
**IMPLEMENTATION OF INDUSTRIAL SECTOR ACCOUNTING TO IMPROVE THE EFFICIENCY OF
PRODUCTION COST RECORDING AND MANAGERIAL DECISION MAKING
AT PT. INDODAYA CIPTA KARYA**

¹Wie Shi Wudjud, ² Syawaluddin
E-mail: wieshiwudjud12@gmail.com
^{1,2}STIE PMCI

ABSTRACT

Community Service (PkM) is one form of implementation of the Tri Dharma of Higher Education which aims to provide a real contribution to the industrial world through the transfer of knowledge and skills. This activity was carried out in 2024 at PT. Indodaya Cipta Karya with a focus on the application of Industrial Sector Accounting concepts in managing production costs and preparing more effective cost reports. Based on the results of initial observations, it was found that the company still faces obstacles in grouping production costs, controlling operational costs, and utilizing accounting information as a basis for managerial decision-making. The implementation methods of the activity include observation, socialization, training, case studies, and mentoring. The material provided includes the classification of production costs, calculating the cost of production, cost control, and preparing industrial cost reports. The results of the activity showed an increase in participants' understanding of industrial cost accounting, their ability to identify and group production costs, and their ability to prepare cost reports as a basis for evaluating company performance. This program has a positive impact on increasing the effectiveness of cost management and supporting more appropriate decision-making. Thus, the implementation of Industrial Sector Accounting is one strategy that can improve operational efficiency and company competitiveness.

Keywords: Industrial Sector Accounting, Production Costs, Cost of Goods Sold, Cost Control, Community Service.

INTRODUCTION

Background

The increasingly competitive industrial sector demands that companies manage their resources effectively and efficiently. A crucial aspect of industrial company management is an accounting system capable of producing accurate and timely cost information. Cost information plays a strategic role in planning, controlling, and managerial decision-making.

Industrial accounting is a branch of accounting that focuses on recording, measuring, classifying, and reporting costs incurred during the production process. The resulting information is used not only to prepare financial reports but also as a tool for cost control and evaluating a company's operational efficiency.

PT. Indodaya Cipta Karya, as an industrial company, requires a robust cost recording system to support the achievement of its goals. Based on initial observations, several issues were identified, including:

1. Employees' understanding of production cost classification is not yet optimal.
2. Lack of utilization of cost information in the decision-making process.
3. There is no structured standard for reporting production costs.
4. Operational cost control is still carried out in a simple manner.

This problem shows the need to improve human resource competency through training and mentoring regarding Industrial Sector Accounting.

Formulation of the problem

1. How to improve employee understanding of Industrial Sector Accounting?
2. How to help companies in grouping production costs correctly?
3. How to improve the ability to prepare production cost reports as a basis for decision making?

Activity Objectives

1. Provides an understanding of the basic concepts of Industrial Sector Accounting.
2. Improve participants' ability to identify and classify production costs.
3. Assist companies in preparing systematic production cost reports.
4. Supporting the effectiveness of managerial decision making based on accounting information.

Benefits of Activities

For Companies

- Improve the efficiency of production cost management.
- Supports more accurate decision making.
- Strengthening operational cost control systems.

For Participants

- Increase knowledge about industrial cost accounting.
- Improve skills in managing cost information.

For Universities

- Implementing the Tri Dharma of Higher Education.
- Increase cooperation with the industrial world.

LITERATURE REVIEW

Industrial Sector Accounting

Industrial sector accounting is an information system used to identify, record, measure, and report costs incurred during the production process so that they can be used for management decision making.

According to Mulyadi (2020), cost accounting is the process of recording, classifying, summarizing, and presenting the costs of making products or services in a certain way to meet management needs.

Production cost

Production costs consist of:

1. Raw Material Costs

Costs incurred to obtain the main materials used in the production process.

2. Direct Labor Costs

Costs related to labor directly involved in the production process.

3. Factory Overhead Costs

Costs other than raw materials and direct labor used in the production process.

Cost of goods sold

Cost of Goods Sold (COGS) is the total cost incurred to produce a product during a specific period. COGS information is used as a basis for determining selling prices and evaluating production efficiency.

Cost Control

Cost control aims to ensure that costs incurred are in accordance with the established budget so that the company can achieve an optimal level of efficiency.

IMPLEMENTATION METHOD

The Community Service (PkM) activity in the Industrial Sector Accounting course was held in August 2024 at PT. Indodaya Cipta Karya. This activity was designed to improve employee understanding and skills in managing production cost information, calculating the cost of goods manufactured, and preparing cost reports that can be used as a basis for managerial decision-making.

The method used in this activity is participatory and educational, emphasizing active participant involvement in every stage of the activity. This approach was chosen so that participants not only gain a theoretical understanding of Industrial Sector Accounting but also are able to implement it in their company's daily operations.

The implementation of the activity is carried out through several interrelated stages, starting from identifying needs to evaluating the results. These stages are explained below.

1. Observation and Identification of Needs

The initial phase of the activity began with field observations and needs identification conducted by the community service team. The purpose of these observations was to obtain a picture of the company's current condition regarding its production cost recording system, operational cost management, and the use of accounting information in decision-making.

Observations are carried out using several methods, namely:

a. Interview

The team conducted interviews with the company's management, administrative staff, and finance department. The interviews were conducted to obtain information on current cost recording procedures, challenges faced in managing production costs, and the company's needs for improving human resource competency in industrial accounting.

b. Direct Observation

Observations were made of the company's administration and cost recording processes. The team observed how cost transactions were recorded, how costs were grouped, and how cost reports were prepared and used by management.

c. Document Analysis

The documents analyzed included operational cost reports, production reports, internal financial reports, and various other supporting documents related to the company's activities. The purpose of document analysis was to determine the completeness of available cost information and identify areas for improvement.

Based on the results of observations and identification of needs, several main problems were found, namely:

1. Employees' understanding of production cost classification is still limited.
2. The separation between direct costs and indirect costs is not optimal.
3. Lack of utilization of cost information in managerial decision making.
4. There is no structured and easy-to-understand production cost report format available.

These findings form the basis for developing training and mentoring programs that suit the company's needs.

2. Preparation of Training Materials

After identifying the company's needs, the community service team developed training materials relevant to the issues encountered in the field. The materials were developed based on applicable Industrial Sector Accounting concepts that are easy to apply in the company's work environment.

The training materials prepared include:

a. Basic Concepts of Industrial Sector Accounting

This material discusses the definition, purpose, and role of industrial sector accounting in supporting company activities. Participants are provided with an understanding of the importance of cost information as a tool for planning, controlling, and evaluating company performance.

b. Classification of Production Costs

In this material, participants learn about the various types of costs that arise in the production process, including:

- Direct raw material costs.

- Direct labor costs.
- Factory overhead costs.
- Fixed costs and variable costs.
- Direct costs and indirect costs.

Understanding cost classification is very important to produce accurate cost information that can be used in decision making.

c. Calculation of Cost of Goods Sold (COGS)

Participants were given material on methods for calculating the cost of goods sold, including identifying the cost elements that make up the COGS. They were also given case studies relevant to their company's characteristics.

d. Production Cost Control

This material aims to provide an understanding of the importance of cost control as an effort to improve a company's operational efficiency. Participants learn budgeting techniques, cost variance analysis, and evaluating the effectiveness of resource use.

e. Preparation of Industrial Cost Reports

This material discusses techniques for preparing systematic and informative cost reports. Participants are provided with an example of a production cost report format that can be used as a tool in the management decision-making process.

All materials are arranged systematically by combining theory and practice so that participants can understand the concepts and apply them in their daily work.

3. Implementation of Training

The training was conducted face-to-face, involving all participants from various parts of the company. The training was conducted using several interactive learning methods to ensure optimal knowledge transfer.

a. Lecture Method

The lecture method is used to convey basic concepts of Industrial Sector Accounting. The community service team explains the material using presentation media supplemented with real-life case examples relevant to company activities.

Through this method, participants gain a theoretical understanding of the importance of cost accounting in supporting the company's operational efficiency.

b. Discussion Method

The discussion was held to provide participants with an opportunity to share their experiences, problems, and obstacles they encountered while carrying out their duties. The discussion was interactive, allowing participants to exchange experiences and find solutions to the problems they encountered.

c. Case Study Method

Participants were presented with several cases related to recording production costs and calculating cost of goods manufactured. Through the case studies, participants were trained to identify cost types, classify costs, and determine appropriate accounting treatment.

d. Simulation of Production Cost Calculation

In this session, participants will practice calculating the cost of goods manufactured using the provided data. The simulation will be conducted in groups, allowing participants to discuss and collaborate on solving the given problems.

The simulation method was chosen because it is able to increase participants' understanding of the application of cost accounting concepts in real situations.

4. Implementation Assistance

Following the completion of the training, the community service team provided mentoring to participants as a follow-up activity. This mentoring aimed to ensure that the material provided could be effectively applied in the company's work environment.

Mentoring activities include:

a. Assistance in Grouping Production Costs

Participants are guided in identifying and categorizing costs based on their characteristics. This activity helps them understand the differences between raw material costs, labor costs, and factory overhead costs.

b. Assistance in Calculating Cost of Goods Sold

The community service team provided guidance in calculating the cost of goods manufactured using actual company data. This assistance aimed to improve the accuracy of cost calculations and minimize errors in preparing cost reports.

c. Assistance in the Preparation of Cost Reports

Participants were given a sample cost report format tailored to their company's needs. They were then asked to prepare a cost report based on the available data, with guidance from the community service team.

Through this mentoring, participants gain practical experience that can be directly applied in their daily work.

5. Activity Evaluation

The final stage of community service activities is evaluation. Evaluation is conducted to measure the success of the program and determine the extent to which participants' understanding has improved after participating.

The evaluation methods used include:

a. Pre-Test

A pre-test was conducted before the training began to determine the participants' initial level of understanding of Industrial Sector Accounting.

b. Post-Test

A post-test is conducted after all training materials have been delivered. Post-test results are used to measure the improvement in participants' understanding compared to the initial conditions.

c. Observation

The community service team observed participant engagement during training and mentoring. Observations were used to assess participants' level of participation, practical skills, and enthusiasm for the activities.

d. Feedback Discussion

Participants were given the opportunity to express their opinions, suggestions, and input regarding the implementation of the activity. Information obtained from the feedback discussions was used as evaluation material to improve future community service programs.

Overall, the implementation method used in this activity is designed to produce an effective, participatory, and company-oriented learning process. Through a combination of training, simulations, and mentoring, participants are expected to improve their competency in managing cost information and applying Industrial Sector Accounting principles sustainably within PT. Indodaya Cipta Karya.

RESULTS AND DISCUSSION

Implementation of Activities

The Community Service (PkM) program in Industrial Accounting was conducted at PT. Indodaya Cipta Karya, involving company management, administrative staff, the finance department, and employees involved in operational and production activities. The program was implemented in stages through material delivery, interactive discussions, cost calculation simulations, and mentoring in the application of industrial cost accounting concepts.

In the initial phase of the activity, the community service team introduced the importance of industrial sector accounting in supporting effective company management. Participants were given an understanding that cost information is a crucial source of information used by management for planning, controlling, and decision-making. Through this understanding, participants began to realize that accurate cost recording serves not only as an administrative requirement but also as a strategic tool for improving company efficiency and competitiveness.

Throughout the event, participants demonstrated high levels of enthusiasm. This was evident in the attendance rate, which reached nearly all invited participants, their active participation in discussions, and their involvement in completing the case studies. The participants' enthusiasm was particularly evident during the simulation session on calculating the cost of goods manufactured, as the material directly related to their daily operational activities.

The material provided is tailored to company needs, allowing participants to easily connect the theory learned to real-world conditions in the workplace. This approach has proven effective in enhancing participants' understanding of cost accounting concepts and their application in industrial activities.

Discussion of Training Materials

1. Classification of Production Costs

The first topic presented to participants was production cost classification. This topic was chosen because, based on initial observations, it was found that some participants still had difficulty distinguishing the types of costs that arise during the production process. Misclassification of costs can lead to inaccuracies in calculating the cost of goods manufactured and impact the quality of information used for decision-making.

In this session, participants are given an understanding of the three main components of production costs, namely raw material costs, direct labor costs, and factory overhead costs.

a. Raw Material Costs

Raw material costs are the costs incurred to acquire the primary materials used in the production process. Participants were given examples of various types of raw materials used by companies and how these costs are recorded and allocated to the resulting product.

Through discussions and case studies, participants understood that accurate recording of raw materials is very important because this component generally has the largest proportion in the production cost structure.

b. Direct Labor Costs

Direct labor costs are costs associated with labor directly involved in the production process. Participants will be taught how to identify direct labor and distinguish it from indirect labor.

This understanding helps participants allocate costs appropriately so that the resulting cost information is more accurate.

c. Factory Overhead Costs

Factory overhead costs are production costs other than raw materials and direct labor. Participants will learn about various examples of overhead costs, such as electricity costs, machine maintenance costs, equipment depreciation costs, and production supplies costs.

This topic received special attention because most participants previously had difficulty identifying costs that fall into the overhead category. After the training, participants were able to understand the method of allocating overhead costs to products.

The discussion results showed that participants' understanding of cost classification had significantly improved. Participants began to be able to group costs according to their characteristics, which could support the process of preparing more accurate cost reports.

2. Calculation of Cost of Goods Sold (COGS)

The next topic is calculating the Cost of Goods Sold (COGS). This topic is a key focus of the training because COGS is the basis for determining selling prices and evaluating production efficiency.

Participants were given an explanation of the concept of COGS and its constituent elements. This training used the full costing method, which includes all production costs in the cost price calculation.

The simulations used in the training are as follows:

Raw Material Costs	= Rp. 50,000,000
Direct Labor Costs	= Rp. 25,000,000
Factory Overhead Costs	= Rp. 15,000,000
Total Cost of Goods Sold	= Rp90,000,000

Through this simulation, participants can systematically understand the COGS calculation process. Furthermore, they are encouraged to analyze the calculation results to understand how changes in production costs can affect the company's cost of goods sold and profits.

During the discussion session, participants realized that even small errors in cost recording can cause significant differences in COGS calculations. Therefore, accurate cost recording is a critical factor in industrial accounting systems.

The skills gained through this training in calculating COGS are expected to help companies determine competitive selling prices without compromising expected profitability. Furthermore, COGS information can also be used as a basis for evaluating the efficiency of resource use during the production process.

3. Production Cost Control

The third topic presented to participants was production cost control. Cost control is a crucial function in management because it directly relates to a company's efforts to increase efficiency and maximize profits.

In this session, participants learn several cost control techniques, including:

a. Budget Preparation

Participants were given an understanding of the importance of budgeting as a cost planning tool. Budgets serve as guidelines for resource utilization, enabling companies to control expenditures in line with established targets.

b. Cost Difference Analysis

Participants also learned variance analysis techniques. This technique is used to compare actual costs with budgeted costs so companies can identify any deviations.

Through case studies, participants are able to identify factors that cause cost differences and determine the corrective steps that need to be taken.

c. Monitoring Cost Realization

Cost realization monitoring is conducted periodically to ensure that operational activities are running according to established plans. Participants were provided with an example of a simple yet effective monitoring format for use in a corporate environment.

The discussion on cost control provided participants with new insights into the importance of monitoring the use of company resources. Participants understood that effective cost control aims not only to reduce expenses but also to ensure that every expense generated provides optimal benefits to the company.

4. Preparation of Production Cost Reports

The final topic covered in the training was preparing production cost reports. Cost reports are a tool used to present cost information to management so it can be used in the decision-making process. Participants were given an example of a cost report format that included details of raw material costs, direct labor costs, factory overhead costs, total production costs, and cost of goods manufactured. After receiving theoretical explanations, participants practiced preparing reports using the provided simulation data. The results showed that participants were able to prepare cost reports more systematically than before the training.

Preparing a good cost report provides many benefits for the company, including:

1. Facilitates the process of evaluating production costs.
2. Assist management in identifying sources of waste.
3. Become the basis for strategic decision making.
4. Improve transparency and accountability of cost management.

Impact of Activities

To measure the effectiveness of the activity, an evaluation was conducted using pre- and post-tests. The results showed an increase in participant understanding across all aspects measured.

Indicator	Before Training	After Training
Understanding Industrial Accounting	61%	90%
Ability to Classify Costs	58%	88%
Ability to Calculate Cost of Goods Sold	55%	87%
Understanding Cost Control	60%	89%

The data shows that the training had a positive impact on improving participants' competencies. The largest improvement was in the ability to calculate Cost of Goods Sold, which increased by 32%, while understanding of industrial accounting increased by 29%.

Discussion Analysis

The results of the activity indicate that the Industrial Sector Accounting training significantly contributed to improving the quality of human resources at PT Indodaya Cipta Karya. Improved understanding of cost classifications enabled the company to produce more accurate and reliable cost information.

The ability to accurately calculate Cost of Goods Sold helps companies set competitive selling prices while maintaining desired profit levels. Accurate cost information also supports decision-making related to production efficiency, cost control, and operational planning.

Furthermore, implementing a more structured cost reporting system helps management obtain a clearer picture of the company's cost situation. With more comprehensive and accurate information available, the company can evaluate performance more effectively and take necessary corrective action.

Overall, this Community Service activity successfully achieved its stated objectives. The training and mentoring program improved participants' competency in Industrial Sector Accounting and positively contributed to improving the effectiveness of cost management at PT. Indodaya Cipta Karya.

CONCLUSION

The 2024 Community Service Program at PT. Indodaya Cipta Karya successfully improved participants' understanding and skills in Industrial Sector Accounting. Participants were able to identify production costs, calculate Cost of Goods Sold, implement cost control, and prepare cost reports to support managerial decision-making.

The sustainable implementation of the Industrial Sector Accounting concept is expected to increase the company's operational efficiency and strengthen the company's competitiveness in facing industrial competition.

SUGGESTION

1. Companies need to implement a more integrated cost recording system.
2. Production cost evaluation needs to be done periodically.
3. The use of accounting technology needs to be improved to support the accuracy of cost reports.
4. Advanced training on cost analysis and decision making needs to be conducted on an ongoing basis.



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BIBLIOGRAPHY

- Bustami, B., & Nurlela. (2021). Cost Accounting. Jakarta: Mitra Wacana Media.
- Carter, W. K. (2020). Cost Accounting. New York: McGraw-Hill Education.
- Garrison, R.H., Noreen, E.W., & Brewer, P.C. (2021). Managerial Accounting. New York: McGraw-Hill.
- Hansen, D.R., Mowen, M.M., & Guan, L. (2020). Cost Management: Accounting and Control. Boston: Cengage Learning.
- Mulyadi. (2020). Cost Accounting. Yogyakarta: UPP STIM YKPN.
- Rudianto. (2021). Management Accounting. Jakarta: Erlangga.
- Samryn, LM (2022). Management Accounting. Jakarta: Kencana.
- Supriyono, RA (2021). Cost Accounting and Cost Control. Yogyakarta: BPFE.
- Warren, C.S., Reeve, J.M., & Duchac, J.E. (2022). Financial and Managerial Accounting. Boston: Cengage Learning.
- Witjaksono, A. (2021). Cost Accounting. Yogyakarta: Graha Ilmu.

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