

Production Cost Management In The Development Of Karawo Center At Smes Of Karawo Business Source Mongolato Village, Gorontalo Regency

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Abstract

The Karawo Center in Gorontalo Regency has an important role in the development of a creative industry based on local culture. Although the demand for Karawo products tends to increase, the management of production costs at the Small and Medium Industries (SMEs) scale still faces various obstacles, especially related to efficiency and cost control. This study aims to analyze the application of production cost management strategies based on the management function of Planning, Organizing, Actuating, and Controlling (POAC) in Karawo Business Source SMEs in Mongolato Village, Gorontalo Regency. This study uses a descriptive qualitative approach with data collection techniques in the form of observation, interviews, and documentation. The research informants include business owners, production managers, and Karawo craftsmen. The data was analyzed by examining the application of POAC functions in managing raw material costs, labor, and overhead costs. The results of the study show that production cost management is still carried out simply and has not been integrated into a systematic management function. Cost planning has not been carried out before production, labor organization has not been optimal, production implementation still causes inefficiencies, and cost control has not been implemented in a sustainable manner. This study concludes that the implementation of POAC-based production cost management can be an important strategy in increasing efficiency and supporting the sustainable development of the Karawo Center.

Keywords: POAC, Production Cost Management, Karawo, Industrial Center



INTRODUCTION

Karawo embroidery is a form of traditional crafts typical of Gorontalo that has high artistic and cultural value, with the main feature lying in the manufacturing technique. The process of making Karawo Embroidery begins with the design stage of motifs that are adjusted to the size and function of the fabric. The next stage is the manual extraction or slicing of the fabric fibers to form small cavities according to the motif pattern. After the cavity is formed, the embroidery process is carried out using colored threads with high technique and precision. The final stage in the form of thread binding is carried out to ensure the strength and neatness of the embroidery.

Historically, Karawo Embroidery has been known since the 17th century and has been passed down from generation to generation among the people of Gorontalo. The motifs used not only have aesthetic value, but also contain philosophical meanings that reflect nature, customs, and the social life of the local community. In its development, Sulam Karawo has experienced innovation both in terms of motifs and utilization, so that it is now applied to various modern fashion products. This shows that Sulam Karawo has the potential as a creative industry based on local culture that is sustainable and adaptive to the times.

Karawo's small and medium industries (SMEs), especially in the Karawo Gorontalo Center, face great challenges in maintaining business sustainability amid increasingly fierce market competition and increasing raw material costs. Karawo's production process, which still uses a lot of manual labor, causes labor costs to be the largest component of expenses, while fluctuations in the price of basic materials such as yarns, fabrics, and motif designs also add to the burden of production costs. On the other hand, the selling price of Karawo products is difficult to increase due to consumer purchasing power and competition with cheaper machine embroidery products. This condition requires Karawo SMEs to implement an efficient production cost management strategy in order to still be able to produce quality products at the lowest possible cost. On the other hand, the selling price of Karawo products is difficult to increase due to consumer purchasing power and competition with cheaper machine embroidery products. (Putra & Kurniawan, 2021).

This condition requires Karawo SMEs to implement production cost management strategies efficiently so that they can still produce quality products at the lowest possible cost. Cost *reduction efforts* such as controlling the use of materials, optimizing labor, and improving the production process are very important to maintain profits and business sustainability. Therefore, the implementation of cost management strategies at the Karawo center is not just an option, but a necessity so that SMEs can survive and compete in the local and national markets.

Small and medium industry players (SMEs) such as Karawo craftsmen in Gorontalo often face obstacles in managing production costs efficiently. As explained by Wuryandini and Pakaya (2022), most business and home industry actors in Gorontalo City still do not



understand the importance of preparing production budgets and sales budgets as a basis for business decision-making and cost control tools. Ignorance in calculating the need for the right production cost makes it difficult to determine the cost of production and control business expenses. As a result, operational efficiency becomes low and business profits are difficult to maximize, especially when raw material prices increase and market competitiveness becomes tighter. (Wuryandini & Pakaya, 2022)

The development of the MSME sector in Gorontalo Regency, especially in the handicraft sector, shows a fairly rapid increase from year to year. However, the growth in the number of business actors is not always followed by an increase in managerial skills and financial literacy. This condition indicates that many MSME actors, including Karawo craftsmen, still face difficulties in managing business finances efficiently and sustainably. Low financial knowledge causes production cost management to be not optimal, thus having an impact on business performance and sustainability. In this context, financial literacy is an important factor in the implementation of production cost management strategies (*cost reduction*), because through a good financial understanding, business actors can plan, control, and evaluate the use of resources more effectively to increase the efficiency and competitiveness of Karawo products in the market. (Literasi et al., 2025)

Theoretically, production cost management develops within the discipline of management accounting. According to the latest literature, cost management is understood as the process of identifying, measuring, analyzing, and controlling costs to ensure optimal use of resources. This concept is widely applied to micro, small, and medium enterprises (MSMEs) because it is proven to be able to improve efficiency, expand the market, and increase the competitiveness of local products. (Rahman & Dewi, 2023).

Production cost management is one of the important aspects that determine the success and competitiveness of a business, especially for small and medium industries (SMEs) that have limited capital and resources. Ineffective cost control can lead to waste of raw materials, labor inefficiency, and a decrease in business profits. Therefore, the strategy *cost reduction* is an important step to maintain financial stability and improve operational efficiency. In the context of the Karawo industry in Gorontalo, the implementation of proper cost management not only helps to reduce production costs, but also strengthens the ability of business actors to optimize the use of local resources, maintain product quality, and increase competitiveness in the national market. (Putri et al., 2024)

Karawo is one of the typical cultural heritage of Gorontalo which has high artistic value and uniqueness in the process of making it. The term *Karawo* comes from the Gorontalo language which means "embroidery" or "thread tied and embroidered" on the fabric. Karawo is different from embroidery techniques in general, because the work is done by pulling out certain fabric threads, then re-embroidering the blank parts with distinctive motifs. This technique results in a beautiful, intricate perforated pattern that has high aesthetic value. The



Karawo process requires precision, skill, and patience, so that only experienced craftsmen are able to produce the best quality products. (Arofah et al., 2024)

The existence of the Karawo center in Gorontalo Regency is one of the local government's efforts to maintain sustainability while increasing Karawo's economic value. This center functions as a center for production, training, and marketing of Karawo products which is expected to increase the competitiveness of local products. Through the Karawo center, artisans are empowered to produce high-quality products that have competitive selling value. In addition, the local government also tries to promote Karawo through cultural festivals, fashion shows, and other promotional activities at the national and international levels. (Arofah et al., 2024)

In recent years, the demand for Karawo products has shown a significant increasing trend, especially in the momentum of the Karawo Festival, regional handicraft exhibitions, and various creative economy promotion activities on a regional and national scale. This increase in demand should be a great economic opportunity for Karawo centers, including Karawo Business Source SMEs, but the reality actually poses new challenges because the Karawo production process is manual, takes a long time, and relies heavily on the skills of craftsmen. When orders surge suddenly, SMEs have difficulty maintaining the stability of production costs, especially in the components of labor and raw materials which tend to increase following fluctuations in demand. This phenomenon reveals a fundamental weakness that SMEs do not have adaptive production cost management, so that an increase in order volume often leads to inefficient consumption of raw materials, swollen labor overtime, and a high level of product defects due to production pressure. Instead of being an opportunity to increase revenue, the surge in demand through festivals and exhibitions actually increases the risk of cost inefficiencies and lowers profit margins, showing that the cost management strategies implemented are still reactive and not designed to deal with high demand seasons. This condition shows the urgency of implementing a more systematic and measurable production cost management strategy—through planning, organizing, implementing, and controlling cost functions—so that SMEs do not continue to be trapped in traditional inefficient work patterns and are able to take advantage of increased demand as an opportunity to strengthen the competitiveness of the Karawo center in Gorontalo Regency.

THEORETICAL STUDIES

Cost Management Strategy

Production cost management is a branch of management accounting that discusses how a company or business actor plans, controls, and evaluates costs incurred during the production process. The production cost itself covers all the expenses required to convert raw materials into ready-to-market finished goods. This concept emphasizes that costs are not just numbers that must be recorded, but important information that managers can use to make



strategic decisions. In the context of MSMEs, especially Karawo craftsmen, production cost management is important because it is directly related to determining selling prices, business efficiency, and profit levels. (Budiandriani et al., 2025)

The theory of production cost management first developed in the early 20th century as large manufacturing companies grew. One of the figures known as a pioneer in this field is Charles T. Horngren, through his work *Cost Accounting: A Managerial Emphasis* (1962). Horngren explains that production costs are not only relevant for record-keeping purposes, but also as a planning and control tool. Horngren's concept later became the basis for the development of modern cost accounting, which is widely used in both large and small companies.

Definition of Production Costs

Production costs are all expenses used in the process of producing goods or services. This cost not only covers the raw materials used, but also labor costs and other costs that support the sustainability of the production process. According to Mulyadi (2016), production costs are the costs that occur to process raw materials into finished products that are ready to be sold. In the context of small and medium industries, understanding production costs is very important because it can affect the determination of selling prices and the competitiveness of products in the market.

Cost Reduction as a Step of Production Cost Management Strategy

Cost reduction in research (Manurung et al., 2025) It is described as a strategy to reduce operational costs that is carried out systematically through more efficient purchasing mechanisms, price negotiations, strengthening relationships with *supplier*, as well as internal demand control. The study confirms that *cost reduction* Not just cost cuts, but a series of strategies directed at increasing operational efficiency and profitability without lowering the quality of services or products. Cost reduction strategies that focus on the causes of costs tend to consider short-term decisions and ignore long-term interests. This is what causes cost reduction programs to have weaknesses and have a bad impact on company performance. Therefore, they gave birth to the concept of a holistic strategy by combining mechanical and system approaches. The concept offers people, especially employees, as the subject of cost reduction strategies so that the company is more humanistic and long-term oriented (Niswatin, Noholo, Deaf, & Wuryandini, 2017).

Teori POAC (Planning, Organizing, Actuating, Controlling)

The management function of POAC is a classic concept put forward by George R. Terry and widely used in modern management research. (Trilogy & South, 2025) explains



that the management function includes four main pillars: *planning*, *organizing*, *actuating*, and *controlling*.

- a. *Planning* is the process of determining goals and establishing the series of actions necessary to achieve them effectively and efficiently. Planning provides work direction and becomes the basis for operational decision-making.
- b. *Organizing* refers to the process of grouping and organizing people, tasks, authorities, and resources in order to create a work structure that is integrated and in harmony with organizational goals (Wibowo et al., 2023).
- c. *Actuating* is an implementation function, which is how leaders encourage, mobilize, and motivate all members of the organization to work according to the plan with high commitment (Prastuti, 2014; Rifaldi et al., 2023).
- d. *Controlling* is an evaluative function that ensures that all planned activities are actually running according to standards. Supervision is carried out through performance assessment, result measurement, and correction of deviations to ensure optimal achievement of goals (Hasnida & Hidral Azhari, 2024).

The POAC theory has been proven to be used empirically in various research on organizations and small businesses, for example in the management study of Cangkiang cake production (Febriana & Asyari, 2025) which shows that the completeness of POAC functions determines the stability of business income.

RESEARCH METHODS

Research Location and Time

This research was carried out in Mongolato Village, Telaga District, Gorontalo Regency in the Karawo Business Source IKM, Gorontalo Province. This location was chosen because Gorontalo Regency is one of the main centers of Karawo production in Indonesia and has become an icon of the region's creative economy. The research period was carried out from September to October 2025 which included the preparation stage, data collection, and data analysis. This research activity will be carried out in September 2025.

Research Approach and Design

This study uses a descriptive qualitative approach. This approach was chosen to describe in depth the actual conditions of production cost management and the implementation of the POAC method in Karawo Business Source SMEs. Qualitative research does not statistically test the relationships between variables, but explores the phenomenon, patterns, and cost management strategies in a naturalistic manner based on field data



Data Types and Sources

This research uses secondary data, secondary data is data obtained from other parties, either from literature, literature studies, or previous similar studies related to this study. Secondary data is used to complement the researcher's data obtained directly from Karawo craftsmen. The use of this secondary data aims to strengthen the analysis, provide comparisons, and expand perspectives in understanding the right strategy for the cost efficiency of Karawo's production costs in Gorontalo.

Analysis with the POAC Method

1. Planning

Objective: to design a realistic and measurable cost reduction strategy.

- Initial analysis: identification of the main cost components (labor, raw materials of yarn/fabric/embroidery thread, electrical overhead/rental, finishing/packaging costs, transportation).
- Target setting: e.g. Reduce the cost of raw materials by 10%/year, reduce material waste by 15%, increase worker productivity by 20% in 6 months.
- Cost reduction strategy options: purchase of materials collectively for quantity discounts; substitution of cheaper but quality equivalent materials; standardization of pattern sizes to reduce fabric residue; skills training to reduce production time per unit; Improved work layout for shorter process flow.
- Budget plan & timeline: details the cost of investment (training, tools, SOP drafting) and when each strategy will be implemented.
- Initial success indicators: production cost per unit (Rp/unit), percentage of material waste (%), working hours per unit (hours/unit), gross margin (%).

2. Organizing

Objective: to organize structures, resources and procedures so that the plan is implemented.

- Role division: assign production coordinator, material procurement, quality control, person in charge of finance.
- Efficiency team formation: small teams (3–5 people) focused on identifying waste and practical solutions.
- Procurement system: create a joint purchasing mechanism between SMEs in the center (cooperative/center manager) for better prices and consistent quality.
- Standard Operating Procedures (SOP): SOPs for fabric cutting, embroidery process, finishing, packing to reduce variations and errors.
- Simple tool utilization: provide ergonomic auxiliary equipment (cutting table, more efficient needle/fastener) to increase speed and reduce defects.



3. Actuating (Pelaksanaan / Penggerakan)

Objectives: execute plans, motivate workers, and ensure the process runs.

- Training & coaching: efficient embroidery technique training, time management, and quality checking. Use the on-the-job training method to practice right away.
- Motivation & incentives: incentive system based on productivity & quality (bonus per unit without flaw, monthly rewards).
- Production layout improvement: rearrange the layout to make the workflow (cut, finishing, packing) efficient, reduce running back and forth.
- The implementation of 5S is simple: sort, set in order, shine, standardize, sustain to reduce the time to search for tools/materials.
- Regular communication: short daily/weekly meetings to monitor progress, deal with rapid production obstacles.

4. Controlling (Pengendalian)

Objective: measure results, compare with targets, and make corrections.

- Key Performance Indicators (KPI):
 - Production cost per unit (Rp/unit).
 - The percentage of material waste (%) of the total material.
 - Production time per unit (hour/unit).
 - Defect rate (%) per 100 products.
 - Gross margin (%) and net profit for the period.
- Measurement & report: record weekly/monthly data of material cost, number of finished products, working hours, number of rejected products.
- Deviation analysis: compare realization vs target; If the cost of materials is still high, evaluate the supplier/purchase quantity.
- Corrective action: e.g. change suppliers, revise SOPs, add training, or change incentive schemes.
- Continuous improvement: use employee feedback and data to test small changes (kaizen). Record test results before full scale.

RESULTS AND DISCUSSION

Profile of Karawo Business Source IKM

IKM Sumber Usaha Karawo is a small and medium industrial business unit engaged in the craft of Karawo embroidery typical of Gorontalo and is located in Monkolato Village, Telaga District, Gorontalo Regency. This business is present as a form of preserving local culture as well as strengthening the community's economy through the development of traditional handicraft products with high artistic value. IKM Sumber Usaha Karawo produces various types of karawo embroidery that are done carefully and in detail by local artisans who have hereditary skills, ranging from traditional clothing, formal and casual clothing, to fashion

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products and accessories based on karawo motifs. Each product is produced through a manual process that requires perseverance, precision, and a deep understanding of the philosophy of the karawo motif that reflects the cultural identity of Gorontalo. By prioritizing quality, originality of motifs, and design innovation, IKM Sumber Usaha Karawo is committed to increasing the competitiveness of local products so that they can be accepted in a wider market, both at the regional and national levels, while creating jobs and improving the welfare of the community around Mongolato Village IKM Sumber Usaha Karawo produces various types of products based on Karawo embroidery typical of Gorontalo which have high artistic and cultural value. The products produced include Karawo clothing such as men's and women's clothes, kebaya, shirts, and supporting products such as shawls, Karawo hijabs, and Karawo patterned fabric decorations. All products are made with manual embroidery techniques that emphasize precision and detail of the motifs, so that each product has a different level of complexity and workmanship. The variety of these types of products has a direct impact on the production cost structure, especially on the use of raw materials and labor time allocation, so that it requires proper cost management so that the selling price remains competitive without reducing the quality and authenticity of Karawo's motifs.

Production Process

The Karawo production process begins with the planning stage of the motif design that will be applied to the fabric. At this stage, the craftsman determines the type of motif, size, and pattern placement according to the function of the product to be made, both in the form of clothing, mukena, and other fashion products. Karawo motifs are generally inspired by natural elements, customs, and the life of the Gorontalo people, so that each design not only functions as a decoration, but also has aesthetic value and cultural meaning.

After the design is set, the fabric to be used is prepared according to the size that has been determined. The next stage is the process of pulling or slicing the fabric fibers, which is the main characteristic of Karawo. At this stage, the craftsman carefully pulls out the fabric threads manually following the design pattern that has been drawn beforehand. This process aims to form small holes in the fabric that will later become the basis for the embroidery process. Precision and patience are required, as small mistakes can damage the fabric structure and affect the overall work.

Once the cavities in the fabric are formed, the process continues with the embroidery stage. Craftsmen began to embroider the holes using colored threads according to the designed motif. Embroidery is done with certain techniques so that the threads are neatly arranged, symmetrical, and strong. At this stage, the skill and experience of the craftsman greatly determine the visual quality of Karawo, since the neatness of the thread puncture will affect the beauty of the resulting motifs.



The next stage is the thread binding process, which aims to strengthen the embroidery so that it does not decompose easily. Tying is done on the back of the fabric with a special technique, so that it does not interfere with the appearance of the motif on the front. This process is often invisible to the user, but it plays an important role in maintaining the durability and quality of Karawo in the long run.

After the entire embroidery process is complete, the Karawo fabric is then checked again to ensure that there are no loose threads or untidy motifs. The final stage is the refinement of the product, such as light washing, ironing, and final adjustment according to the type of product produced. Through this long and demanding series of processes, a piece of plain cloth finally turns into Karawo's work of high artistic value, reflecting the patience, skill, and local wisdom of the Gorontalo people that have been passed down from generation to generation.

The production characteristics of Karawo are highly dependent on the skill of the craftsmen and are not supported by the use of production machines (*Hand Made*). The entire process relies on the individual's ability to maintain neatness, precision of motifs, and quality of the final result. This condition causes productivity to be greatly influenced by the experience, speed, and precision of each craftsman. Differences in skill levels between craftsmen have the potential to cause variations in work time and product quality, thus having a direct impact on labor cost efficiency. In addition, the characteristics of manual production make it difficult for Karawo to be mass-produced, so production cost control is more focused on managing working time, reducing production errors, and using raw material efficiency.

Under normal conditions, Karawo's production pattern at Karawo Sumber Usaha IKM is regular and adjusts to the number of incoming orders gradually. Production is carried out based on a *job order* system with a relatively stable volume. However, in certain periods such as the Karawi Festival, MSME exhibitions, and regional promotional activities, there was a significant surge in demand in a short period of time. This surge in demand encourages an increase in production volumes without being balanced with careful planning, resulting in frequent increase in working hours, less controlled use of raw materials, and an increased risk of production errors. These conditions have an impact on increasing production costs and declining efficiency, which shows that production patterns during peak demand still require more structured management so as not to cause cost inefficiencies.

Production Costs in Karawo Business Source SMEs

Production costs are one of the important components in determining business efficiency and sustainability in Karawo Business Source SMEs. As a handicraft-based creative industry, Karawo's production process is carried out manually and relies on the skills of craftsmen, so its production cost structure has different characteristics compared to large-scale manufacturing industries. Karawo's production costs generally consist of raw material



costs, direct labor costs, and factory overhead costs which together make up the total production costs.

Table 1. Raw Material Cost

Raw Material Type	Units	Quantity	Unit Price (Rp)	Total Cost (Rp)
Cotton Fabric	Meter	20	45.000	900.000
Embroidery Thread	Scroll	15	18.000	270.000
Pattern/Motif Yarn	Scroll	10	20.000	200.000
Pattern/Motif Design	Sheets	10	5.000	50.000
Total Raw Material Cost				1.420.000

Source : Processed Data (2026)

Table 2. Direct Labor Costs

Types of Workforce	Number of Employees	Wage per Product (Rp)	Number of Products	Total Cost (Rp)
Craftsman Unthread Pull	3 Orang	75.000	10	2.250.000
Embroidery Craftsman	4 Orang	100.000	10	4.000.000
Finishing & Trimming	2 People	50.000	10	1.000.000
Total Labor Costs				7.250.000

Source : Processed Data (2026)

Table 3. Production Overhead Costs

Types of Overhead Costs	Total Cost (Rp)
Electricity and Water	300.000
Material Transportation	250.000
Production Equipment Depreciation	200.000
Tool Maintenance Costs	150.000
Total Overhead Costs	900.000

Source : Processed Data (2026)

Table 4. Auxiliary Material Costs

Types of Auxiliary Materials	Units	Quantity	Unit Price (Rp)	Total Cost (Rp)
Embroidery Needles	Fruit	10	7.000	70.000
Small Scissors	Fruit	2	35.000	70.000
Lime Fabric	Fruit	5	8.000	40.000
Plastic Packaging	Sheet s	20	3.000	60.000
Total Cost of Auxiliary Materials				240.000

Source : Processed Data (2026)



Decryption of the Results of the Research of the Karawo Business Source IKM

1. Planning (Production Cost Planning)

Production cost planning is the initial stage in cost management which plays an important role in determining the efficiency and effectiveness of the Karawo production process at the Karawo Business Source IKM. Based on the results of the research, the production cost planning system implemented is still simple and has not been formally documented. Cost planning is generally done based on the experience of owners and craftsmen, without the preparation of a detailed production cost budget for each type of Karawo product. This condition causes cost planning to not be able to become an effective control tool in anticipating changes in production volumes and cost fluctuations.

Yes..."Based on incoming orders from consumers. We do not set a fixed production every month because the manufacture of Karawo is dependent on demand. In planning production, the most important thing is the ability of capital to buy raw materials and pay the wages of craftsmen." (Informant 2)

2. Organizing Production Costs\

The organization of production resources is one of the management functions that plays an important role in supporting Karawo's production cost efficiency. In the Karawo Business Resource IKM, the function of organizing production is still simple and has not been supported by a documented formal organizational structure. The production structure generally consists of business owners who at the same time play the role of main managers, Karawo craftsmen, and support personnel in the procurement of raw materials and marketing. This condition causes most managerial and operational functions to be concentrated in business owners, so production cost control has not run optimally.

"The structure of the division of labor is still simple. The business owner manages production and finances, while the craftsman focuses on doing Karawo the karawo consists of two embroidery and slicing. There is no special division of finance or production." (Informants 1 and 2)

3. Actuating (Production Process Execution)

The implementation of the Karawo production process at Karawo Sumber Usaha IKM is carried out on a sustainable basis based on orders received from consumers. Production activities are not carried out in bulk, but adjust the number and level of complexity of orders, so that the production volume is volatile. Karawo's production process includes the stages of thread pulling, motif embroidery, and finishing, all of which are done manually by craftsmen. This manual production pattern causes the success of production execution to depend heavily on the skills and experience of the workforce, as reflected in the large proportion of labor costs in the production cost structure.



"Craftsmen who can do marawo embroidery before the set time get more wages while those who do not do it on time have their orders reduced." (Informant 2)

4. Controlling (Control and Evaluation of Production Costs)

The control and evaluation of production costs is a management function that plays an important role in ensuring that Karawo's production costs can be controlled in accordance with the planned that has been set. At IKM Sumber Usaha Karawo, the production cost controlling system is still simple and not formally structured, so it has not been able to function optimally as a tool for controlling cost efficiency. The production cost recording system implemented is still limited and has not been carried out in detail for each Karawo order

"The recording of the production cost budget has not been done in detail. Costs are only generally estimated, such as material costs and wages." (Informant 2)

Table 5. Opportunities for Implementing POAC-Based Cost Reduction Strategies

Strategy Opportunities	Related POAC Functions	Forms of Application	Potential Cost Reduction
Collective raw material purchase	Planning, Organizing	Centralized and periodic procurement of raw materials	Lowering the price of raw materials and suppressing price fluctuations
Standardization of production patterns and processes	Planning, Actuating	Grouping of motives and working time standards	Reduce waste of materials and time
Strengthening center management	Organizing, Controlling	Coordination of procurement, record-keeping, and supervision	Reduce overhead costs and increase efficiency
Production efficiency training	Actuating, Controlling	Work techniques and cost control training	Lowers production errors and labor costs

Source : Research Results Table, 2026

The table above shows that the implementation of POAC-based cost reduction strategies has a great opportunity to increase production cost efficiency in Karawo Business Resource SMEs. Each strategic opportunity is interrelated to the function of POAC and can be implemented gradually according to business capacity and conditions.

Conformity of Findings with Production Cost Management Theory

The discussion of the suitability of research findings with production cost management theory aims to assess the extent to which production cost management practices in Karawo



Sumber Usaha SMEs are in accordance with the concepts and principles put forward by experts, especially Mulyadi and Hansen & Mowen. This analysis focuses on the concept of cost management and cost reduction strategies in the context of small order-based industries (job orders).

According to Mulyadi, production costs consist of raw material costs, direct labor costs, and factory overhead costs that must be recorded and controlled systematically to produce accurate cost of production. The findings of the study show that the Karawo Sumber Usaha IKM has recognized the three cost components in practice, but has not implemented a structured cost recording and control system. Production costs are still calculated based on estimates and experience, so they are not fully in line with the concept of cost control according to Mulyadi, which emphasizes the importance of cost standards and cost difference evaluation.

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Meanwhile, Hansen & Mowen explained that cost management is a process of planning and controlling costs that aims to increase the efficiency, effectiveness, and competitiveness of the company. In this context, the findings of the study show that the cost reduction strategy in the Karawo Business Resource IKM is still reactive and informal, such as the efficiency of the use of raw materials and the adjustment of working hours. The practice is in line with the basic concept of cost reduction according to Hansen & Mowen, but has not been supported by a systematic approach that integrates comprehensive planning, organization, implementation, and cost control

Table 6 Suitability of Research Findings with Production Cost Management Theory.

Aspects	Theory (Mulyadi; Hansen & Mowen)	Findings in the Source of Karawo Business	Compatibility Level
Production cost components	Raw material, labor, and overhead costs should be recorded separately	Cost components are recognized but not recorded separately	Partially compliant
Determination of HPP	Based on actual costs and standard costs	HPP is calculated based on estimates	Less suitable

Cost management	Systematic cost planning and control	Planning and control are still informal	Less suitable
Cost reduction	Focus on process efficiency and improvement	Efficiency is done practically	Partially compliant
Cost control	Cost differential evaluation and continuous monitoring	Cost evaluation is not routine	Less suitable

Source : Research Results Table, 2026

Based on the compatibility between the research findings and the theory of production cost management, it can be concluded that the practice of managing production costs in SMEs of Sumber Usaha Karawo is not fully in accordance with the theories of Mulyadi and Hansen & Mowen. However, the practices that have been implemented show a direction that is in line with the concept of cost management and cost reduction. With the implementation of POAC in a more structured manner, the gap between theory and practice can be narrowed so that the production cost efficiency and competitiveness of the Karawo center can be improved.

Compatibility of Findings with POAC Theory

The analysis of the suitability of the research findings with the POAC (Planning, Organizing, Actuating, and Controlling) theory aims to assess the extent to which these management functions have been applied in the management of production costs in IKM Sumber Usaha Karawo. The POAC theory emphasizes that the four management functions must run in a balanced manner and support each other so that the organization is able to achieve operational efficiency and effectiveness.

In the context of planning, POAC theory emphasizes the importance of systematic production cost planning, including budgeting, cost standards, and resource planning. The findings of the study show that production cost planning at Karawo Sumber Usaha IKM is still simple and not based on cost standards. Planning is carried out based on experience and estimates, so it is not fully in accordance with the POAC theory which places planning as the main foundation in controlling production costs.

On the organizing function, POAC theory underscores the importance of a clear division of duties, authority, and responsibilities in the organizational structure. The findings of the study show that the organization of production resources in Karawo Business Resource SMEs has not been formally structured. The division of tasks of craftsmen is still flexible and not based on production stages, which causes workload imbalances and difficulties in controlling labor costs. This condition shows that there is a gap between practice in the field and organizing principles in POAC theory.

The actuating function in POAC theory emphasizes the implementation of activities according to the plan and structure that has been set, accompanied by effective coordination and motivation. The findings of the study show that the implementation of Karawo production is operational and able to meet market demand, but it is not fully supported by a standardized work and cost recording system. As a result, production execution often triggers the waste of raw materials and increased labor costs, especially during periods of surge in demand.

Meanwhile, the controlling function in POAC theory acts as an evaluation and control tool to ensure the conformity between the plan and the realization. The findings of the study show that production cost control at Karawo Sumber Usaha IKM is still weak, characterized by the absence of detailed cost recording and post-production evaluation. This condition causes cost waste to be difficult to detect and improve on an ongoing basis, so it is not in line with the concept of controlling in POAC theory.

Table 7. Table 4.10 Suitability of Research Findings with POAC Theory

POAC Functions	POAC Theory	Findings in the Source of Karawo Business	Compatibility Level
Planning	Standard- and budget-based cost planning	Experiential planning	Less suitable
Organizing	Clear division of tasks and work structure	The structure and division of tasks are not yet formal	Less suitable
Actuating	Implementation according to the plan and work standards	Operational implementation without standard standards	Partially compliant
Controlling	Continuous cost evaluation and control	Weak cost recording and evaluation	Less suitable

Source : Research Results Table, 2026

The imbalance in the implementation of the POAC function has a direct impact on the efficiency of production costs in the Karawo Business Source IKM. The weak planning and controlling function causes the actuating function to run without a clear control direction, so that the implementation of production tends to be reactive and has the potential to cause cost waste. In addition, the non-optimal organizing function leads to labor inefficiencies and increased production costs, especially during a surge in demand. This condition shows that strengthening and balancing the implementation of the POAC function is an important prerequisite in an effort to improve production cost efficiency and business sustainability of Karawo.

Research by Rifai et al. (2024) examined the calculation of the cost of production in the culinary MSMEs of Warung Penyet Pak Indra by using a cost accounting approach through full costing and variable costing methods. In the study, it was explained that the



grouping of production costs into raw material costs, direct labor costs, and factory overhead costs is an important basis in determining the selling price and knowing the amount of operating profit. The results of the study show that the calculation of HPP is carried out correctly and is able to provide a more realistic picture of production costs per unit, so that MSME actors can set selling prices with more rational considerations. In contrast to this study, Dinda et al. (2021) focused their study on the application of the target costing method as a tool to control production costs in CV Multi Building. This research emphasizes the cost planning process that starts from the market price and profit target to be achieved, then is lowered to the target cost through the value engineering stage. The results of the study prove that the implementation of target costing is able to reduce production costs and have a positive impact on increasing company profits when compared to the traditional cost calculation method previously used. Meanwhile, the research conducted by the author focuses on the analysis of production costs in Karawo Sumber Usaha IKM which is a creative industry based on local culture with manual and order-based production characteristics. This research not only focuses on the calculation of cost of production, but also examines how the process of organizing and managing production costs—which includes raw material costs, direct labor costs, and factory overhead costs—is implemented simply by SMEs and their impact on business efficiency and pricing of Karawo products. Conceptually, this research is in line with the research of Rifai et al. because they both use the cost accounting approach as a basis for identifying and classifying production costs to determine HPP, even though they have differences in the object and characteristics of the business being studied.

This research is also related to the research of Dinda et al. in terms of the importance of planning and controlling production costs, although it does not directly apply the target costing method. Thus, this study strengthens the findings of previous research that proper and structured management of production costs plays an important role in determining selling prices, increasing business efficiency, and supporting the achievement of optimal profits. In terms of theoretical foundation, this research is based on cost accounting theory, especially the concept of cost of production which views HPP as the accumulation of all production costs consisting of raw material costs, direct labor costs, and factory overhead costs, as stated by Mulyadi and Sujarweni. In addition, this research is also supported by cost management theory which emphasizes the importance of planning, organizing, and controlling costs so that the production process can run effectively and efficiently, which in the context of Karawo SMEs is a determining factor for business continuity even though the management system is still simple.

A comparison with previous research was carried out to place the results of this research in the context of relevant scientific studies, especially research on the management of production costs in cultural-based creative industries such as Karawo, batik, and other



creative MSMEs. This analysis is focused on similarities, differences, and research contributions in enriching the literature on production cost management.

Some previous research that examined the Karawo industry and similar crafts generally focused on aspects of cultural preservation, design development, and product marketing. Research on the batik and creative MSME sectors discusses more about determining the cost of production, cost efficiency, and the application of cost accounting methods such as full costing and job order costing. The main similarities between this study and the previous research lie in the characteristics of production that are manual, skill-based, and order-dependent, so they face relatively similar cost problems, such as high labor costs and fluctuations in raw material prices.

The main difference between this study and previous research lies in the analytical approach used. Most previous research has only emphasized the calculation of cost of production or quantitative cost analysis, without linking it deeply to the management function. This study integrates the analysis of production cost management with the POAC (Planning, Organizing, Actuating, and Controlling) approach, so as to not only identify the amount of costs, but also analyze the managerial processes that affect the occurrence of cost inefficiencies. In addition, the focus of this research is specifically directed at Karawo SMEs as a local creative industry that still lacks studies related to management-based cost management.

CONCLUSION

Based on the overall discussion in this proposal, it can be concluded that the Karawo Business Source IKM is a creative industry based on local culture with the characteristics of manual, skill-based, and order-ordered production. These characteristics cause the production cost structure to be greatly influenced by direct labor costs, the use of raw materials, and fluctuations in market demand. In practice, the management of production costs at Karawo Sumber Usaha IKM has not been carried out systematically and standardized, so it has the potential to cause cost inefficiencies and inaccuracies in determining the cost of production.

The results of the study show that the *planning* function in managing Karawo's production costs has not been implemented systematically. Production cost planning is still estimative and experience-based, without the support of standard raw material, labor, and overhead costs. This condition causes *cost reduction* opportunities at the planning stage to not be utilized optimally, especially in controlling raw material waste and planning for labor needs when there is a surge in demand.

In the *organizing function*, the management of production resources has not been supported by a clear division of tasks and work structure. The division of roles of craftsmen is still flexible and not based on production stages, making it difficult to control labor costs and



production time. This organizational weakness hinders the implementation of *cost reduction*, because the potential for cost efficiency through work specialization and production flow regulation has not been utilized to the fullest.

The *actuating function* is a function that is relatively running well in Karawo's production management system. The implementation of production is able to adjust to market needs and consumer demand. However, the implementation has not fully referred to clear planning and cost standards, so there is still a waste of raw materials, an increase in overtime costs, and variations in production costs between orders. This shows that the implementation of production has not fully supported the goal of *cost reduction* consistently.

The *controlling function* in the management of production costs is still considered weak, characterized by the absence of a detailed cost recording system and post-production cost evaluation. Weak control makes cost irregularities difficult to detect and not immediately corrected. As a result, *cost reduction* efforts tend to be informal and unsustainable, so that the effectiveness of production cost control is low.

Overall, the findings of the study show that the imbalance in the implementation of the POAC function is the main cause of the lack of optimal production cost management system and *cost reduction strategy* in Karawo Business Source SMEs. The implementation of *cost reduction* will be more effective if it is supported by clear cost planning, structured resource organization, production implementation that refers to standards, and sustainable cost control. By strengthening the four functions of POAC in an integrated manner, Karawo's production cost management system has the potential to become more efficient and support business sustainability.

This study concludes that the cost reduction strategy in Karawo Business Resource SMEs has not been implemented in a planned manner and is still informal. Despite practical efficiency efforts, without the support of cost planning, resource organization, and strong cost control, cost reduction efforts have not yielded optimal results. Therefore, the implementation of POAC-based cost reduction is a relevant and strategic approach to increase production cost efficiency while maintaining the sustainability of Karawo's business.

Suggestions

Based on this conclusion, it is suggested that Karawo Business Resource SMEs begin to implement the planning function in a more structured manner through the preparation of production cost planning, the determination of raw material use standards, and workforce planning according to production capacity. In the organizing function, it is necessary to have a clearer division of tasks based on Karawo's production stages so that the workload is more balanced and labor costs can be controlled more efficiently.

In the actuating function, production implementation needs to be directed so that it always refers to the plan and standards that have been set, so as to minimize the waste of



raw materials and labor time. Furthermore, strengthening the controlling function is crucial by recording production costs in a simple but consistent manner, as well as evaluating post-production costs as a basis for continuous improvement. Through strengthening the four functions of POAC in a balanced manner, the cost reduction strategy can be implemented systematically and sustainably.

Karawo craftsmen are advised to start implementing simple recording of raw material usage and working time on each production order. This step needs to be done consistently as a basis for controlling material waste and working time. In addition, craftsmen need to follow the production process standards set together so that work results are more uniform, production time is more controlled, and production costs can be reduced.

Karawo center managers are advised to develop production cost standards that include raw materials, labor, and overhead as a reference in determining the cost of production. Managers also need to organize the division of craftsmen's duties based on production stages and coordinate the procurement of raw materials collectively to suppress price fluctuations. In addition, center managers need to evaluate production costs periodically as part of the cost control function.

Local governments and MSME support institutions are advised to provide production cost management training programs that are applicable and in accordance with the characteristics of the Karawi industry. The program needs to focus on cost planning, simple cost recording, and the implementation of *POAC-based cost reduction* strategies. In addition, institutional support through ongoing mentoring is needed so that cost management practices can be implemented consistently and sustainably.

Researchers are further advised to develop this study by adding a quantitative analysis of production costs or comparing the application of cost management in several similar creative industry centers. This approach is expected to be able to strengthen the generalization of research results and provide more comprehensive managerial recommendations.

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