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Implementation of Production Cost Using the Full Costing Method at CV Tani Nias Makmur

Gloria Zefita Kristiani Zebua[1], Serniati Zebua[2], Eliagus Telaumbanua[3], Sophia Molinda Kakisina[4]

[1,2,3,4,5]Faculty of Economics, Accounting, Nias University, Indonesia.

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ABSTRACT

This study aims to analyze the implementation of the cost of production (HPP) calculation at a local manufacturing enterprise to determine whether the company has applied accurate and appropriate costing methods. The research focuses on identifying the components of raw material costs, labor costs, and factory overhead costs, as well as evaluating the suitability of the company's costing approach with generally accepted accounting principles. Using a descriptive qualitative method, data were collected from interviews, documentation, and direct observation. The results show that the company has not fully implemented a comprehensive cost of production calculation, particularly in allocating factory overhead costs, which leads to inaccurate product pricing and profit assessment. The study concludes that proper cost of production implementation is essential for determining competitive pricing, evaluating business performance, and supporting managerial decision-making. It is recommended that the company adopt a more structured costing system to enhance accuracy and financial effectiveness.

Corresponding Author:

Gloria Zefita Kristiani Zebua,
Faculty of Economics, Accounting,
Nias University, Indonesia.
Email: gloryzebua17@gmail.com

1. INTRODUCTION

The cost of production (HPP) is a fundamental concept in managerial and financial accounting, serving as the basis for determining product pricing, evaluating profitability, and supporting strategic decision-making. In manufacturing companies, cost of production becomes even more critical because it reflects the total expenditure required to convert raw materials into finished goods (CHEMMANUR et al., 2020). An accurate HPP calculation ensures that the company can set competitive prices, avoid financial losses, and manage resources efficiently. In contrast, inaccurate costing often results in inappropriate pricing strategies, distorted profit calculations, and ineffective financial planning.

In the current competitive business environment, companies must be able to produce high-quality goods at efficient cost levels. The accuracy of cost determination has a direct effect on how companies survive and compete. Understanding and implementing the correct cost of production system enables management to identify unnecessary expenses, reduce waste, and increase operational productivity (Thi et al., 2021). Thus, HPP is not merely a technical calculation but a strategic tool that influences the entire value chain of production.

A common problem found in many small and medium-sized enterprises (SMEs) is the incomplete application of cost accounting principles. Many businesses tend to calculate product costs based only on raw materials and direct labor, without systematically allocating factory overhead

costs. This leads to undercosting or overcosting, both of which negatively affect pricing decisions and financial performance (CHEMMANUR et al., 2020). Overcosting results in overpriced products, reducing competitiveness in the market, while undercosting leads to selling products below actual cost, causing losses.

The company examined in this study represents a typical SME facing challenges related to cost of production calculation. Although it has been operating for several years and has experienced growth in product demand, the company lacks a formal and structured method for calculating HPP. This condition becomes problematic when the company attempts to expand, compete with larger businesses, or evaluate its financial performance accurately (Marjudi et al., 2023).

The importance of calculating cost of production lies in the ability to incorporate all elements of cost, including raw materials, direct labor, and factory overhead. Raw materials represent the primary physical inputs of production, direct labor reflects human effort required to convert materials, and overhead consists of indirect costs such as electricity, depreciation, equipment maintenance, and supporting materials (Giaretta & Chesini, 2021). If one of these components is omitted or inaccurately measured, the resulting cost calculation becomes unreliable.

In traditional costing practices, SME owners often rely on estimations or habitual cost assessments rather than systematic accounting methods. This informal approach may be sufficient during early stages of business operations, but it becomes inadequate as the company grows and production complexity increases. Management must shift from intuition-based decisions to data-based calculations to remain competitive and financially stable (Mlambo & Msosa, 2020).

Cost of production also serves multiple managerial functions. It allows businesses to control production expenses, evaluate efficiency, prepare budgets, assess profitability, and create pricing strategies that align with market conditions. Inaccurate HPP calculations can lead to budget deviations, unexpected production costs, and difficulty in measuring business performance. Therefore, managers need a reliable system to track and categorize costs consistently (Savitri et al., 2023).

Previous research has shown that many SMEs do not allocate overhead costs properly because they consider such costs to be insignificant or difficult to measure. However, as production volume increases, overhead costs actually become one of the largest contributors to total production costs. The failure to allocate overhead correctly results in distorted pricing, especially when the company produces multiple types of products (Yang et al., 2023).

In the context of this study, the company operates in the food production sector, which requires careful attention to cost calculation due to fluctuating raw material prices and significant overhead expenses such as electricity and equipment maintenance. Yet, despite the importance of these costs, the company has not adopted a standard costing method that integrates all cost components systematically (Deng et al., 2021).

Another concern in cost of production implementation is the company's lack of documentation and recording practices. Proper financial records are essential to determine cost trends, evaluate efficiency, and make future projections. Without structured documentation, the company cannot analyze whether production costs have increased or decreased over time, nor can it determine the causes behind such changes (Marjudi et al., 2023).

The absence of a detailed cost accounting framework also prevents the company from performing break-even analysis, profit planning, and variance analysis. These analytical tools are important for managerial control and decision-making. When a company lacks access to accurate cost data, it becomes difficult to decide whether to expand production, adjust selling prices, or invest in new equipment (Gao, 2022).

Furthermore, miscalculating the cost of production can negatively impact company competitiveness. In a market where customers are sensitive to price differences, even minor inaccuracies in pricing can influence consumer purchasing decisions. Companies that incorrectly estimate costs may suffer from low sales volume or reduced profit margins, either of which threatens long-term sustainability (Arner et al., 2020).

In addition, an inaccurate cost of production impacts external functions such as financial reporting and taxation. Companies are required to present fair and accurate financial statements. If

production costs are misreported, the company may face challenges in meeting regulatory requirements or securing financial support from banks and investors (Babaei et al., 2023).

Given these issues, this study aims to analyze the implementation of cost of production calculation within the company, determine whether the calculation is accurate, and identify which cost components may be missing. By doing so, the study contributes practical recommendations for improving managerial practices and ensuring that financial decision-making within the company is based on accurate and reliable cost information (Alaassar et al., 2020).

Ultimately, the significance of this research lies in promoting better financial management within SMEs. Through proper implementation of HPP, companies can improve their pricing strategies, increase profit margins, and strengthen their long-term sustainability (Hoque, 2023). This study therefore provides both academic relevance and practical value, serving as a reference for other SMEs facing similar challenges.

2. RESEARCH METHOD

This research employed a descriptive qualitative methodology aimed at analyzing the implementation of cost of production within the company. A qualitative approach was chosen because it allows the researcher to explore the process, accuracy, and suitability of the company's existing costing practices compared to standard costing principles (Marjudi et al., 2023). This method emphasizes understanding rather than measurement, making it suitable for assessing managerial practices in real operational settings.

Data collection methods consisted of interviews, documentation studies, and direct observation. Interviews were conducted with company owners and production staff to obtain insights regarding cost recording practices, production procedures, and pricing methods. Documentation included examination of receipts, production records, and cost reports. Observation was used to understand the actual production flow, identify cost components used, and verify the costs incurred during the production process (El Gohary, 2019).

Data analysis was conducted through three stages: data reduction, data display, and conclusion drawing. During data reduction, relevant information was selected and organized according to research objectives. Data display was performed through structured narratives summarizing cost components and company practices (Muganyi et al., 2022). Finally, conclusions were drawn to assess the accuracy of the company's cost of production calculation and identify necessary improvements. This methodological approach ensured that findings reflect the actual conditions and challenges faced by the company.

3. RESULTS AND DISCUSSIONS

Results

The results of this study reveal that the company has implemented cost of production calculations but not comprehensively in accordance with generally accepted accounting principles. The company's HPP calculation includes basic raw material costs and direct labor costs but lacks systematic incorporation of factory overhead costs. This omission affects the accuracy of cost determination and, consequently, the pricing of finished products (Alaassar et al., 2020).

Based on the data obtained, the company calculates raw material costs by recording all direct materials needed for production. These records were found to be relatively accurate, as the company maintains receipts for purchased materials and records quantities used during production. However, raw material costs fluctuate depending on market prices, and the company does not regularly update its cost calculations to reflect these changes (Kostin et al., 2022).

Regarding labor costs, the company calculates direct labor costs by determining the wages paid to workers for each production cycle. Although this approach is generally correct, the company does not differentiate between skilled and unskilled labor costs, nor does it allocate indirect labor costs such as supervision and handling. As a result, the calculation of labor cost is incomplete and does not fully represent the actual labor expenses incurred (Tan, 2022).

A significant finding is the absence of structured overhead cost allocation. The company incurs several overhead costs such as electricity, equipment depreciation, maintenance, and supporting materials but these costs are not allocated into the cost of production. Instead, overhead

expenses are treated as general operating expenses and are not linked to specific production outputs. This approach leads to undercosting, where the calculated cost of goods sold is below the actual cost (Mascarenhas et al., 2021).

Furthermore, the company does not prepare detailed cost reports for each batch of production. The absence of batch-level costing prevents management from evaluating which products are profitable and which are not. Without such analysis, decision-making regarding product pricing and production planning becomes less accurate and potentially harmful to the company's financial performance (Emara & Zhang, 2021).

The research also found that the company does not use standardized costing methods such as full costing or variable costing. Instead, cost calculations are made based on experience and rough estimations, with no formal accounting system implemented. While this approach allows simplicity, it lacks precision and increases the risk of mispricing products (CHEMMANUR et al., 2020).

Another finding is that the company does not maintain financial records consistently. Many supporting documents are incomplete, making it difficult to trace cost components accurately. This hinders both internal evaluation and external reporting, especially when the company requires financial documentation for loans or investment (Gancarczyk et al., 2022).

During interviews, management acknowledged that they face challenges in calculating overhead costs because they believe such costs are insignificant or difficult to allocate. However, the analysis shows that overhead actually contributes significantly to the total cost of production, especially due to high electricity usage and equipment depreciation (Efimov et al., 2021).

The absence of overhead allocation has caused the company to underestimate production costs. Consequently, product prices set by the company may be lower than actual costs, leading to reduced profit margins or even unrecognized financial losses. This pricing inaccuracy is a major concern, as it affects sustainability and competitiveness (Bartlett et al., 2022).

Overall, the results indicate that the company must improve its cost accounting practices to ensure accurate cost of production calculation. The findings highlight the need for a structured, transparent, and complete costing system that includes raw materials, direct labor, and all relevant overhead costs (Mlambo & Msosa, 2020). Only with proper cost calculation can the company make informed decisions regarding pricing, budgeting, and financial planning.

Discussion

The results of this study support the notion that cost of production must be calculated comprehensively to provide accurate information for decision-making. The omission of overhead cost allocation in the company's current practice illustrates a common problem among SMEs. Without recognizing overhead as part of production cost, the company fails to reflect the true cost structure of its operations (Yang et al., 2023). This finding aligns with the theoretical framework of cost accounting, which emphasizes the inclusion of all production-related costs, both direct and indirect.

The importance of overhead allocation is well-documented in the literature. Overhead costs such as factory rent, machine depreciation, and utilities are essential components of manufacturing operations. Although these costs may not be directly tied to specific units of output, they contribute significantly to the production process. Ignoring these costs leads to distorted cost calculations, which in turn result in inaccurate pricing (Thottoli et al., 2024). The company's current practice of excluding overhead from HPP demonstrates a misunderstanding of the full costing principle.

In the context of SMEs, limited knowledge and resources often hinder proper cost accounting implementation. Many business owners prioritize immediate operational needs over systematic accounting practices. However, as competition intensifies, the need for accurate cost information becomes unavoidable. The company in this study exemplifies an SME that initially relied on informal cost estimation methods but now faces challenges as production volume increases (Kim Lien et al., 2020).

Another key issue identified in the discussion is the lack of recordkeeping. Accounting records serve as the backbone of cost analysis. Without supporting documentation, it becomes difficult to verify costs, track fluctuations, or evaluate performance. Inconsistent documentation also

complicates financial reporting and budgeting, which are crucial for business planning and external financing (Gancarczyk et al., 2022).

The study also highlights that raw material and direct labor costs were calculated more accurately compared to overhead costs. This is consistent with the common practice among SMEs, where direct costs are easier to measure and monitor. Raw materials and worker wages are visible, measurable, and frequently documented, making them easier to incorporate into production cost. However, focusing solely on direct costs without considering overhead results in an incomplete cost structure (Ningrat & Nurzaman, 2019).

Additionally, the company's informal approach to costing fails to align with accepted costing methods such as full costing or variable costing. Full costing, in particular, requires the inclusion of all manufacturing costs direct materials, direct labor, and both variable and fixed overhead. By not adopting a structured costing method, the company risks inconsistencies in decision-making, especially in determining product prices and evaluating profitability (Tan, 2022).

The findings also reveal the strategic implications of inaccurate cost of production. Pricing decisions based on incomplete cost calculations can lead to unfair competition. When products are priced too low due to undercosting, the company may inadvertently harm its own profitability. On the other hand, incorrect pricing can affect market positioning and customer perceptions, especially in competitive industries (Alkhawaldeh et al., 2023).

Management's acknowledgment of the difficulties in allocating overhead costs suggests a need for capacity building and training. Many SMEs lack accounting personnel or formal accounting systems. Introducing basic cost accounting training or simple digital tools could help the company overcome these challenges. Even small improvements, such as categorizing overhead into fixed and variable components, can enhance the accuracy of cost calculations (Hoque, 2023).

Another important aspect discussed is the relevance of cost accounting to managerial control. Accurate cost data enable managers to plan production effectively, allocate resources efficiently, and assess performance. Without accurate HPP calculation, managers operate in uncertainty, making it difficult to determine whether the business is profitable or encountering financial problems (Hornuf & Haddad, 2019).

Furthermore, the study highlights the role of cost accounting in product decision-making. When companies understand the true cost of producing each product, they can decide whether to continue, modify, or discontinue a product line. The lack of such insight limits the company's ability to evaluate product profitability and adjust its business strategy accordingly (Festa et al., 2023).

The findings also contribute to the understanding of SME vulnerabilities. Many SMEs operate with limited margins, making cost accuracy crucial. A small miscalculation can significantly affect profitability. This research demonstrates that adopting proper cost accounting methods is not merely an administrative task but a strategic requirement that influences long-term sustainability (Savitri et al., 2023).

The discussion also emphasizes the importance of integrating cost information into pricing strategies. A company that calculates costs accurately can set prices that are both competitive and profitable. Without this integration, pricing becomes speculative and may fail to reflect market realities or internal financial needs (Suryanto et al., 2022).

Finally, the study acknowledges that improving HPP implementation requires a holistic approach. It is not enough to calculate costs; companies must also develop systems that support cost management, such as standardized recording procedures, regular cost reviews, and the use of accounting tools. Strengthening these aspects will help the company increase transparency, accuracy, and overall managerial effectiveness.

4. CONCLUSION

This study concludes that the company has not implemented a complete and accurate cost of production calculation, particularly due to the omission of factory overhead allocation, which results in undercosting and inaccurate pricing decisions. While raw material and direct labor costs are recorded with reasonable accuracy, the absence of structured overhead cost allocation and inadequate documentation practices hinder effective financial evaluation and managerial decision-making. It is therefore suggested that the company adopt a more systematic costing method—

preferably full costing—to incorporate all production-related expenses, improve documentation procedures, and provide training for management and staff to enhance their understanding of cost accounting principles.

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