

Application Of Management Accounting System To Product Quality Control At Pt Bio Maraja Nusantara

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Abstract

This study aims to determine the application of the management accounting system to product quality control at PT Bio Maraja Nusantara. This study uses a qualitative descriptive method, data is collected by observation, interviews, and documentation. Data analysis uses the Miles and Huberman model, through the stages of data collection, data reduction, data presentation, and conclusion drawn. The results of the study show that PT Bio Maraja Nusantara implements a management accounting system effectively, focusing on quality control from raw materials to finished products. This system ensures that every stage of production adheres to strict quality standards, as well as motivates employees through a system of quality- and quantity-based incentives. Although the company has implemented this system well, the main recommendation is to maintain and continuously improve the management accounting system so that product quality control remains optimal.

Keywords: *Management Accounting System, Quality Control*

INTRODUCTION

In the digital era that continues to grow rapidly, the business world is faced with increasingly fierce and dynamic competition. Companies are required to continue to innovate and maintain their competitive advantage, one of which is through the provision of quality products. The company designed a management accounting system to assist the organization through its managers, namely in planning, organizing, directing, and decision-making (Ghasemi, 2019). In carrying out managerial functions, information is an important element needed for proper decision-making. The management accounting information system produces accounting information that is used internally by the manager, and if this system is well designed, it will be able to produce accurate and relevant information to support the effectiveness of the management control system.

Management accounting systems (SAM) have a broad scope of control, as they are designed to respond quickly to changing information, provide data for planning, and support the control process (Syaula Nurrajab et al., 2022). In a managerial context, this system also plays a role in increasing the accountability, efficiency, and effectiveness of managers in managing company resources. Therefore, the management accounting system can be said to be a very important internal decision support system because it provides information systematically and thoroughly.

The management accounting system in general has three main functions, namely planning, control, and coordination. One of its main roles is to provide information to internal parties in need, in the right format and time (Jusriadi & Ario, 2020). In the midst of increasingly complex business competition, companies are not only required to produce products, but also to ensure that the products have superior and consistent quality. Quality is one of the main factors that consumers consider in buying and using a product. Therefore, quality control is a very vital aspect in the company's operational activities (Ivan & Surianto, 2021).

This research focuses on the application of management accounting systems to product quality control at PT Bio Maraja Nusantara, especially through three main components, namely quality goals, quality feedback, and quality incentives, as well as how these three components are applied in maintaining and improving product quality from the raw material stage to the final product.

Several previous research results also strengthen the importance of a management accounting system in product quality control. The results of the implementation of the management accounting system at Benings Clinic Medan have shown its role as a tool in controlling product quality and can help managers be better prepared to handle company problems and control product quality. Benings Clinic Medan is only enough to maintain it and check every part for no errors in every process that is running. Meanwhile, the results of the research conducted at CV. Berkah Mandiri has used a management accounting system to ensure product quality, namely CV Mandiri has implemented 3 main landayan methods, namely Quality Goals, Quality feedback, and Quality intensive. Where the three main foundations of the management accounting system are used as a measuring tool in quality control. The implementation of a proper management accounting system can have a significant impact on the success of a company's quality control system

RESEARCH METHODS

The type of research used is qualitative descriptive research. The data studied are in the form of words or sentences, pictures and not numbers because they are based on qualitative research. The focus of the research on the proposal "the application of management accounting system to product quality control at PT Bio Maraja Nusantara" is to understand how the application of management accounting system at PT Bio Maraja Nusantara plays a role in supporting product quality control. This study explores the application of three main components in a management accounting system, namely quality goals, quality feedback, and quality incentives, as well as how these three contribute to product quality control at every stage of the production process, starting from raw material inspection, supervision during production, to final product evaluation. incentive.

The location of the research is Jl. Mirah Seruni Jl. Pengayoman No.2 No.1 A, Pandang, Kec. Panakkukang, Kota Makassar, Sulawesi Selatan. The time in this study was carried out for 2 months. The data collection technique in this study was carried out through three methods, namely observation, interview, and documentation. The interview was conducted in a semi-structured manner to two informants, namely Mr. Hamka as the manager and Mr. Ultra as the admin. Through this interview, the researcher collected information about the application of accounting systems in supporting product quality control, especially in terms of quality goals, quality feedback, and quality incentives. In addition, the documentation used is photo documentation in the form of recordings during interviews and company structure files.

RESULTS AND DISCUSSION

This research was conducted at PT Bio Maraja Nusantara and aims to determine the application of management accounting systems to product quality control. Data collection was carried out through interviews with two informants, namely Mr. Hamka (Manager) and Kak Ultra (Admin). The results of the interviews were then categorized based on the management accounting system and the stages of product quality control.

1. Management Accounting System in Companies

Based on the results of the research, it is known that the company PT Bio Maraja Nusantara still uses a standard system, namely from the recording process to the preparation of the ledger. Although modern technology has not been applied, the standard system is still implemented in a disciplined manner, with recording stages that follow standard procedures. Recording is carried out for all transactions related to the production process, ranging from raw materials, production processes, to product distribution. Based on the results of the interview from the informant, Mr. Hamka as the Manager that:

"The accounting system used in the company is still using a standard accounting system starting from the recording to the general ledger."

Based on the results of the interview, the researcher can conclude that the company still uses a standard manual or conventional accounting system, meaning that it has not used modern and computerized information technology or accounting software. This standard accounting system covers the entire process, from recording initial transactions (such as purchasing raw materials, paying wages, selling products) to compiling a ledger, which is a summary of all accounts used in the company.

2. The Role of Management Accounting Systems

The role of the management accounting system in PT Bio Maraja Nusantara's company is not only limited to recording financial transactions, but also serves as the main tool in the process of planning, supervising, and controlling production activities. Through this system, information related to income and expenses can be recorded systematically, including transactions that directly affect product quality. Although the system used is still standard, recording is still carried out in a disciplined manner based on the standard procedures that have been set by the company PT Bio Maraja Nusantara. Based on the results of the interview Mr. Hamka as the Manager that:

"The role of the accounting system is important because we record all expenses and income in essence, yes, in the outline, yes, so we know our financial flow".

The above statement can confirm that the accounting system has a very vital role in managing the company's finances. The informant stated that through the accounting system, all financial transactions, both expenses and income, are recorded thoroughly. This reflects the main function of the accounting system, which is as a tool for recording and reporting financial information.

3. Quality Control

Quality control is a key element in a company's production process because it is the main determinant of product success. In general, quality control is a series of systematic activities that aim to ensure that the products produced are in accordance with the specifications that have been set, both in terms of internal standards of the company PT Bio Maraja Nusantara and in terms of consumer expectations. In the context of PT Bio Maraja Nusantara, quality control is carried out, starting from the raw material stage, production process, and ending at the finished

product stage. Based on the results of research on the Bio Maraja Nusantara company, the company conducts 3 stages of product quality control, namely:

1. Raw Material Handling

Quality control begins at the initial stage, namely at the time of receipt of raw materials. The raw material inspection procedure aims to ensure that the materials received from suppliers meet the quality specifications that have been set before being used in the production process. If the material does not meet the standard, it can disrupt the process and reduce the quality of the final product. According to Heizer and Render (2017), the inspection of raw materials at the initial stage is a crucial step in quality control because the quality of raw materials will greatly determine the quality of the final product produced. If the material does not meet the standard, it can interfere with the production process, cause waste, and reduce the quality of the final product. This is in line with the opinion of Assauri (2016) who states that quality control should be carried out from the stage of receiving raw materials to prevent the entry of non-standard materials into the production process. Based on an interview from the informant, Mr. Hamka as the Manager that;

"The raw materials, because we receive them from delivery, and from there we already have employees who already have a job deck to check the quality of the product and its storage, as well as the stop file".

The above statement shows that the company conducts quality control from the initial stage, namely at the time of receipt of raw materials from suppliers. This process is an important part of the company's quality control system because the quality of raw materials greatly determines the final quality of the products produced.

Discussion

Based on the results of the research, the implementation of the Management Accounting System (SAM) at PT Bio Maraja Nusantara has gone well and has made a real contribution to product quality control. Implementation The management accounting system remains able to be run effectively through structured procedures and consistent work discipline. According to Hansen and Mowen (2018), the effectiveness of a management accounting system is not only determined by the sophistication of the technology used, but also by the existence of structured work procedures and the level of discipline of the implementers in running them. A system designed with clear procedures will minimize errors, ensure data consistency, and simplify the performance evaluation process. This is in line with the opinion of Romney and Steinbart (2017) who stated that a management accounting system can run effectively if it is supported by well-documented operational standards and consistent implementation by all relevant parties. Thus, although the technology used is still simple, structured procedures and high work discipline can maintain the effectiveness of the implementation of management accounting systems in supporting control and decision-making. The three main components that are the focus of this research: quality goals, quality feedback, and quality incentives each contribute differently to the success of quality control, with varying levels of strength.

The implementation of *quality goals* at PT Bio Maraja Nusantara is the most *powerful component* in the management accounting system. The company sets specific and measurable quality goals, which include raw material quality standards, minimum product defect targets, and finished product quality benchmarks. Quality control is carried out preventively through multi-layered quality control, starting from the inspection of raw materials when received from the supplier, followed by checking before the materials enter the warehouse, to supervision during

the production process. This approach ensures only materials that meet the standards used in the production process. The consistency of the implementation of *these quality goals* is in line with the view of Santosa & Windyaningrum which emphasizes that clear quality goals facilitate the control and evaluation of production performance. Its main strength lies in its preventive nature, so that potential product defects can be suppressed from the start. The impact can be seen in stable product quality, higher production efficiency, and the company's positive image in the market.

The *quality feedback component* at PT Bio Maraja Nusantara has also been carried out quite well, although it is not fully optimal. The company collects feedback through two main channels, namely internal and external evaluations. Internal evaluation is carried out by the *quality control* team at the final stage of production to ensure the conformity of the product with the set standards. External evaluations are carried out through after-sales service, where the company receives suggestions, inputs, and complaints from consumers. Information from these two sources is used to improve products and production processes. However, the process of collecting and analyzing feedback is still done manually, so it takes longer to respond to quality issues. This condition hinders the rapid implementation of *continuous improvement*, even though the substance of the feedback obtained is relevant and useful for quality control. Zulaikha (2021) who emphasized that customer perception is an important factor in determining quality. *Feedback* that is quickly responded to and integrated into the improvement process forms a *continuous improvement cycle* as described by Pratama & Nurlaily (2024). Despite making a significant contribution, this component cannot be categorized as *the most powerful* due to the limitations of the speed and response accuracy due to the manual system.

Integrating these three components into the management accounting system allows the company to create a comprehensive and sustainable quality control mechanism. This process starts from the earliest stage, namely the receipt of raw materials, where strict checks are carried out on quality and conformity with the standards that have been set. The raw materials that pass the selection then go into the production process stage, which is supervised in layers to ensure that every step goes smoothly

Based on this analysis, it can be concluded that *quality goals* are the strongest aspect in the implementation of the management accounting system at PT Bio Maraja Nusantara because it has a clear, measurable, and consistent formulation that is implemented from the early stages of production. *Quality feedback* is already running well, but it needs to be modernized through a digital-based recording and analysis system to be faster and more accurate. Meanwhile, *quality incentives* already contain elements of financial bonuses, but it still needs to be expanded to include assessment indicators so that they can be a more effective motivation driver for employees. With improvements in the last two components, the effectiveness of the implementation of the management accounting system in supporting product quality control at PT Bio Maraja Nusantara will increase significantly.

CONCLUSION

The conclusion of the discussion was that the implementation of the Management Accounting System (SAM) at PT Bio Maraja Nusantara has been effective, because it is supported by structured procedures and consistent work discipline. Of the three main components, quality goals are the most powerful aspect thanks to the determination of specific, measurable, and consistent quality goals that are applied from the inspection of raw materials when received from suppliers to the production process so as to be able to reduce the potential for product defects and maintain quality in a sustainable manner.

Quality feedback has functioned quite well through internal and external evaluation, but it is not optimal because the collection and analysis process is still manual, slowing down the response to quality problems. Quality incentives have provided financial motivation through bonuses based on quantity and product quality, but the assessment indicators are still limited so that their potential as a driver of employee motivation is not optimal. Thus, strengthening the digital-based feedback system and providing measurable incentives will further increase the effectiveness of the management accounting system in maintaining and improving the quality of the company's product

REFERENCES

- (Bohar & Lutfi, 2018). (2018). The Role of Statistical Quality Control (Sqc) in Quality Control: A Literature Study. *Journal of Ocean Accounting Students*, 4(3), 125–138. <https://doi.org/10.33059/jmas.v4i3.8079>
- Accounting, S., & Dalam, M. (n.d.). *Leunipun, Pattinama, Rumra : Characteristics of Management Accounting Systems in Relation to Management*. 31–45.
- Andika, B., & Marwan. (2021). Planning for Quality Control of Plastic Packaging Products Using the Six Sigma Method at PT. Bawar Sakti Indonesia. *IESM Journal*, 2(2), 198–208.
- Annas, N. A., Mattunruang, A. A., & Wahyuni, N. (2024). *Analysis of the application of management accounting system to product quality control at the Akhwat Makassar sewing house*. 4(4), 1525–1534.
- Grace. (2019). REDUCING THE AMOUNT OF PRODUCT DAMAGE TO PT . ANUGRAH Thesis Submitted by: Fitriya Salamah PAKUAN UNIVERSITY. *Accounting*.
- ARIEF REZKY PERDANA. (2022). Analysis of the Application of Quality Control in Improving the Quality of Convection Products in Arumi Fashion in Sungai Pua District, Agam Regency, West Sumatra. *Analysis of the Application of Quality Control in Improving the Quality of Convection Products in Arumi Fashion in Sungai Pua District, Agam Regency, West Sumatra*, 1-23.
- Butarbutar, J. D., Karamoy, H., & Tirayoh, V. Z. (2017). Analysis of the Application of Management Accounting System to Product Quality Control at Pt.Empat Saudara Manado. *Going Concern: Journal of Accounting Research*, 12(01), 187–193. <https://doi.org/10.32400/gc.12.01.17204.2017>
- Darmawan, M. R., Cahaya, Y. F., & Erasashanti, A. P. (2020). The influence of brand image, product quality, and price on the purchase decision of Yonex rackets. *Journal of Entrepreneurship, Accounting, and Management of TRI BISNIS*, 2(2), 129–140.
- Dwi Putra, A. I., & Surianto, M. A. (2021). Measuring the application of operational standards for cultivation procedures for controlling the quality of corn crops. *Journal of Business Management*, 18(4), 448–458. <https://doi.org/10.38043/jmb.v18i4.3278>
- Farahsyifa, S., & Aida, W. M. (2023). *Analysis of Management Accounting System on MSME Product*

- Quality Control (Case Study: CV Berkah Mandiri). 2013.*
- Ghasemi. (2019). The Effect of the Implementation of Management Accounting Information System on Product Quality Control. *JEKAMI: Journal of Accounting*, 3(1), 1–10. <https://pusdig.web.id/akuntansi/article/view/128%0Ahttps://pusdig.web.id/akuntansi/article/download/128/154>
- Herlina, E., Prabowo, F. H. E., & Nuraida, D. (2021). Quality Control Analysis in Improving the Production Process. *Journal of Business Management Focus*, 11(2), 173. <https://doi.org/10.12928/fokus.v11i2.4263>
- Hermawati, T. (2023). The Influence of Management Accounting Systems and Business Strategy on Managerial Performance. *Journal of Innovation in Management, Accounting and Business*, 2(1), 17–24. <https://doi.org/10.56916/jimab.v2i1.347>
- Ivan, A., & Suriyanto, A. (2021). Measuring the Implementation of Operational Standards of Cultivation Procedures for Controlling the Quality of Corn Yields at the University of Muhammadiyah Gresik (1) (2). *Journal of Business Management*, 18(4), 448–458. <http://journal.undiknas.ac.id/index.php/magister-manajemen/448>
- Jusriadi, E., & Ario, A. (2020). Evaluation of the Management Accounting System on the Smooth Production Process at Pt. Semen Bosowa. *Journal of Accounting Sciences*, 2(1), 21–37. <https://doi.org/10.26618/inv.v2i1.3182>
- Kontesa, D., & Siahaan, M. (2021). Management of Managerial Performance at Pt . Pos Indonesia (Persero) Bandar City. *Pusdansi.Org*, 1(2), 1–12.
- Empas, Y., Economics, F., Business, D., Accounting, J., Sam, U., & Manado, R. (2014). DECENTRALIZATION AND MANAGEMENT ACCOUNTING SYSTEM FOR MANAGER PERFORMANCE AT PT. SINAR GALESONG PRIMA MANADO Ventje Ilat 2 Harijanto Sabijono 3. *March*, 2(1), 431–440.
- Marshall, P. (2023). Managerial Performance: Product Quality Control and Management Accounting Information System: (Empirical Study: PT EDS Manufacturing Indonesia-Tangerang Banten). *Proceedings Auditing and Accounting Conference*, 96–109.
- Mahulette, B. W., Karamoy, H., & Wangkar, A. (2020). Analysis of the Implementation of Management Control Systems in an Effort to Improve the Performance of Production Managers at PT. Citra Raja Ampat Canning. *Journal EMBA*, 8(4), 1010–1017.
- Mellyana, W., Miru, S., & Hadi, S. (2024). Analysis of Quality Control of King Chips's Products in Sigi Windi Mellyana Regency. *Maeswara: Journal of Management and Entrepreneurship Research*, 2(2), 46–52.
- Ningsih, N. H., & Astrina, F. (2020). The Influence of Management Accounting System on Product Quality Control with Environmental Uncertainty as a Moderating Variable at PT. Sinar Sosro KPB Palembang. *Mbia*, 19(2), 170–185. <https://doi.org/10.33557/mbia.v19i2.832>
- Nugroho, P. I., & Takaliwuhang, J. G. (2022). Application of Management Accounting in Micro, Small and Medium Enterprises (MSMEs): I Cendol Kamu Salatiga. *Equity: Journal of Economic Education*, 10(2), 340–346.
- Nur Latifah, Y., Indhira P. Susanto, Nabila I. Mulia, & Isna Nugraha. (2022). Quality Control Analysis of Ud. Xyz with Total Quality Control (Tqc).