

Evaluation of Management Accounting Implementation in Supporting MSME Operational Efficiency (Krutukan MSME Case Study)

Robiatus Salamah¹, Nur Aisyah¹, Chirmala Wisnu Permata¹, Dyah Ayu Rizqi Ramadhani¹, Nabilatuz Zahro¹

¹ Universitas Sunan Gresik, Indonesia; robiatus.s@lecturer.usg.ac.id

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Abstract

MSMEs have an important role in the economy, but they still face limitations in cost management, financial recording, and operational planning. This condition causes cost information to not be fully used as a basis for decision-making and efficiency improvement. This study aims to evaluate the implementation of management accounting in supporting operational efficiency in Krutukan MSMEs, especially in recording and managing costs, determining selling prices, production planning, and cost control. This study uses a qualitative approach with a *single intrinsic case study method* and involves one main informant, namely the owner of Krutukan MSMEs. Data was obtained through observation for two days, in-depth interviews with MSME owners, and documentation, then analyzed using the interactive model Miles, Huberman, and Saldaña through the stages of coding, categorization, theme formation, data presentation, and verification. The results of the study show that management accounting is applied only through cost recording, raw material needs planning, expenditure control, and the use of cost information in determining selling prices. However, recording is still done manually and costs have not been classified systematically. Simulations show that expenditure-based HPP that does not include all BOP of Rp. 8,000 per package increased to Rp. 9,500 per package after the full cost calculation approach included a BOP of Rp. 150,000, so that the previous HPP was lower than Rp. 1,500 per package. The study concluded that operational efficiency can be improved through cost classification, simple budgeting, systematic HPP calculation, and digitization of financial records.

Keywords

Management Accounting; Production Costs; Operational Evidence; MSMEs

Corresponding Author:

Robiatus Salamah

Universitas Sunan Gresik, Indonesia; robiatus.s@lecturer.usg.ac.id

1. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are sectors that make significant contributions to the Indonesian economy, both in job creation, increasing people's income, and growing Gross Domestic Product (GDP). However, despite having a strategic role, many MSMEs still face various challenges in managing financial operations. Problems such as wasted costs, ineffective use of resources, and weak business planning and control are often factors that hinder performance and competitiveness (Azhari



et al., 2024).

Management accounting can help MSMEs in planning, control, performance measurement, and decision-making. Its implementation does not have to use a complex system, but can be started through cost grouping, simple budgeting, HPP calculations, and comparisons between plans and realization. Relevant, timely, and detailed cost information helps owners understand the relationship between costs and business activities. The quality of accounting information and the implementation of accounting information systems also play a role in supporting performance improvement and more targeted management of MSME resources (Asih et al., 2025)(Susetyo et al., 2024)(Nareswari & Winarsih, 2024).

The development of digital technology also encourages MSMEs to start changing the way they manage their finances. Digital bookkeeping helps MSME actors obtain cost information faster, more accurately, and more organized, making it easier to control costs and make business decisions (A. R. Hakim & Iswahyudi, 2024). However, the implementation still faces various obstacles, especially the limitations of accounting literacy, technological capabilities, and resources owned by MSMEs (Mubarak et al., 2026). In these conditions, the implementation of management accounting is important because it can help MSMEs manage budgets, analyze costs, evaluate performance, and plan profits more effectively (Ramadhan et al., 2024).

Production cost management is an important part of management accounting because it is used as the basis for calculating HPP, setting selling prices, measuring margins, and evaluating efficiency. In a food processing business, production costs include raw materials, labor, and overhead such as electricity, water, fuel, maintenance, and equipment depreciation. If these components are not taken into account, production costs can appear lower than the actual conditions. Methods *Full costing* helps provide a more complete picture of costs because it includes all elements of production costs, including overhead and asset depreciation (Soeliongan et al., 2024)(Putra et al., 2024)(Haliza et al., 2024). Relevant, reliable, and timely cost information also supports pricing, production planning, and cost control, so that management accounting can play a role in improving the efficiency and sustainability of MSMEs (Ayuningtyas & Purwanti, 2025).

Previous research shows that the application of management accounting can support the performance, operational effectiveness, and sustainability of MSMEs through information used in business planning and control (SM et al., 2025). However, research on the application of management accounting to improve operational efficiency in micro-scale MSMEs is still limited. Some studies also use a more quantitative approach so that they have not described in depth the practice of management accounting in daily activities and the obstacles faced by business actors (Ayem et al., 2024) (Zandra et al., 2024)(Nurhidayah et al., 2025). This condition opens up research space to understand the application of management accounting in a more contextual way in micro businesses.

Krutukan MSMEs are a fish bone processing business that produces crackers under the brand KRUTUKAN (*Fish Bone Crackers*). Cost management still relies on owner's memory and inconsistent recording, so that the cost of raw materials, labor, electricity, gas, equipment depreciation, and potential waste has not been recorded comprehensively. This condition makes cost information per unit not fully reflect the actual production cost. In addition, studies on the use of cost information for production control, pricing, raw material management, and waste reduction in micro businesses are still limited. Therefore, more in-depth research is needed on the application of management accounting and its relation to operational efficiency in food processing MSMEs (Soeliongan et al., 2024)(Asih et al., 2025).

Krutukan MSMEs were chosen as the object of research because they have independently recorded costs and managed their business, but still face limitations in cost classification and accounting information systems. Records that still rely on the owner's memory show that cost information is used practically, but has not been systematically documented. This condition can limit the quality of information in supporting decisions related to price, production, and cost control. Based on Decision Usability Theory, accounting information will be more useful if it is relevant, reliable, and available on time. As an effort to improve, the concept of *Target Costing* can be used by considering market prices and expected profits to determine production cost limits from the planning stage (Ammar, 2024).

The novelty of the research lies in the evaluation of management accounting by placing the quality of cost information and operational efficiency as the focus of the analysis. This study examines the cost characteristics of fish bone processing MSMEs, including electricity, gas, equipment shrinkage, and potential loss of raw materials, then analyzes memory-based recording practices using *Theory of Decision Usefulness* and concepts *Target Costing*. In addition, the research is equipped with simulations *Full costing* as well as practical cost classification recommendations to help MSMEs build a more structured recording system (Ammar, 2024)(Soeliongan et al., 2024).

2. METHODS

This study uses a qualitative approach with a case study method. The qualitative approach was chosen because this study aims to understand in depth how the implementation of management accounting is applied in the operational activities of MSMEs. The case study design allows the researcher to maintain the case context intact, including the relationship between recording practices, production decisions, pricing, and cost control. With this design, the findings are understood as a contextual explanation of the case being studied and are not intended to be generalized statistically to all MSMEs (Nababan & Marpaung, 2024)(Zandra et al., 2024).

The case study method was used because the research focused on one research object, namely Krutukan MSMEs involved in the production of fish bone biscuits. The design used was a single

intrinsic case study, as the case was chosen to be understood in depth based on the characteristics and practices of cost management that occur in the business unit. This approach is appropriate to uncover how the recording, planning, cost control, pricing, and use of cost information occur in a real operational context (Judijanto & Wibowo, 2024).

The research was conducted on Krutukan MSMEs that were selected purposively because they have routine production activities, have operated sustainably, perform simple financial records, and have cost management issues relevant to management accounting. The main informant is the business owner who carries out management functions as well as operational and financial decision-making. One informant is considered adequate because most of the business activities are centered on the owner, while the adequacy of information is checked through interviews, observations, and documentation. The findings are understood according to the context of the case and are not intended to be generalized to all MSMEs (Puyo, 2024)(Nababan & Marpaung, 2024).

The observation was conducted over two days and was supplemented with interviews regarding raw material purchases, production, sales, and expenses in the previous period, then checked through documents and transaction records. Data from various sources were compared through triangulation to ensure consistency of findings and obtain a more complete picture of MSME cost management. This approach is in line with research showing that management accounting plays a role in helping MSMEs plan, control, and evaluate business activities more effectively (Anto et al., 2024) (Puyo, 2024).

Data Collection Techniques

Research data was obtained through observation, in-depth interviews, and documentation. The three techniques were used together to obtain a more complete picture of the management accounting practices and operational efficiency of Krutukan MSMEs while increasing the reliability of findings through triangulation of methods (Anto et al., 2024).

a. Observations

Observations were carried out for two days by observing the procurement of raw materials, production processes, labor use, cost recording, packaging, and product distribution. Information about activities or transactions that did not appear during the observation was confirmed through interviews and documents, so that cost patterns could be understood more comprehensively.

b. In-Depth Interviews

Semi-structured interviews were conducted with Krutukan MSME owners as the main informant. The interviews focused on recording and classification of costs, budgeting, setting selling prices, controlling costs, using information in decision-making, cost management barriers, and efforts to improve operational efficiency. The semi-structured approach allows researchers to dig deeper into

information according to the conditions found in the field.

c. Documentation

Documentation includes sales records, purchase of raw materials, production costs, proof of transactions, inventory, and other documents related to business activities. Documents are used to check the suitability of information from observations and interviews while strengthening empirical evidence regarding recording practices and cost management in Krutukan MSMEs.

Data Analysis Techniques

Data analysis was carried out thematically with reference to the interactive models of Miles, Huberman, and Saldana. The process began through *Open Coding* based on the results of interviews, observations, and documentation, then the code is grouped into the categories of cost recording, planning, cost control, pricing, and operational efficiency to form the main theme of the research (Siswanto et al., 2024). The data is further presented in the form of a matrix and a narrative, while conclusions are drawn from a pattern of findings verified through a comparison of various data sources.

The credibility of the data is strengthened through triangulation of sources and methods, *member checking*, and *Audit trail*. The results of interviews, observations, and documentation are compared to ensure consistency, while *member checking* is used to confirm the suitability of the interpretation with the informant's information. Because the study only involves observation for two days and one informant, data that cannot be observed is directly confirmed through the informant's notes and statements. These limitations are considered in interpreting the results of the study (Nababan & Marpaung, 2024).

3. FINDINGS AND DISCUSSION

Krutukan MSMEs are micro-businesses that process and sell products made from fish bones for the local market. All activities, from raw material procurement, production, packaging, marketing, to transaction recording, are managed directly by the owner with limited resources. Centralized management makes it easier to make decisions, but makes business information simple and relies more on the owner's experience. This condition shows that Krutukan MSME decision-making still relies on practical knowledge rather than a structured accounting information system (S. N. Hakim et al., 2025).

Krutukan's MSME operational activities start from the purchase of raw materials based on estimated production needs, then continue with the processing process to product packaging and marketing. Sales and expenditure transactions are still recorded manually after the activity is completed, so that recording functions more as simple financial documentation. Sales records are used to estimate the next production, but the available information is still limited to income and expenses so

it is not able to provide a detailed picture of the structure and cost of production.

3.1. Implementation of Management Accounting in Krutukan MSMEs

The results of the interviews show that the practice of management accounting in Krutukan MSMEs has taken place in a simple form. The owner records expenses, estimates raw material needs, controls expenses, and uses cost information along with market price considerations when setting selling prices. These practices show the existence of planning and control functions even though they have not been compiled in a formal management accounting system. This finding is in line with research that shows that the use of accounting information in MSMEs often develops gradually following the needs of the owner and the perception of the benefits of the information (Ramadhan et al., 2024)(Zandra et al., 2024).

The first analysis that emerged from the results of the study was cost recording as a simple business control tool. MSME owners realize the importance of cost recording to find out the amount of costs that have been incurred during production activities even though they do not use a formal accounting system.

"How did you record the production cost so far?"

"I still write them down manually in the book. If there are any purchases of raw materials or production expenses, I write them down one by one so I know how much it costs each day."

The results of the study show that management accounting in Krutukan MSMEs has been implemented simply and informally through cost recording, raw material planning, expenditure control, and pricing. Although it does not use a structured system, the practice helps owners control costs and maintain business sustainability. The ability to manage cost information is important because it affects the quality of operational and strategic decision-making (Nurhidayah et al., 2025). These findings are in line with opinion (S. N. Hakim et al., 2025) that management accounting provides financial information that supports business planning, control, and decision-making.

The results of the interviews show that Krutukan MSME owners have recorded production expenses regularly through a simple book as a form of controlling the use of resources and the basis of cost information. Consistent recording can support business performance planning and evaluation (Ramadhan et al., 2024). Owners also plan cost and raw material needs based on sales and order experience, even if they have not been outlined in a formal budget. The practice reflects the planning function in management accounting that can help optimize resources and improve operational efficiency (Utami et al., 2026). These findings are in line with (SM et al., 2025) that management accounting information supports planning and decision-making, even though its application in Krutukan MSMEs is still simple and not optimal.

3.2. Production Cost Management in Krutukan MSMEs

The documentation results show that the owner has recognized various production expenses, but they have not been fully grouped by function. In the available data, the main ingredients and additives are the largest components, followed by labor, electricity and water, packaging, and transportation. Conceptually, materials that can be traced directly to the product can be categorized as direct raw materials; the wages of workers directly involved in the process can be categorized as direct labor; while production costs that cannot be traced directly can be grouped as overhead. This separation is an important basis for the calculation of full costing (Putra et al., 2024)(Soeliongan et al., 2024).

Table 1. Examples of Production Cost Components of MSMEs Krutukan per Production Cycle

Cost Components	Value (IDR)
Fish Bones and Main Ingredients	350,000
Flour and Additives	200,000
Seasonings and Supporting Ingredients	100,000
Product Packaging	75,000
Daily Labor	150,000
Electricity and Water	50,000
Material Procurement Transport	25,000
Total Production Cost	950,000

Source: Processed by researcher

Cost data shows that total expenditure is known, but the contribution of each cost group to the product cannot be fully traced. This reduces the owner's ability to know which components are most sensitive to changes in prices and production activities. For example, an increase in the price of raw materials can be known from a note, but the impact on the HPP per package cannot be calculated if the amount of production and cost classification are not recorded consistently. Therefore, cost classification needs to be seen as a control tool, not just a change in bookkeeping format (Syahbana et al., 2026)(Syahputri et al., 2025).

"What costs do you usually take into account in production?"

"Usually what I calculate are the main raw materials, additives, plastic packaging, shipping costs, and electricity if the production is large."

Owner awareness of the importance of recording is a positive initial capital for the development of a management accounting system. The main problem lies in the level of detail and function of information. Records that only show total expenses cannot explain the source of costs, cost behavior, and the relationship between costs and the amount of output. To improve the quality of information, each production cycle needs to have a minimum summary of raw materials, direct labor, overhead, number of products, HPP per unit, selling price, and margin. With this format, recording remains simple but already produces more relevant information for control (Ayuningtyas & Purwanti, 2025) (Syahbana

et al., 2026).

The results of the study show that Krutukan MSMEs still record all production expenses in one group without differentiating the cost of direct raw materials, direct labor, and production overhead costs. This condition is not in accordance with the principle *Full costing* which requires all production costs to be systematically identified and allocated to the product. The separation of these cost components is important to know the contribution of each cost to the total cost of production and evaluate business efficiency. Although the owner has recognized the various costs that arise during the production process, the information has not been classified in a structured manner so that it cannot be optimally utilized as a basis for analysis and managerial decision-making.(Soeliongan et al., 2024).

The unclear separation between raw materials, labor, and overhead costs makes it difficult for Krutukan MSMEs to identify the main sources of costs, identify waste, and evaluate costs per activity and per unit of product. Because all expenses are still recorded as business costs in general, changes in electricity, raw materials, and labor costs cannot be analyzed separately. This condition can make inefficiencies difficult to detect and slow down corrective actions, so cost classification needs to be seen as part of operational control, not just administrative activities (Syahputri et al., 2025).

The findings are in line with research (Asih et al., 2025) which shows that MSMEs still face difficulties in separating production costs so that cost information does not fully reflect actual conditions. Application *Full costing* can help to include all components of production costs, including overhead, while *Target Costing* can be used to set cost limits based on market prices and expected profits (Ammar, 2024). Both approaches can be the basis for Krutukan MSMEs to improve cost control and increase operational efficiency.

3.3. Determining selling prices as management accounting implementations

The setting of selling prices in Krutukan MSMEs is carried out by considering the capital expended, the price of similar products in the market, and the expected profit. The practice shows that the owner does not fully use cost-plus pricing, but combines internal information and external considerations. This approach has advantages because the market price is a consideration, but the quality of the decision still depends on the accuracy of the internal costs. If the HPP is too low because the overhead is not calculated, the visible margin can be higher than the actual economic margin.

Table 2. Practical Transition Matrix for Cost Classification and Recording of Krutukan MSMEs

Current Empirical Practices	Recommendation for Full Costing/Target Costing	Realistic Stages of Digital Transition
Currently recorded as a general business expense and not yet separated from other costs.	Categorize fish bones, flour, seasonings, auxiliary ingredients, and packaging components of the product as direct raw materials.	Create a "Raw Materials" account category in your digital cash book or spreadsheet, and save photos of the receipts.
Labor costs are recorded but do not yet constitute a separate cost category.	Record the wages of labor directly involved in production as direct labor costs.	Enter the number of workers, work days/hours, and total wages per production cycle.
Electricity and water costs are recorded alongside other expenses; the available cost data indicates Rp50,000 per cycle.	Allocate the portion used for production as factory overhead (BOP) and separate it from non-production costs.	Record estimated production usage per cycle and conduct a monthly evaluation.
No separate figures are currently available in the research documentation.	Record the purchase/consumption of gas used for the frying process as Manufacturing Overhead (MOH).	Use a single 'Production Gas' category and record the cylinders/consumption per cycle.
Not yet calculated separately.	Calculate simple depreciation for production equipment and allocate it to the production period/cycle.	Start with a simple asset list: equipment name, purchase price, useful life, and monthly depreciation.
Record as a general expense.	Determine whether the transportation relates directly to the procurement of production materials or to sales activities, and ensure consistent classification.	Use the categories 'Material Transport' and 'Sales Transport' to keep them separate.
Not yet available as a periodic report; all costs focus on total expenditure.	Calculate COGS per cycle using the formula: Raw Materials + Direct Labor + Factory Overhead.	The spreadsheet automatically calculates the COGS per package whenever production data is entered.
The selling price is determined based on estimated costs, market price, and expected profit.	Establish an acceptable market price, determine the target profit, and then derive the target cost: Market Price – Target Profit.	Use the calculated cost of goods sold (COGS) as a starting point; if the COGS exceeds the target cost, identify components where costs can be reduced without compromising quality.
There are no periodic production cost reports.	Create a cost summary per cycle and compare the budget against actual figures.	Start with a single monthly spreadsheet: costs, production, COGS per unit, selling price, profit, and the budget-versus-actual variance.

Source: Processed by researcher

The limitations of cost information become clearer when all expenses are placed in a single group. Owners know the total costs, but cannot immediately answer the cost per unit or contribution of each activity. For micro-businesses, the solution does not have to be a complex accounting system. A more realistic step is to create a consistent cost category and add a column of production amount in each cycle. Thus, cost information can be directly linked to the output and used as the basis for calculating the HPP.

"Do you separate between the cost of raw materials, labor, and other costs?"

"It has not been separated specifically. All costs I record as business expenses. The important thing is that I know the total costs that come out."

Cost management in Krutukan MSMEs still focuses on the amount of expenses, which is important to maintain liquidity but not enough to assess the profitability of the product. In order for recording to be more useful for cost control, expenditure information needs to be developed into cost per unit, margin, and comparison between budget and realization.

Based on the available data, the *full costing simulation* in one production cycle with an output of 100 packages resulted in a total production cost of IDR 950,000, consisting of raw materials of IDR 650,000, direct labor of IDR 150,000, and production overhead cost of IDR 150,000. In this simulation, IDR 150,000 is treated as the total BOP because gas costs and depreciation have not been documented separately. These two components are parts that need to be collected and recorded further to obtain a more complete calculation of production costs.

Table 3. Production Cost Calculation Simulation

Description	Value (IDR)
Total raw material costs	650,000
Total direct labor	150,000
Total production overhead	150,000
Total production costs	950,000
Quantity of products	100
Cost of goods sold per pack	9,500

Source: Processed by researcher

The results of the *full costing* simulation showed a HPP of IDR 9,500 per package out of a total cost of IDR 950,000 for 100 packages. This information provides a clearer basis for owners to compare production costs with selling prices. The grouping of raw material costs, direct labor, and overhead also results in a more complete HPP calculation (Putra et al., 2024; Haliza et al., 2024).

At a selling price of IDR 12,350 per package, one-cycle revenue reached IDR 1,235,000 with profit based on *Full costing* of IDR 285,000 or a margin of 23.08%. On the other hand, without including a BOP of IDR 150,000, the HPP is only visible at IDR 8,000, so that the profit appears to be IDR 435,000 with a margin of 35.22%. This difference shows that the BOP waiver causes a lower HPP of IDR 1,500 per

package and a margin that looks higher by 12.15 percentage points. This finding confirms the importance of including all cost components in the calculation of HPP so that the condition of production costs can be described more realistically (Soeliongan et al., 2024) (Asih et al., 2025).

Scenario.	COGS per pack.	Profit per cycle.	Margin on sales.	Impact
Full costing: Factory overhead of Rp150,000 is included.	Rp. 9.500	Rp. 285.000	23,08%	The most comprehensive cost basis, based on research simulations.
The IDR 150,000 overhead cost is disregarded.	Rp. 8.000	Rp. 435.000	35,22%	Reported profit is higher by Rp150,000; Cost of Goods Sold is understated by Rp1,500 per pack.
Only identified operational overhead costs (BOP) of Rp50,000 (electricity/water) were disregarded.	Rp. 9.000*	Rp. 335.000*	27,13%	In terms of sensitivity, omitting a component costing just Rp50,000 increases the artificial profit by Rp50,000.

Source: Processed by researcher

Sensitivity analysis needs to be done carefully because the documentation only records electricity and water costs of Rp50,000, while gas and depreciation costs are not available separately. If only the electricity and water costs are ignored, the profit appears to increase by Rp50,000. Meanwhile, the abandonment of all simulative BOP of Rp150,000 lowers the HPP by Rp1,500 per package. Thus, this simulation is used to show the impact of cost information, not as a measurement of actual waste (Asih et al., 2025).

Pricing based on costs, market prices, and expected profits can support business decisions if all production costs are calculated consistently. On the other hand, when part of the cost is not taken into account, the visible margin can be higher than the actual condition. Therefore, improvements to the HPP calculation need to be made first before determining the target margin, because understanding costs and selling prices is an important part of improving the quality of MSME management (Yuana & Nurmasari, 2024).

"How do you determine the selling price of a product?"

"I first calculated the capital out, then I saw the price of the same product in the market. After that, I added the profits that I thought consumers could still receive."

The statement indicates that cost information has been used in the decision-making process,

although it is still an estimate and has not been supported by structured production cost calculations.

Table 4. Basis for Determining Product Selling Price

Factors for Consideration	Details
Production costs	Estimated total costs incurred
Competitor prices	Market price of similar products
Margin keuntungan	Expected profit
Consumer purchasing power	Consumer purchasing power

Based on the simulated HPP of IDR 9,500 per package, the selling price of IDR 12,350 is used as the price limit in the scenario, not as the actual market price. With a profit target of 30% of the selling price, the target cost is set at IDR 8,645 per package. Compared to the full HPP of IDR 9,500, there is a gap of IDR 855 per package or IDR 85,500 per cycle. This condition shows that *Target Costing* can help MSMEs control costs from the planning stage, especially on raw materials, energy, packaging, and equipment use (Ammar, 2024) (Pebrianti & Widajanti, 2024).

The results of the interviews show that Krutukan MSME owners have considered production costs, market prices, and profits in setting selling prices. However, the absence of a structured cost classification makes decisions still largely based on estimates. The simulation shows that the production cost of 100 packages is Rp950,000 or Rp9,500 per package, information that is not available in the current records. Reliance on estimates can increase the risk of making wrong decisions when there are changes in the price of raw materials, energy, and market conditions (Ayuningtyas & Purwanti, 2025)(Siahaan et al., 2025).

Krutukan MSMEs still use a simple costing approach, which is to estimate expenses and then add margins based on market conditions. In contrast to *Target Costing* which sets market prices and expected profits in advance to determine the production cost limit, the approach used by MSMEs has not provided a cost control mechanism since the planning stage. This condition shows that there is still an opportunity to improve efficiency through more targeted cost management (Pebrianti & Widajanti, 2024).

Production planning is also not supported by formal budgeting and still relies on sales experience and market need estimates. Simple budgeting can help compare plans with realization, control the use of resources, and anticipate changes in raw material prices that are the largest cost component. Thus, budgeting can support cost discipline and reduce the risk of waste (Fadilah et al., 2025)(Mubarok et al., 2026).

Digitizing financial records can be a step to improve the quality of management accounting in Krutukan MSMEs. Currently, transactions are still recorded manually so that access to information, accuracy of recording, and preparation of cost reports are still limited. The use of digital recording can

help group raw material, labor, and overhead costs more quickly so that cost information is easier to use in evaluation and decision-making (A. R. Hakim & Iswahyudi, 2024) .

The implementation can be done gradually, starting with a spreadsheet that records production, raw materials, labor, electricity/water, gas, depreciation, transportation, HPP, and selling prices. After consistent recording, automatic calculations can be developed to produce HPP, margins, and compare cost targets with realization. This approach is more suitable for micro MSMEs because it does not directly require a complex accounting system (A. R. Hakim & Iswahyudi, 2024) (Mubarok et al., 2026).

In determining selling prices, Krutukan MSMEs have considered internal costs and market conditions. However, the limitations of cost calculation mean that the selling price does not fully reflect the actual production cost. Therefore, improvements in cost recording and classification are needed to make pricing more accurate, while supporting the integration of internal and external information in decision-making (Utami et al., 2026).

3.4. Implementation of Management Accounting in Supporting Operational Efficiency

Analytical is business experience-based cost planning. MSME owners estimate production needs based on sales in the previous period and estimated market demand.

"Have you ever planned the cost before production?"

"Usually I first estimate how much material needs there will be based on the previous week's sales. So before production, I already have an idea of the costs that will come out."

The planning function of Krutukan MSMEs has been running, but it has not been supported by consistent performance indicators. Control can be strengthened through monitoring the difference in material costs, production output, overhead, actual HPP, and margins in each production cycle. In general, recording expenses and material planning has helped owners maintain production and determine the next production needs, but the benefits are still limited because cost information is aggregate. Therefore, digitization should not be the first step, but begins with improving the classification and structure of cost data, then continues with budgeting and digitization so that the information produced is more useful for business control (A. R. Hakim & Iswahyudi, 2024)(Dewi et al., 2024).

The results of the study show that management accounting practices in Krutukan MSMEs have helped support operational efficiency through cost recording and raw material needs planning. Planning based on previous sales patterns helps reduce the risk of excess or shortage of inventory and control waste during production. These findings are in line with the view that management accounting information can be used to control operational activities and resource utilization (Ramadhan et al., 2024) (Nabila et al., 2024).

However, the efficiency achieved is still not optimal due to the limitations of the accounting system used. The absence of cost separation and the absence of a formal budget makes the operational efficiency evaluation process difficult to carry out quantitatively. This condition is in accordance with the findings (Mubarak et al., 2026) which states that low accounting literacy and limited information systems are the main obstacles in the implementation of management accounting in MSMEs.

Quantitatively, the simulation showed that the cost classification was directly related to the margin size. If the BOP of Rp150,000 was not tracked, the HPP appeared to be Rp8,000 per package and the margin at the selling price of Rp12,350 appeared to be 35.22%. After the BOP was entered, the HPP became Rp9,500 and the margin dropped to 23.08%. The margin difference of 12.15 percentage points suggests that cost information can materially alter the interpretation of profitability. However, since gas and depreciation have not been documented separately and observations only last two days, the figure should be understood as a diagnostic simulation, not an actual waste measure. Measurement of actual waste requires repeated recording of BOP and production realization (Syahputri et al., 2025) (Fadilah et al., 2025).

Improving the operational efficiency of Krutukan MSMEs can be supported through three main aspects, namely systematic cost classification, structured budgeting, and digital recording. Cost classification helps to understand the cost structure, budgeting controls the use of resources, while digitalization accelerates the provision of information to support decisions. These three can be the basis for strengthening management accounting that not only improves the accuracy of cost calculations and selling prices, but also supports business efficiency and competitiveness in a sustainable manner. These findings strengthen the results of the research (SM et al., 2025), (Asih et al., 2025), and (Utami et al., 2026) which shows the relationship between the application of management accounting and operational efficiency and the quality of decision-making in MSMEs.

4. CONCLUSION

This study shows that management accounting in Krutukan MSMEs has been applied simply through cost recording, raw material planning, expenditure control, and the use of cost information in determining selling prices. This practice has helped owners control business activities, but its utilization still depends on experience and estimates so that the information produced is not fully adequate to support managerial decisions.

The main problem lies not in the absence of recording, but in the lack of optimal quality of cost information. Expenses are still recorded in aggregate without a consistent separation between raw materials, direct labor, and overhead, so that the cost structure, sources of waste, and activity efficiency cannot be analyzed precisely. The *full costing* simulation resulted in a HPP of Rp9,500 per package for

100 packages, which shows that a more systematic classification of costs can provide a more measurable basis for decision-making.

In making decisions, Krutukan MSME owners have considered costs, market prices, and expected profits in setting selling prices. However, the process is still estimative because it is not supported by structured cost information, so operational efficiency cannot be measured quantitatively and sustainably. Improvements are therefore not enough to be done by increasing the frequency of recording, but need to be directed at improving the quality of information through cost classification, simple budgeting, production cost calculation, and digital recording.

Improvements can be made gradually. The short term is focused on separating personal and business finances and grouping costs into raw materials, direct labor, and overhead. The medium term is carried out through a simple spreadsheet to calculate the HPP per production cycle and compare the budget with the realization. Furthermore, the long term is directed at digitization through cashier applications or financial recording that integrates sales, purchasing, inventory, production costs, HPP, and margin. These stages are expected to turn administrative records into more useful cost information for continuous control and decision-making.

Practically, strengthening management accounting in Krutukan MSMEs can be started from a simple and gradual system, without having to use a complex system. The initial step can be done through the separation of raw materials, labor, and overhead, preparation of production budgets, periodic calculation of HPP, and the use of digital records that are easy to implement. These improvements can help owners understand the cost structure, compare the budget with the realization, set selling prices more objectively, and detect potential waste.

The implications of the research are also aimed at MSME assistance institutions, regional cooperatives, and agencies that handle the fisheries and micro business sectors. The research findings can be the basis for the preparation of training modules that contain cost classification, calculation of HPP per unit, pricing, overhead control, and the use of simple spreadsheets. Assistance should be carried out in stages from manual recording to digitalization, taking into account the accounting and technological literacy skills of MSME actors. Thus, support for MSMEs does not only focus on digitalization, but also on the ability to use cost information for decision-making.

This study was limited to one MSME with one main informant and a relatively short observation period, so the results are contextual and not intended to be generalized to all MSMEs. Further research can involve more MSMEs with different characteristics and regions and use a longitudinal approach to see changes in efficiency before and after the implementation of cost classification, budgeting, full costing, target costing, and digital recording. Follow-up studies can also directly test the application of a simple cost recording system to measure changes in HPP accuracy, cost control, pricing, and

operational efficiency.

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