary Kitchen/Month	Amount Employee	Section Salary Packing/Month	Amount Employee	Total Salary/Month
January	Rp. 600,000	1	Rp. 400,000	4	Rp. 2,200,000
February	Rp. 600,000	1	Rp. 400,000	4	Rp. 2,200,000
March	Rp. 600,000	1	Rp. 400,000	4	Rp. 2,200,000
April	Rp. 600,000	1	Rp. 400,000	4	Rp. 2,200,000
May	Rp. 600,000	1	Rp. 400,000	4	Rp. 2,200,000
June	Rp. 600,000	1	Rp. 400,000	4	Rp. 2,200,000
July	Rp. 600,000	1	Rp. 400,000	4	Rp. 2,200,000
August	Rp. 600,000	1	Rp. 400,000	4	Rp. 2,200,000
September	Rp. 600,000	1	Rp. 400,000	4	Rp. 2,200,000
October	Rp. 600,000	1	Rp. 400,000	4	Rp. 2,200,000
November	Rp. 600,000	1	Rp. 400,000	4	Rp. 2,200,000
December	Rp. 600,000	1	Rp. 400,000	4	Rp. 2,200,000
TOTAL					Rp. 26,400,000

So, based on the calculation above, the total direct labor cost budget incurred by the business each month is IDR 2,200,000 with a total of IDR 24,400,000 for the year 2026.

Factory Overhead Budget

Table 16 Overhead Cost Budget for the Ngapak Mendoan Tempe Factory

Information	FOH Fixed	FOH Variables	Total One Month	Total One Year
Maid Fee				
Gas	100,000		100,000	1,200,000
Banana leaf	200,000		200,000	2,400,000
Packaging (bamboo basket)	105,000		105,000	1,260,000
TOTAL				4,860,000

Based on the calculations in Table 13, the total overhead cost budget for the Tempe Mendoan Ngapak factory for 2026 is IDR 4,860,000 per year.

Operating Cost Budget

Table 17 Operational Cost Budget for Tempe Mendoan Ngapak

Information	Fixed Costs
Vehicle Fuel Costs	Rp. 2,400,000
TOTAL OPERATING EXPENSES	Rp. 2,400,000

Based on the calculations in Table 14, Tempe mendoan ngapak only spends Rp. 50,000 per week on vehicle fuel for its operations, with the total operational costs reaching Rp. 2,400,000 per year.

Cost of Goods Sold Budget

Table 18 Budget for Cost of Goods Sold for Tempe Mendoan Ngapak

Information	Fried Tempeh
Raw Material Costs	
Soya bean	14,646,100
Yeast	523,075
Direct Labor Costs	26,400,000
Factory Overhead Costs	4,860,000
Cost of Goods Sold (Rp)	46,429,175
Production Unit (unit)	2,989
COGS/unit (Rp/Unit)	15,533

Table 15 shows the results of the calculation of the production cost budget for ngapak mendoan tempeh, the HPP is set at IDR 15,533 per mendoan tempeh.

Profit and Loss Budget

Table 19 Profit and Loss Budget for Tempe Mendoan Ngapak

Information	Fried Tempeh Total
Sale	Rp. 53,802,000
HPP	Rp. 46,429,175
Gross profit	Rp. 7,372,825
Operation	Rp. 2,400,000
Net profit	Rp. 4,972,825

Table 16 shows the profit and loss statement for Ngapak's mendoan tempeh for 2026, amounting to Rp 4,972,825. The profit and loss calculation for Ngapak's mendoan tempeh is still relatively small, due to the relatively high operational costs while the selling price is set too low.

Discussion

Based on research conducted on the Tempe Mendoan Ngapak Khas Banyumas MSME, it was found that the business lacks a systematic financial recording or planning system. The records only record the total sales, without detailing production costs, operational costs, or profit and loss calculations. This makes it difficult for the business owner to determine sales targets, estimate production needs, set more accurate selling prices, and determine actual business profits.

The operational budget preparation in this study was conducted to help the Tempe Mendoan Ngapak Khas Banyumas MSME develop a more systematic and focused business plan. The operational budget prepared includes the sales budget, production budget, raw materials budget, direct labor budget, factory overhead budget, operational cost budget, cost of goods sold budget, and profit and loss budget.

The sales budget is prepared as the foundation for the entire operational budget. The sales budget preparation in this study was conducted using a forecasting method based on historical data and assumptions. Based on the calculation results using the least squares method for the number of units $X \neq 0$, the least squares method for the number of units $X = 0$, and the trend moment, the same sales forecast results were obtained, namely 2,989 packs for 2026.

Forecasting results indicate that sales of Tempe Mendoan Ngapak have decreased from year to year. This may be due to increasingly fierce competition and a lack of promotion and marketing. Furthermore, sales forecasting results predict an increase in sales during Ramadan, while remaining stable in other months. Based on the sales budget, total sales for 2026 are estimated to reach Rp 53,802,000. However, it should be noted that sales forecasts are not always accurate because they are based on estimates and assumptions. Preparing a sales budget is beneficial for the Tempe Mendoan Ngapak MSME because it helps business owners estimate sales targets and revenue for the coming period.

The production budget is based on a previously calculated sales budget. The goal is to determine the number of products that must be produced during a specific period to meet sales needs and avoid excess or shortages. Based on the calculations, the total planned production for 2026 is 2,989 packs, with an average production of 250 packs per month. Preparing a production budget can help business owners manage production volume more effectively and efficiently. With production planning, businesses can minimize the risk of raw material waste and ensure the smooth running of the production process.

A raw materials budget is prepared to determine the quantity of raw materials needed and their purchase costs for the production process. Based on calculations, one production run requires 10 kilograms of soybeans and one package of yeast. Raw material prices remained relatively stable throughout the period, with total purchasing costs in 2026 of Rp 14,646,100 for soybeans and Rp 523,075 for yeast. With a raw materials budget, business owners can estimate the amount of raw materials needed for smooth production, helping to control raw material purchasing costs and prevent waste.

The direct labor budget determines the labor requirements and wage costs incurred in the production process. The workforce in the business consists of two sections: the kitchen section and the packaging section. The kitchen section has a monthly salary of Rp 600,000, while the packaging section has a monthly salary of Rp 400,000. Based on the research results, the total direct labor cost for Tempe Mendoan Ngapak MSME is Rp 26,400,000 for 2026. Preparing a direct labor budget helps business owners determine the amount of labor costs that need to be allocated for a certain period so that business owners can better plan labor usage.

The factory overhead budget includes supporting costs incurred during the production process. The total factory overhead costs for the Tempe Mendoan Ngapak MSME for 2026 amounted to Rp 4,860,000. The most dominant factory overhead cost incurred by this MSME is direct labor costs. This cost is often not calculated in detail by MSMEs. However, it significantly affects the total production costs and determines the selling price of the product. By preparing a factory overhead budget, the Tempe Mendoan Ngapak MSME can determine the amount of production supporting costs that must be incurred in one period.

The operational budget for the Tempe Mendoan Ngapak MSME for 2026 is Rp 2,400,000, which is primarily for vehicle fuel. Prior to the preparation of the operational budget, the business had

not recorded its operational costs in detail, making it difficult for the owner to determine the actual amount of business expenses.

The cost of production per unit for tempe mendoan is Rp 15,533 per pack with an annual cost of goods sold of Rp 46,429,175 for 2026. Preparing a cost of production budget helps the Tempe Mendoan Ngapak MSME determine the selling price of its products more accurately. Previously, pricing was only based on estimates without calculating all production costs in detail. By calculating this budget, business owners can determine the total costs incurred to produce each product so that the selling price set can provide an appropriate profit.

The profit and loss calculation results obtained by the Tempe Mendoan Ngapak MSME in 2026 showed a profit of Rp 4,972,825, representing 9.24% of sales turnover. The profit obtained is still relatively small due to high operational expenses. This is also due to the product's low selling price while operational expenses tend to be high. Preparing a profit and loss budget provides an overview of the business's financial condition for the coming period. With a profit and loss budget, business owners can estimate revenue, expenses, and net profit.

The results of this study demonstrate that operational budgeting plays a crucial role for MSMEs, particularly in helping them manage their finances more systematically and effectively. These findings align with research by Saputri et al. (2025), which states that budgeting plays a crucial role in improving operational effectiveness and assisting MSMEs in financial planning to support business growth and sustainability.

Having a structured operational budget at the Tempe Mendoan Ngapak MSME can help carry out better financial planning and control so that it can serve as a guideline in carrying out business activities in the future and support business development to be more effective, efficient and sustainable.

Conclusion

Based on the research results, the preparation of the operational budget at the Tempe Mendoan Ngapak Khas Banyumas MSME has succeeded in producing a more systematic financial planning through the preparation of sales, production, raw material, direct labor, factory overhead costs, operational costs, cost of goods sold, and profit and loss budgets. The forecast results show a sales target for 2026 of 2,989 packs with a sales value of Rp53,802,000, a cost of goods sold of Rp46,429,175, and an estimated net profit of Rp4,972,825 or approximately 9.24% of sales turnover. This budget preparation provides a clearer picture of cost requirements, production targets, and profit estimates so that it can be a basis for MSMEs in carrying out financial planning and control more effectively. The research findings also show that before the budget preparation, financial records were still simple so that business owners had difficulty in determining sales targets, calculating overall costs, setting selling prices, and knowing the actual business profit.

This study has limitations because it was only conducted on one MSME using sales data from 2023 to 2025 as the basis for budgeting. Therefore, the results cannot be generalized to other types of businesses. Furthermore, the budget prepared is still a projection based on historical data and has not been compared with its actual implementation. Therefore, further research is recommended to conduct an evaluation between the budget and its realization to measure the level of operational budget effectiveness. Practically, the results of this study can be used as a guideline for the MSME Tempe Mendoan Ngapak Khas Banyumas in implementing sustainable operational budgeting, improving the financial recording system, setting more appropriate selling prices, and increasing cost efficiency and the quality of decision-making to support business sustainability.

Bibliography

- Angraini, A., Syam, EW, Tahir, RU, Shabrina, A., Klarina, A., & Nur, W. (2024). Preparation of operational budgets in Pocan MSMEs. *Scientific Journal of Accounting and Finance*, 3(2), 41–46. <https://doi.org/10.69679/jian.v3i2.5811>
- Angraini, N., Paisal, & Afrizawati. (2025). Preparation of an operational budget as a cost control tool for the Pemppek Love Palembang MSME. *Journal of Digital Era Business Management*, 206–218. <https://doi.org/10.61132/jumabedi.v2i3.731>
- Balaka, YM (2022). *Research methodology: Theory and application*. Widina Bhakti Persada.
- Fauzi, F., Dencik, AB, & Asiati, DI (2019). *Research methodology for management and accounting*:



- Application of SPSS and EViews for data analysis techniques. Salemba Empat.
- Coordinating Ministry for Economic Affairs of the Republic of Indonesia. (2025, January 30). The government encourages MSMEs to upgrade to increase their contribution to Indonesian exports. <https://ekon.go.id/publikasi/detail/6152/pemerintah-dorong-umkm-naik-kelas-tingkatkan-kontribusi-terhadap-ekspor-indonesia>
- Muhtarom, A. (2016). Company budget. CV Pustaka Ilalang Group.
- Nur'aidah, A., Puspita, NA, Sari, NZN, & Santoso, RA (2023). Analysis of the preparation of the operational cost budget for CV Sukses Bersama. Journal of Accounting and Finance, 5(2). <https://doi.org/10.34005/akrual.v5i2.3625>
- Pasolong, H. (2016). Public administration research methods. Alfabet.
- Pratiwi, US, Hartono, EY, Rahayu, FP, Sari, NP, & Santoso, SB (2022). Operational cost budget as a planning and control tool to maximize profit at PT Bank Riau Kepri Syariah. Scientific Journal of Accounting, 6(1), 22–30. <https://doi.org/10.35145/bilancia.v6i1.1748>
- Railis, H. (2022). Budget analysis as one of the planning tools and production control. International Journal of Multidisciplinary Research and Literature, 1(2), 138–149. <https://doi.org/10.53067/ijomral.v1i2.15>
- Refacaroline, N., Aulia, N., Aisya, S., Ibnur, AAS, & Gaffar, I. (2024). Operational optimization and growth at Warung Bakso Bandung Mang Abun MSME. Scientific Journal of Accounting and Finance, 3(2), 67–76. <https://doi.org/10.69679/jian.v3i2.5820>
- Sasongko, C., & Parulian, SR (2023). Budget (17th ed.). Salemba Empat.
- Sugiyono. (2019). Quantitative, qualitative, and R&D research methods. Alfabeta.
- Sugiyono. (2020). Quantitative, qualitative, and R&D research methods. Alfabeta.
- Waru, AT, Ramadhani, AD, Julmina, A., Aras, A., Misran, A., & Haris, MR (2024). Preparation of operational budgets at the Kopi Lia MSME. Scientific Journal of Accounting and Finance, 3(2), 60–66. <https://doi.org/10.69679/jian.v3i2.5818>
- Widajatun, VW, Astuti, A., Inrawan, A., Silitonga, HP, Putri, DE, Manurung, S., Ervina, N., Abdurohim, A., Susanti, N., & Ichsani, S. (2021). Operational budget of manufacturing companies. Zahir Publishing.
- Wulandari, AH, Purwati, & Miskiyah, N. (2025). Analysis of operational budget planning for Mebel X. Journal of Creative and Innovative Business, 2(3), 90–98. <https://doi.org/10.61132/jubikin.v2i3.828>