

The Role of Management Accounting Systems in Product Quality Control

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ABSTRACT

In an increasingly competitive business world, companies are required to produce quality products. SAM is a formal system that utilizes information to support various company activities. SAM has four main characteristics: broad coverage, aggregation, integration, and timeliness. Product quality control functions to integrate quality maintenance and development so that production and service are more efficient and satisfy consumers. There are three components of SAM in quality control: quality control objectives, quality feedback, and quality incentives. Companies need to control the products they produce to minimize defects. SAM helps present information on product quality and employee performance, as well as managing data into reports that support managers in decision making.

INTRODUCTION

With the advancement of globalization, competition has become increasingly fierce. Technology evolves rapidly, changing alongside consumer preferences. This creates both challenges and opportunities for companies and businesses. To ensure that the products offered are accepted, companies must quickly adapt to changing consumer preferences. To survive and win in business competition, it is essential to apply skills and encourage innovation in product development (Kamaruddin, 2019).

In today's competitive business world, companies must produce quality products to ensure customer satisfaction. Easier product quality control also impacts customer loyalty. Producing high-quality products requires careful attention to the manufacturing process. Process quality management involves identifying factors that improve product quality, which are key components in manufacturing and development. Process quality control ensures high-quality products so that product quality can be monitored before reaching consumers (Dariana, 2020).

Management accounting systems have three functions: "control," "adjustment," and "planning." One of the critical roles of management accounting systems is providing timely and relevant information to the necessary parties. Product quality is a competitive priority for achieving a competitive edge. In competition, companies must control the quality of their products. Therefore, companies need to monitor and control the products they produce. Quality control involves inspection and evaluation processes to minimize defective or damaged products. Moreover, products should be compared to customer needs and preferences (Anwar, 2023).

Product quality performance consists of internal and external quality. Both are influenced by variables, and the quality of each depends on those factors. Process quality management includes elements that drive product quality performance, such as identifying key components in manufacturing and development. Process quality control refers to a series of processes for producing high-quality products. However, previous research on the impact of process quality control on product quality performance has shown mixed results.

Based on this background, the author will examine the role of management accounting systems in product quality control. The purpose of this study is to explore how management accounting systems contribute to controlling product quality, ensuring that products meet high standards. This is crucial because quality control is one of the core functions of a company.

LITERATURE REVIEW

Accounting Management

Management accounting plays a crucial role in providing the necessary information for management and supporting managerial operations such as planning, coordination, and control. In an organization, information is vital for the management process. Business owners require accurate and relevant information to make decisions from various short-term and long-term options. Management accounting is a key management information system used within organizations. It focuses on internal organizational matters and aims to inform

internal stakeholders about the company's assessment and future plans (Kamaruddin, 2019).

Product Quality

In developing product strategies, the first step is selecting the market segment, and the second is understanding the essence of the product from the buyer's perspective. The third element is the product strategy at the level of individual product combinations, product series, and overall product mix. The fourth element emphasizes marketing strategies at each stage of the product life cycle (Made, 2023).

Product quality is the ability of a product to perform its functions, including durability, reliability, accuracy, ease of use, product operation and repair, and other valuable characteristics. To improve product quality, companies can implement comprehensive quality control programs. Product quality refers to a product's ability to perform its intended functions, encompassing overall durability, reliability, accuracy, ease of use, repairability, and other product features. Differences in product quality produced by different companies may arise due to factors such as human resources, management, financial resources, raw materials, machinery, and equipment (Mugiono, 2022).

METHODOLOGY

The research method used in this study is a qualitative method. The research data consists of secondary data collected through literature reviews, theory collection, research data, or previous research results from various sources related to the research topic. In qualitative research, evaluation is the result of data collection to answer a research question concerning accounting and product quality. This study employs an inductive approach and assesses the researcher's understanding and knowledge of relevant theories.

RESEARCH RESULT AND DISCUSSION

Management Accounting System

Management accounting is the process of identifying, measuring, collecting, preparing, analyzing, interpreting, and communicating economic events used by management to plan, control, make decisions, and evaluate an organization's performance. It is a process within an organization aimed at providing information to managers for planning, executing, and controlling organizational activities (Sulistyawati, 2021).

Role of the Management Accounting System

Management accounting information is essential for performing functions related to planning, organizing, controlling, and making business decisions. This information can be obtained from a system called the Management Accounting System (MAS). Examples of management accounting information include product-based sales reports, profit and loss reports by segment, and high-quality cost reports. MAS helps managers and organizations adopt and implement plans according to the competitive environment. Traditionally, MAS is seen as a system

that provides benchmarking and monitoring information from internal and historical data (Huda, 2020).

MAS information also enables users (managers or executives) to easily control costs, measure and improve productivity, and support production processes. MAS consists of three elements: quality objectives, quality feedback, and quality-related incentives, which are expected to motivate employees to achieve desired results (Tinangon, 2020).

Objectives of Management Accounting System

The objectives of management accounting are divided into two: primary objectives and secondary objectives. The primary objective is to support management in making business decisions. The secondary objective is to assist management in planning, responding to organizational issues, controlling management functions, and implementing management activity systems (Saputra, 2023)

Quality Control

Darsono (2020) states that to achieve quality standards, companies must implement quality control, which includes controlling raw materials, the production process, and finished products. The traditional approach to measuring quality allows companies to reduce defects and damages, as well as maintain product quality.

Several experts have provided different definitions of quality control. It is an effective system for integrating quality maintenance and development activities within an organization to achieve the most economical and satisfactory production and services for consumers (*Feightboun*) (Hasanah, 2020).

Objectives of Quality Control

Quality Control ensures that products and services meet customer needs. Therefore, the objective of quality control is to guarantee product quality, cost efficiency, on-time delivery, safety, and environmental friendliness (Hasanah, 2020).

Total Quality Management (TQM)

Total Quality Management (TQM) is a business management approach aimed at improving an organization's competitiveness through continuous improvement of products, services, people, processes, and the environment. According to Nasution, TQM is a management system that makes quality a business strategy and focuses on customer satisfaction by involving all members of the organization (Nafsyiah, 2023).

Total Quality Control (TQC)

TQC (*Total Quality Control*) is a responsive management system that involves all members of the organization by applying quality control concepts and techniques to ensure customer satisfaction and the satisfaction of those implementing it (Hasanah, 2020).

Table 1. Quality Control,

	QC (First Generation)	TQC (Second Generation)	TQM (Third Generation)
Industry and organization	Manufacturing Power	The strength of product competition	Extension appreciated
Object	Product quality	Production and service quality	Management quality
Scope of Activity	Product	Company, Group	Human relations
QC purposes	Match the request	Satisfy customers	Satisfy shareholders
How to Think About Quality Assurance	Out Product	Market in	Society in
Quality of Goods	Product Q	Product QCD	
Management Goals	Product	Process	Management System
Management Way of Thinking	Controls	Management and Operations	Management Strategy
Control Range	Raize Maintenance	Kaizen Stop	Prioriting Reform
Scope of Treatment	Temporary Fix	Repair Before Stopping	Prevention

Role of Management Accounting System in Product Quality Control

To ensure product quality, MAS consists of three management components: quality objectives, quality feedback, and quality incentives. For example, CV Graphics Indah Offset displays information boards in key areas of the workspace, outlining the company's vision and mission for all employees. This ensures that everyone, from management to staff, follows these guidelines during production, boosting employee morale and maintaining product quality standards (Huda, 2020).

The second component relates to quality feedback. Graphics Indah Offset has implemented open management, allowing employees to receive immediate feedback on performance errors, enabling them to quickly correct issues and maintain control over the production process. The third component, quality incentives, involves using financial and non-financial performance indicators, such as sales growth targets, work discipline, attendance records, and customer feedback. These three elements are closely related to MAS, as it provides the necessary information (Darsono, 2020).

MAS has four characteristics: broad scope, integration, aggregation, and timeliness. The primary feature of MAS is its broad scope. When production managers receive information about competitors' product quality, they must

maintain and improve their own high-quality standards. Evaluating whether their products can continue to compete is crucial for maintaining a competitive edge. MAS data supports superior product quality and improved financial performance compared to competitors (Made, 2023)

The second feature is aggregation, which covers information from various features and time periods. For instance, a production manager in a printing company may require a report on the latest magazine design to be printed. This aggregates all the necessary information, enabling the manager to make quick decisions (Hasanah, 2020).

The third feature of MAS is integration. For example, in material planning, manufacturing companies use a process called material resource planning (MRP) to control production and inventory. In a printing company, the inventory department must check the paper stock for calendar printing. If the warehouse has two reams of paper but production requires three, the warehouse must purchase more paper to meet production needs. Integrating this information involves checking the available paper stock (Huda, 2020).

The fourth feature is timeliness. In a printing factory, the warehouse team must reserve time to purchase raw materials quickly to meet production demands and ensure product availability. As technology advances, MAS can provide timely reports, making information readily available to managers. TQC and TQM can support MAS, ensuring accuracy in manufacturing and achieving quality standards, while MAS provides the reporting accuracy needed for decision-making (Kamaruddin, 2019).

CONCLUSION AND RECOMMENDATION

Reports generated using the Management Accounting System (MAS) must include four key characteristics: broad scope, aggregation, integration, and timeliness. If these characteristics are not covered, managers will struggle to read the reports they need to control product quality effectively. Quality management consists of three elements: quality objectives, quality feedback, and quality incentives. These three components work together to achieve the desired results in line with the company's quality standards. Through MAS, managers can request these reports at any time to address issues within the company, especially in product quality control. There are two quality development approaches that can support MAS: Total Quality Control (TQC) and Total Quality Management (TQM). MAS aims to provide administrators with the information they need to manage products. Its role in managing product quality helps managers address company problems and prepares them to manage product quality effectively, ensuring that their products remain competitive. Additionally, MAS provides quality reports that contribute to the overall development of the product.

ADVANCED RESEARCH

Further research could focus on exploring the role of the Management Accounting System (MAS) in product quality control, specifically in the context of financial accountability and transparency within government institutions. This study could examine how MAS, with its characteristics such as broad scope, aggregation, integration, and timeliness, can be adapted to enhance

accountability and transparency in the public sector. Beyond serving as a tool for product quality control, MAS also plays a role in managing the quality of financial reports and operational performance, ensuring that accounting information is accessible to stakeholders in real-time.

This research could further develop the idea that implementing MAS in government institutions has the potential to provide more effective feedback in internal audits. Quality control can be implemented through the integration of financial data with various government functions, leading to more accurate financial reporting and faster decision-making. This is essential in preventing irregularities and strengthening oversight by relevant parties. Consequently, this research could expand the role of MAS in public sector financial management, where transparency and accountability are crucial to maintaining public trust. The use of digital technology within MAS could also be a focal point of study to improve system effectiveness and ensure that quality standards and efficiency are maintained throughout the government's financial administration processes.

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