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Performance Measurement System: Management Accounting Information System And Total Quality Management

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ABSTRACT

A performance measurement system is the ability for companies to measure how well employees and managers are performing well in meeting current standards and improving every time. In addition, to evaluate employees, a performance measurement system can also develop and motivate employees. The purpose of this study is to determine the influence of Management Accounting Information System and Total Quality Management on the Performance Measurement System in the Production Department of PT. Aplus Pacific for the 2024 period. The hypothesis in this study is suspected to be the Influence of Broad Scope, Employee Involvement and Teamwork. This study uses a quantitative method using primary data through the distribution of questionnaires. The population and this research is the company PT. Aplus Pacific. Sampling used saturated sampling with a total of 53 respondents. The data analysis techniques used in this study used validity tests, reliability tests, normality tests, heteroscedasticity tests, multicollinearity tests, autocorrelation tests, classical assumption tests, multiple linear regression analysis tests, correlation coefficient tests, determination coefficient tests, partial tests and simultaneous tests supported by the IBM SPSSS Statistics Version 20 program. The results of this study show that (1) Partially Broad Scope has a significant effect on Quality. (2) Partially, Employee Involvement Does Not Have a Significant Effect on Quality (3) Partially, Teamwork Does Not Have a Significant Effect on Quality (4) Simultaneously Broad Scope, Employee Involvement, and Teamwork Have a Significant Effect on Quality in the Production Department of PT. Aplus Pacific for the 2024 period. With this research, companies are advised to continue to expand the scope of their projects, but still pay attention to existing resources. And it is necessary to conduct further analysis regarding the type of new projects that have the potential to improve quality and the company needs to maintain and increase sales, streamline costs and develop new products in order to improve quality.

Keywords: Management Accounting Information System, Total Quality Management, Performance Measurement System.

INTRODUCTION

The current economic situation has resulted in rapid changes in the operating environment, and these environmental changes require companies to adapt to these changes. These demands require companies to orient themselves towards increasingly effective, efficient, and responsive service functions. Every company needs to improve its operational and management capabilities.

According to Horngren and Datar in Hasanah (2013), performance measurement in general based on the criteria and information produced can be divided into two, namely: financial performance measurement and non-financial performance measurement. (Ridwan & Sandi, 2019)

Performance measurement system is one of the important elements in effective organizational management. Performance measurement not only provides information on operational effectiveness and efficiency, but can also be used as a tool to evaluate and improve overall organizational performance. Therefore, a deep understanding of the factors that influence the performance measurement system is very important for the organization. Performance indicators must be something that will be calculated and measured and used as a basis for assessing or seeing the level of performance, both in the planning stage, the implementation stage and the stage after the activity is completed and functioning. The phenomenon of the performance measurement system can be seen from the casePT Aplus Pacific has not implemented a good salary system.(Yusuf, 2022)

In the phenomenon that occurred in the table above in 2020, the Covid-19 virus caused the company PT. Aplus Pacific to experience a decline and due to the PSBB policy that occurred during the pandemic and resulted in the delivery of goods having to be turned back and in some areas the delivery of goods even stopped and resulted in the company not producing and the work system which was initially three shifts became one shift. And in 2023 PT. Aplus Pacific has not implemented the function of making a payroll, this is reflected in the elements that should be submitted by the function of making a payroll to the section, but because the function does not exist, the function of making a payroll submits it directly to the General Manager so that it does not comply with the function in accordance with the procedure.

Performance measurement systems are not always aligned with the company's overall goals, vision, and strategy. This can result in performance measurement not supporting the achievement of the desired business strategy. Performance measurement systems often focus too much on the financial aspects, ignoring non-financial factors that are also important. This can lead to decision-making that is too oriented towards financial numbers. If employees are not involved in the development of the performance measurement system, they may not understand or feel involved in the process. Poor communication about the performance measurement system can lead to confusion and resistance among employees.

"The performance measurement system is a mechanism for periodic improvement of the effectiveness of the workforce in carrying out the company's operational activities based on pre-determined standards in order to successfully implement the company's strategy and improve decision-making." (Afriantoni & Erwati, 2019). The assessment effort of an activity (and its process) that is carried out is the basis for efforts to improve the company's ability to generate profits. Measurement of performance activities is carried out in financial and non-financial forms. This measurement is designed to assess how an activity is carried out and the results achieved. Measurement of performance activities is also designed to reveal whether sustainable development has been carried out on an activity to generate value for customers.

A performance measurement system consists of a series of measures that evaluate the performance of a company's management. Performance measures can also inform decision-making regarding both financial and nonfinancial matters of the company. When managers receive high-level performance measures in the form of information needed to provide feedback or improvement, they are motivated to improve performance. Performance measurement systems help managers implement business strategies by comparing actual results to strategic goals. Performance measurement systems involve a systematic approach to setting business goals and regular feedback reports that show progress toward those goals.

Performance measurement system is one of the important components in organizational management. "Effective performance measurement can help organizations achieve their goals, identify areas for improvement, and monitor organizational progress" (Faisal & Darmawan, 2024), "One approach that can be used in a performance measurement system is to use quality indicators" (Pardiyono & Indrayani, 2019). The quality of information held by an organization is an important factor for its success with the rapid development of internet and social media usage, bad information can have a negative impact on every element/level within the company or in society. The quality of good or bad information is correlated with the quality of the information itself. In addition, a quality assurance system can ensure consistency and sustainability of meeting quality standards to satisfy all consumers, producers, and other stakeholders.

Management accounting information system (MAIS) is one of the important tools for management in collecting, managing and presenting relevant financial and non-financial information for decision making. With an effective MAIS, employees can access accurate and timely information, thereby improving the quality of their decision making and performance. A good MAIS can also help employees in planning, controlling, and evaluating the company's operational activities more efficiently.

Management accounting information system as a system that plays a role in helping to predict the possible consequences of several alternative actions taken in various activities such as planning, controlling and decision making. In the management accounting information system there are still several problems in it such as poor data quality which causes the management accounting information system to be inaccurate, incomplete, or untimely. So the performance measurement system will produce invalid performance evaluations. This can lead to inappropriate management decisions, and users of the management accounting information system and performance measurement system do not have an adequate understanding of the two systems, so there will be difficulties in interpreting and using the information produced effectively. Lack of integration between the management accounting information system and other information systems can make it difficult to collect comprehensive data for the performance measurement system. This can result in incomplete performance evaluations.

"the higher the interdependence, the more the characteristics of a management accounting system are needed." (Wulandari et al., 2016) High interdependence will cause an increase in the tasks faced by managers. Managers do not only focus on the activities of their own subunits, but also the activities of other units. This condition will increase the complexity of the tasks faced by managers and cause the need for better coordination and control. Therefore, to deal with this situation, managers need broad scope information to overcome the complexity of the tasks faced and improve decision making. As a result, managerial performance can be improved.

Broad scope is to carry out the management process. Management requires broad information but at a reasonable level so that the benefits of the information are greater than the costs of obtaining the information. Broad scope information is information that considers the dimensions of focus, quantification, and time horizon. Information that is characterized by a broad scope includes information related to the external environment (such as: GNP, total sales, and market share) or is non-economic (such as: demographic factors, consumer desires, competitor actions, and technological advances). The broad scope of SAM will provide an estimate of the possibility of future events in terms of profitability.

PT. Aplus Pacific faces special competition due to differences in quality between workers. Total quality management (TQM) is a system that can be developed into an approach to running a business to maximize the competitiveness of an organization through continuous improvement of products, services, workforce, processes and the environment.

"If a company uses TQM, it will reduce operational costs and increase income so that profits will increase." (Darmawan, 2017) Managers will be more motivated to improve their managerial performance if they receive high performance measurements in the form of necessary information, which provides feedback for improvement and learning.

Total Quality Management (TQM) is a management approach that focuses on continuous quality improvement in all aspects of an organization, including products, services, and processes. TQM involves the participation of all members of the organization, from top management to front-line employees, to achieve maximum customer satisfaction.

In Total Quality Management (TQM) there are still problems within it, including the lack of employee training and development, so that employees will have difficulty implementing TQM principles, lack of communication which can lead to misunderstandings and lack of information, employee barriers to change such as employee empowerment, teamwork, and focus on the process.

In this study, total quality management uses indicators of employee involvement and Teamwork. Employees who are actively involved in the quality improvement process will feel appreciated and have a sense of ownership of the organization. This can increase their motivation, productivity, and commitment to organizational goals. In a performance system that uses employee involvement indicators, organizations can measure the extent to which employees are involved in quality improvement efforts.

"Employee involvement is a concept that can be seen from the discretionary effort, namely employees have choices, employees act in the interests of the organization." (Yudiani, 2017) Employees who have high work engagement are employees who are able to be fully involved and enthusiastic about the work they do. Employee engagement can be said to be a "resource" that can be invested to spur the development of an organization or company. Employees who are enthusiastic about their work, immersed in work activities and persistent when faced with existing challenges and obstacles are characteristics of employees who have a high sense of involvement in the work at hand Bakker, (2017)(Belinda et al., 2021), (Yumhi, et al, (2023)).

By using employee engagement indicators, organizations can monitor and evaluate the effectiveness of their TQM efforts. If employee engagement levels are low, organizations can take action to increase participation, such as through training programs, better communication, or incentives. The success of TQM implementation depends heavily on employee engagement and commitment. By measuring and improving employee engagement, organizations can ensure that quality improvement efforts are carried out effectively, thereby achieving higher customer satisfaction and sustainable competitive advantage.

TQM is an important management philosophy to improve the quality of products and services in an organization. Teamwork is one of the key factors in the success of TQM. Experts have developed various indicators to measure teamwork, and research shows that there is a positive relationship between teamwork and TQM performance. The problem that occurs in employee involvement is the existence of employee barriers to changes in employee empowerment teamwork. Differences of opinion and work power between team members can trigger conflict and disputes. Lack of open and transparent communication between team members can lead to misunderstandings. According to Mangkunegara (2021:67) "performance is the result of work in terms of quality and quantity achieved by an employee in carrying out his duties in accordance with the responsibilities given to him" (Perdana et al., 2024). Performance Measurement System is a tool used to identify strengths and weaknesses in conveying information about the effectiveness or failure of an organization's programs or activities (Ammons, 2001)(Kuntadi & Cheria Puspita, 2022). According to Mulyadi, the reward and recognition system for employee performance is a means to direct employee behavior towards behavior that is valued and recognized by the organization. (Dhutarso Aviantoro et al., 2020). A performance measurement system can be useful for its users if the results can provide feedback that can help members of the organization in their efforts to make further work improvements. (Jusuf, 2013). This is possible because "performance measurement systems can produce useful information for decision making" (Kumala & Widyarti, 2020). "Total quality management is an approach to running a business that attempts to maximize the competitiveness of an organization through continuous improvement of its products, services, workforce, processes and environment."(Nasution.MN, 2015).

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"Total quality management is an approach to running a business that attempts to maximize the competitiveness of an organization through continuous improvement of its products, services, people, processes and environment." (Tjiptono & Diana, 2003).

RESEARCH METHODS

This research falls into the quantitative descriptive research category, which involves collecting data and presenting it numerically. Using quantitative methods, the author was able to obtain a picture and evidence of the influence of Management Accounting Information Systems, Financial Performance, and Total Quality Management on the Performance System in the Production Department of PT. Aplus Pacific for the 2024 period.

A population is a collection of elements that share certain characteristics and serve as research objects. Members of a population are called population elements. Populations can include individuals, companies, auditors, managers, and the like. The population in this study can be seen in the following table:

Table 1. Number of Research Population

No	Population	Amount
1	Quality Control (QC)	5
2	Head of Section DMechanical revision	3
3	Deputy Head of Section DMechanical revision	2
4	KTeam Leader	2
5	Part Mmechanical	55
Total Population		67

Source: PT. Aplus Pacific (2024)

For the sample used in this study, the saturated sample technique was used, so all of the research population was used as samples in the research conducted.

RESULTS AND DISCUSSION

RESULTS

The t-test is conducted to test whether the independent variable partially influences the dependent variable. H0 is accepted if the calculated t < t table and H0 is rejected if the calculated t > table or if the significance > 0.05 then the hypothesis is rejected. The results of the t-test can be seen as follows:

Table 2. Partial t-test results Coefficientsa

Model	t	Sig.
(Constant)	2,277	.027
Broad scope	3,052	.004
Employee performance	-.684	.497
Teamwork	.083	.934
a. Dependent Variable: Quality		

Source: data processed by the author (SPSS version 20)

The calculated t value is 3.052 and the t table value is 2.009, which means the calculated t value is 2.100 > t table 2.009 with a significant value of 0.004 < 0.05. This means that H0 is rejected and H1 is accepted, which means that partially the variable X1 (Broad Scope) has a significant effect on quality.

The calculated t value is -.684 and the t table value is 2.009, which means the calculated t value is -.684 < t table 2.009 with a significant value of 0.497 < 0.05. This means that H0 is accepted and H2 is rejected, which means that partially the variable X2 (Employee involvement) does not have a significant effect on quality.

The calculated t value is 0.083 and the t table value is 2.009, which means the calculated t value is 0.083 < t table 2.009 with a significant value of 0.934 < 0.05. This means that H0 is accepted and H3 is rejected, which means that partially the variable X3 (Teamwork) does not have a significant effect on quality.

The results of the F test on research variables using SPSS 20 can be seen as follows:

Table 3. F Test Results (simultaneous)

ANOVA			
Model	Mean Square	F	Sig.
Regression	86,339	3,225	.030b
Residual	1,965		
Total			
a. Dependent Variable: Quality			
b. Predictors: (Constant), Broad Scope, Employee Involvement and Teamwork.			

Source: data processed by the author (SPSS version 20)

Based on the results of the F Test analysis, the calculated F value is 3.225 with a significance level of 0.000. From the table, it can be concluded that the calculated F value > F table (3.225 > 2.56) and the significance value of 0.000 < 0.05, so H0 is rejected and H4 is accepted. Which means that Broad scope, Employee performance and teamwork have an impact on quality.

Discussion

The Impact of Broad Scope on Quality

Based on the test results using SPSS Version 20, it was found that H0 was rejected and H1 was accepted, which means that partially the variable X1 (Broad Scope) had a significant effect on quality. The results of this study are in line with research conducted by Elisabeth Mamita Sofia Obi Putri, (2023). The results of the study showed that in the partial test, the management accounting information system had a positive and significant effect on managerial performance and the performance measurement system had a significant effect on managerial performance.(Mamita & Putri, 2023).

The Impact of Employee Engagement on Quality

Based on the test results using SPSS Version 20, it was found that H0 was accepted and H2 was rejected, which means that partially the variable X2 (Employee involvement) does not have a significant effect on quality.(Letsoin & Ratnasari, 2020)

The Influence of Teamwork on Quality

Based on the test results using SPSS Version 20, it was found that H0 was accepted and H3 was rejected, which means that partially the variable X3 (team cooperation) does not have a significant effect on quality. This is in accordance with the research.(Riana, 2019)(Veronika Tamaya & Maria Modesta Missi Mone, 2023)(Hidayat & Mudawanah, 2024).

CONCLUSION

From the results of the analysis that the author has done, it can be concluded that partially Broad Scope has a significant effect on Quality at PT. Aplus Pacific Period 2024. Employee Involvement does not have a significant effect on Quality at PT. Aplus Pacific Period 2024. Teamwork does not have a significant effect on Quality at PT. Aplus Pacific Period 2024, so the hypothesis is rejected, and simultaneously Broad Scope, Employee Involvement, and Teamwork have a significant effect on Quality at PT. Aplus Pacific Period 2024.

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