

ANALYSIS OF THE EFFECT OF TOTAL QUALITY MANAGEMENT ON MANAGERIAL PERFORMANCE WITH PERFORMANCE MEASUREMENT SYSTEM AS AN INTERVENING VARIABLE ON PERUMDA AIR MINUM TIRTA MOEDAL SEMARANG

Khausaria Apridita¹, Tutik Dwi Karyati², Arum Febriyanti Ciptaningtias³, Agni Astugkara⁴

AFFILIATIONS

¹ Departement of Accounting, Semarang State Polytechnic, Indonesia

² Departement of Accounting, Semarang State Polytechnic, Indonesia

³ Departement of Accounting, Semarang State Polytechnic, Indonesia

⁴ Departement of Accounting, Semarang State Polytechnic, Indonesia

*Corresponding Author E-mail: arum@polines.ac.id

Abstract: This study aims to determine the effect of Total Quality Management, especially focus on customers, quality obsession, long-term commitment, and continuous improvement on managerial performance mediated by a performance measurement system at Perumda Air Minum Tirta Moedal Semarang. There are 38 respondents selected based on the purposive sampling technique. Methods of data collection by distributing questionnaires and interviews. This study used a data quality test which consisted of validity and reliability tests, then used the classical assumption test which consisted of a normality test, multicollinearity test, and heteroscedasticity test. Hypothesis testing is done by t-test, f-test, determinant coefficient test, and path analysis (Path Analysis). The results of this study state that the performance measurement system cannot mediate the relationship between customer focus and managerial performance. The performance measurement system cannot mediate the relationship between quality obsession with managerial performance. The performance measurement system cannot mediate the long-term commitment relationship to managerial performance, the performance measurement system cannot mediate the continuous improvement relationship to managerial performance.

Keywords: Total quality management, managerial performance, performance measurement system

INTRODUCTION

Introduction

The rapid development of technology provides benefits and challenges for all countries, especially for developing countries. Along with the development of information technology, companies can exercise maximum control over the quality management produced (Ross J.E. in Ramlawati (2020: 174). Quality management control can be done by improving managerial performance efficiently and effectively. Performance is a condition that describes the company's achievements to realize the goals and vision and mission that have been prepared. In general, managerial performance is an achievement that has been achieved by staff to carry out their duties and obligations (Mangkunegara 2009: 67). The level of effectiveness and efficiency in the company's achievements can be measured through managerial performance (Stoner in (Evelyne Evelyn and Juniarti Juniarti 2003). Company managers need to pay attention to the behavior carried out by staff in doing their work so that company goals are achieved immediately, for this reason a performance measurement system is needed so that the assessment is more structured and well documented. Every achievement needs to be measured, because measurement is the key to performance management Dharma (2012: 93). The results

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of the achievements that have been achieved are used to determine the next target as the basis for performance appraisal. According to Moehariono (2012:96) performance measurement is an assessment of the progress of work in managing human resources to produce products and services and provide information to achieve organizational goals. Performance measurement can be done with an effort to map the strategy in each activity to achieve a certain target (Handayani 2011). Performance measurement can begin with setting a strategy that is useful for providing information efficiently and effectively. This is expected to make it easier for each part to monitor staff performance in achieving the company's goals and vision and mission. The application of the Total Quality Management concept can help measure and improve managerial performance in the company. Total Quality Management is a management concept that responds to any changes that occur both externally and internally (Ramlawati 2020: 179). According to Tjiptono and Diana (2000: 4) Total Quality Management is an effort applied by the company to maximize the competitiveness of the company with the aim of increasing customer satisfaction. The process of maximizing competitiveness can be done by making continuous improvements to products, services, labor, processes, and the environment within the company (Nasution 2010: 22).

Regional Public Water Company Tirta Moedal Semarang is one of the regionally owned enterprises engaged in community services. This company is a company that strives to provide clean water in the city of Semarang and continues to improve the best in service and quality provided. In carrying out its goals and vision and mission, Perumda Air Minum Tirta Moedal Semarang has 4 branches with good performance levels. The high needs of the people of Semarang City regarding clean water is a challenge for the company in providing the best service and quality. Service delivery can be maximized by improving managerial performance. The company has divided the staff into several sections in order to focus more on the work they face so that there is an increase in performance. To measure the performance improvement that has been achieved, the company has also implemented a performance measurement system. There are several factors contained in the performance measurement system such as honesty, motivation, and creativity.

LITERATURE REVIEW

Total Quality Management is a strategy carried out by each company with the aim of increasing customer satisfaction involving all company resources. The application of the Total Quality Management concept can run smoothly if the company makes continuous improvements. The application of the concept of Total Quality Management can run smoothly if the company can understand its characteristics.

According to Tjiptono and Diana (2000:15) there are ten characteristics of Total Quality Management, which are as follows:

a. Customer Focus

The existence of customers in society is very important in the company. The company must prepare and identify related to the services that will be provided to the community if it wants to implement Total Quality Management.

b. Obsession with Quality

The company must be able to meet customer expectations regarding the quality of the product. Obsession is a way that companies can do to improve quality, both in terms of products and services. The quality of the work environment is one of the important things that can be done so that managerial performance can improve.

c. Scientific Approach

The scientific approach has a great influence on job design, the decision-making process, and problem-solving related to the job.

d. Long-term Commitment

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Total Quality Management is a new paradigm in doing business. In applying the concept, a supportive corporate culture is needed. Changes can occur if the company can implement TQM properly.

e. Teamwork

Teamwork, partnerships, and relationships that exist between agencies and communities are one of the characteristics of agencies that apply the concept of Total Quality Management. Teamwork can generate or increase employee enthusiasm for continuous improvement.

f. Continuous System Improvement

To meet customer needs and provide a good company image in the community, the system used today needs to be improved continuously to produce good quality.

g. Education and Training

Training is part of education. Education is both philosophical and theoretical. Both have the same goal. However, until now there are still some companies that do not care about the importance of education and training for their employees. This condition is one of the reasons for agencies that have difficulty developing. Education and training in the implementation of TQM is a basic thing that must be done so that it has a positive impact on managerial performance.

h. Controlled Freedom

Problem solving in agencies is not always decided by a leader alone. Every employee who knows about it has the same right to express his opinion.

i. Unity of Purpose

Unity of purpose is one of the characteristics of agencies that apply the TQM concept. With unity of purpose, agencies can find out what areas still need improvement.

j. Employee Involvement and Empowerment

Good decisions can be made from the thoughts of all employees. This is because it includes views and thoughts from various parties who have complete control.

The need for leadership, education and training, support structures, communication, rewards and recognition, and measurement as supporting elements in companies that implement Total Quality Management (Tenner and De Toro 2016: 97). The benefits obtained from companies that apply the concept of Total Quality Management are that companies can provide goods or services of the highest quality at lower costs. The application of the Total Quality Management concept to the company can affect managerial performance.

Managerial performance can be defined as the ability produced by managers through various types of managerial activities. Managerial activities carried out by each manager include planning, organizing, directing, coordinating, supervising, assessing, reporting, and determining budgets. According to Mangkunegara (2009: 67) the factors driving performance are:

1. Ability factor: each staff has a different level of skill and proficiency. Therefore, staff need to be placed in jobs that are in accordance with their expertise.
2. Motivation factor: motivation can affect the condition of each staff. The better the motivation and mental owned by the staff, the better the performance.

The form of performance provided by each individual can be assessed and measured through a performance measurement system. Performance measurement is stated as important in the planning, control, and transaction processes within the company (Amirullah 2015: 235). In the world of work, the performance measurement system has a considerable impact on the company. The use of a performance measurement system has positive benefits for the company Masram and Mu'ah (2018: 145) the benefits provided are as follows:

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1. Providing motivation is one way to manage organizational operations properly. The motivation provided can encourage employees to act consciously and in accordance with predetermined goals.
2. Making it easier for agencies to find out about waste while reducing these wasteful activities.
3. Analyzing performance activities carried out by staff by focusing on customer expectations by involving all staff in these activities.
4. Setting fixed strategic goals in order to accelerate the company's learning process.

Hypothesis

A good company is a company that is able to provide satisfaction to customers. Management must strive to meet customer expectations. The following is a hypothesis statement in this study:

- a. The effect of customer focus on managerial performance

According to Almansour (2012), Total Quality Management has the ultimate goal of satisfying customers, implementing planned strategies and responding to customer complaints. A manager can be said to be good if he is able to achieve company goals and can direct employees to improve performance. So that with the company implementing a focus on customers, it will improve managerial performance. From the above statement it can be concluded as follows:

H1 : There is an influence that occurs between focus on customers on managerial performance.

- b. The effect of customer focus on managerial performance mediated by the performance measurement system

Customer focus is one of the strategies that can be carried out by companies in order to better fulfill customer satisfaction. The performance measurement system can be said to be a process for measuring how efficient and effective the quality produced by the company is (Mufahamah, Wuryanti, and Muhammad 2022). Each individual has a different level of satisfaction, with a performance measurement system, it can find out whether the customer is satisfied or not with the results produced. Staff are increasingly competing to improve their performance in order to provide the best service.

H2 : There is an influence that occurs between customer focus on managerial performance mediated by the performance measurement system.

- c. The effect of obsession with quality on managerial performance

Obsession with quality is one of the attitudes that must be carried out in every company, because with an obsession with quality, the company will never be satisfied with the quality provided. Obsession with quality has a positive impact on increasing customer satisfaction (Irmadhani, Atika, and Junaidi 2019). So the greater the obsession with quality carried out by the company, the higher the managerial performance of the company.

H3 : There is an influence that occurs between obsession with quality on managerial performance.

- d. The effect of obsession with quality on managerial performance mediated by the performance measurement system

Obsession with quality has a big impact on the company, namely increasing customer satisfaction. The performance measurement system has several important factors. One of them is that the performance measurement system can improve employee performance to work even better to increase customer satisfaction.

H4 : There is an influence that occurs between obsession with quality on managerial performance mediated by the performance measurement system.

- e. The effect of long-term commitment on managerial performance

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Long-term commitment is one of the factors of Total Quality Management which has an important point, because commitment can show the leader's role in leading his company. The perceptions of managers must be equalized with the principles of Total Quality Management so that commitment can run well (Puji Isyanto 2019).

H5 : There is an influence that occurs between long-term commitment to managerial performance.

- f. The effect of long-term commitment on managerial performance mediated by the performance measurement system

Long-term commitment is a form of encouragement that arises within employees who have an influence on organizational success (Mufahamah et al. 2022). Meanwhile, the performance measurement system provides feedback on the work done so that it can generate motivation for managerial performance.

H6 : There is an influence that occurs between long-term commitment to managerial performance mediated by the performance measurement system.

- g. The effect of continuous improvement on managerial performance

One of the important points in Total Quality Management is continuous improvement. According to Fandy Tjiptono and Diana (2000) continuous improvement does not only focus on solving problems, but also on correcting the causes of existing standard deviations.

H7 : There is an influence that occurs between continuous improvement on managerial performance.

- h. Effect of continuous improvement on managerial performance mediated by performance measurement system

Continuous improvement is an effort to make improvements in all fields in the long term. The quality culture of continuous improvement in the company is the influence of the performance measurement system which has an impact on the formation of a conducive environment.

By implementing a performance measurement system in the company, it will provide an understanding of the purpose of the work being done (Mufahamah et al. 2022).

H8 : There is an influence that occurs between continuous improvement on managerial performance mediated by the performance measurement system.

- i. The effect of customer focus, obsession with quality, long-term commitment, and continuous improvement together on managerial performance

Customer focus, obsession with quality, long-term commitment, and continuous improvement are some of the factors that exist in Total Quality Management. There is a relationship that occurs between TQM and managerial performance, namely the application of TQM can make it easier for staff to work, this can improve managerial performance.

H9 : There is an effect of customer focus, obsession with quality, long-term commitment, and continuous improvement together on managerial performance.

- j. The effect of performance measurement system on managerial performance

The performance measurement system is an assessment made of the progress made by employees to achieve the goals and vision and mission of the organization. According to Rumampea (2018) with the company implementing a performance measurement system, it will make staff morale increase.

H10 : There is an influence on the performance measurement system on managerial performance.

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RESEARCH METHODOLOGY

This type of research is quantitative research that describes the relationship between the independent variable and the dependent variable. The population used in this study were all employees at Perumda Air Minum Tirta Moedal Semarang. The purposive sampling method was used as a method of sampling. Primary data obtained from filling out questionnaires through questionnaire distribution using a Likert scale. Data analysis using path analysis method used to determine the relationship between dependent and independent variables. Sobel test is also used to determine whether there is a relationship through mediating variables.

RESULTS AND ANALYSIS

Data Quality Test

The validity test is important because it is useful for knowing whether or not our research questionnaire is valid (Sugiyono 2015: 236). Based on the r table with an alpha value of 0.05, the r table is 0.32002. Based on the results of validity testing, it is found that the value of $r_{count} > r_{table}$, so it can be concluded that all indicators in this study are declared valid.

Reliability test is important because this test can measure the extent of the consistency of the questionnaire. According to Pamungkas (2015), the consistency in question is the suitability of the measuring instrument whether it will get consistent results if the measurement occurs again. This research reliability test uses the Cronbach's Alpha formula. According to Sugiyono (2015: 168) variables can be said to be reliable if the reliability coefficient is at least 0.6.

Table 1 Reliability Test Results

No	Variables	<i>Cronbach's Alpha</i>	Criteria
1	Customer Focus	0,602	Reliable
2	Obsession with Quality	0,610	Reliable
3	Long-term Commitment	0,602	Reliable
4	Continuous Improvement	0,608	Reliable
5	Performance Measurement System	0,603	Reliable
6	Managerial Performance	0,615	Reliable

Source: Primary data processed, 2023

Classic Assumption Test

The normality test results state that the significance value (Asyp. Sig 2-tailed) is $0.200 > 0.005$, so it can be concluded that the normality test has been fulfilled. The multicollinearity test results show that the calculation of the tolerance value > 0.01 with $VIF < 10$, so the independent variables in this model do not occur multicollinearity. After calculating the heteroscedasticity test, it shows that there is no clear pattern and the data points spread out so that this study does not occur heteroscedasticity.

Path Analysis Model 1

The first analysis in this regression model is used to determine the strength of the relationship of the independent variables, namely customer focus, obsession with quality, long-term commitment, continuous improvement to the mediating variable (intervening), namely the

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performance measurement system. The results of the calculation of R² through the SPSS calculation of 0.194 which means that in this equation model the entire dependent variable is 19.4% while the remaining 80.6% is explained by other variations outside of this study. The regression equation model can be seen from the following table:

Table 2 Path Analysis Results Model 1

Coefficients ^a				
	Unstandardized B	Coefficients Std. Error	t	Sig.
(Constant)	10,490	4,105	2,555	0,015
Customer focus	0,238	0,192	1,240	0,224
Quality obsession	0,152	0,165	0,920	0,364
Long-term commitment	0,393	0,183	2,144	0,039
Continuous improvement	-0,328	0,204	-1,605	0,118

Source: Primary data processed 2023

Based on the first regression model, it can be seen that:

- The constant value of 10.490 means that if the focus on customers, quality obsession, long-term commitment, and continuous improvement amounts to 0, then the performance measurement system is worth 10.490.
- The regression coefficient value for the customer focus variable (X1) of 0.238 means that if the customer focus variable is increased by 1 unit, the value of the performance measurement system variable will increase by 0.238.
- The regression coefficient value for the quality obsession variable (X2) is 0.152, which means that if the quality obsession variable is increased by 1 unit, the value of the performance measurement system variable will increase by 0.152.
- The regression coefficient value for the long-term commitment variable (X3) of 0.393 means that if the long-term commitment variable is increased by 1 unit, the value of the performance measurement system variable will increase by 0.393.
- The regression coefficient value for the continuous improvement variable (X4) of -0.328 means that if the continuous improvement variable is increased by 1 unit, the value of the performance measurement system variable will decrease by 0.328.

Path Analysis Model 2

The second path analysis was conducted to determine the influence of the variables of customer focus, quality obsession, long-term commitment, continuous improvement and performance measurement system on this regression model. The result of R² calculation through SPSS calculation is 0.513 which means that in this equation model the influence of customer focus, quality obsession, long-term commitment, continuous improvement, and performance

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measurement system is 51.3% while the remaining 48.7% is explained by other variations outside of this study. The regression equation model can be seen from the following table:

Table 3 Model 2 Path Test Results

Coefficients ^a				
	Unstandardized B	Coefficients Std. Error	t	Sig.
(Constant)	-3,946	3,943	-1,001	0,324
Customer focus	0,275	0,172	1,599	0,120
Quality obsession	0,299	0,147	2,041	0,050
Long-term commitment	0,277	0,172	0,228	0,116
Continuous improvement	0,016	0,186	0,012	0,934
Performance measurement system	0,321	0,153	0,284	0,043

Source: Primary data processed 2023

Based on the second regression model equation, it can be seen that:

- The constant value is -3.946, the constant value is negative, this means that if the focus on customers, quality obsession, long-term commitment, continuous improvement and performance measurement systems are considered absent or equal to 0, the value of managerial performance will decrease
- The regression coefficient value for the customer focus variable (X1) is 0.275, which means that if the customer focus variable is increased by 1 unit, the value of the managerial performance variable will increase by 0.275.
- The regression coefficient value for the quality obsession variable (X2) is 0.299, which means that if the quality obsession variable is increased by 1 unit, the value of the managerial performance variable will increase by 0.299.
- The regression coefficient value for the long-term commitment variable (X3) is 0.277, which means that if the long-term commitment variable is increased by 1 unit, the value of the managerial performance variable will increase by 0.277.
- The regression coefficient value for the continuous improvement variable (X4) is 0.016, which means that if the continuous improvement variable is increased by 1 unit, the value of the managerial performance variable will increase by 0.016.
- The regression coefficient value for the performance measurement system variable (Z) of 0.321 means that if the performance measurement system variable is increased by 1 unit, the value of the managerial performance variable will increase by 0.321.

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Sobel Test

Variables in the study can be said to be able to mediate between the independent and dependent variables if the Sobel test statistic ≥ 1.96 with a significant value of 5% or 0.05 (Ghozali 2018). It can be seen the results of data calculations calculated by the following formula:

- a. The effect of customer focus on managerial performance mediated by the performance measurement system

By entering the values of a,b, Sa, Sb that we have obtained from the coefficient table above into the sobel equation, the value of $Sa1b = 0.07159$ is obtained. The calculated z value is derived from the values of ab and Sa1b, then the calculated z value is 1.067. Because the resulting z value of 1.067 is smaller than the z table of 1.96, it can be concluded that the performance measurement system is unable to mediate the effect of focus on customers on managerial performance.

Input:		Test statistic:	
a	0.238	Sobel test:	1.0672274
b	0.321	Aroian test:	0.98732853
s_a	0.192	Goodman test:	1.17030494
s_b	0.153	Reset all	

Figure 1
Sobel Test Results Customer Focus
Source: Primary data processed 2023

- b. The effect of quality obsession on managerial performance mediated by the performance measurement system

By entering the values of a,b, Sa, Sb that we have obtained from the coefficient table above into the sobel equation, the value of $Sa2b = 0.0578$ is obtained. The calculated z value comes from the value of ab and Sa2b, so the calculated z value is 0.84. Because the resulting z value of 0.84 is smaller than the z table of 1.96, it can be concluded that the performance measurement system is unable to mediate the effect of quality obsession on managerial performance.

Input:		Test statistic:	
a	0.152	Sobel test:	0.84348436
b	0.321	Aroian test:	0.7730709
s_a	0.165	Goodman test:	0.93747205
s_b	0.153	Reset all	

Figure 2
Sobel Test Results Quality Obsession
Source: Primary data processed 2023

- c. The effect of long-term commitment on managerial performance mediated by the performance measurement system

By entering the values of a,b, Sa, Sb that we have obtained from the coefficient table above into the sobel equation, the value of $Sa3b = 0.0841$ is obtained. The calculated z value comes from the value of ab and Sa1b, so the calculated z value is 1.5. Because the resulting z value of 1.5 is smaller than the z table of 1.96, it can be concluded that the performance measurement system is unable to mediate the effect of long-term commitment on managerial performance.

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Input:		Test statistic:	
a	0.393	Sobel test:	1.50073321
b	0.321	Aroian test:	1.42382874
s _a	0.183	Goodman test:	1.59161675
s _b	0.153	Reset all	

Figure 3

Sobel Test Results Long-Term Commitment

Source: Primary data processed 2023

- d. The effect of continuous improvement on managerial performance mediated by the performance measurement system

By entering the values of a,b, Sa, Sb that we have obtained from the coefficient table above into the sobel equation, the value of $Sa^2b = 0.0825$ is obtained. The calculated z value comes from the value of ab and Sa^2b , then the calculated z value is -1.27. Because the resulting z value of -1.27 is smaller than the z table of 1.96, it can be concluded that the performance measurement system is unable to mediate the effect of continuous improvement on managerial performance.

Input:		Test statistic:	
a	-0.328	Sobel test:	-1.27618648
b	0.321	Aroian test:	-1.19362358
s _a	0.204	Goodman test:	-1.37865391
s _b	0.153	Reset all	

Figure 4

Sobel Test Results Continuous Improvement

Source: Primary data processed 2023

Discussion

- a. The Effect of Focus on Customers on Managerial Performance

Based on the results of the calculation regarding the hypothesis test above, it shows that the significance value is 0.120. This means that the customer focus variable has no effect on managerial performance. So the first hypothesis (H1) in this study is rejected.

At this time, the focus on customers is considered less able to increase managerial motivation in improving their performance because the customer focus is more prepared to increase customer satisfaction by competing to provide the best service, always trying to minimize errors that occur in the repair process but not yet able to provide resources that can master this. From the results of the research that has been done, the research is in line with research conducted by Tatontos, A., Palandeng, I. D., & Karuntu (2019) which states that customer focus does not have a big effect on performance.

- b. The Effect of Focus on Customers on Managerial Performance mediated by Performance Measurement System

Based on the results of calculations carried out using the sobel test, the z count of 1.067 is smaller than the z table of 1.96. This means that the performance measurement system variable cannot mediate customer focus on managerial performance. So the first hypothesis (H2) in this study is rejected.

The results of this study are in line with research conducted by Ridwan & Sandi (2019) which states that Total Quality Management with a performance measurement system has no effect on managerial performance. This is because there are human resources who are not yet qualified to assess performance measurement. There is a misunderstanding when conveying information from public relations so that managerial performance does not have any impact.

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c. The Effect of Quality Obsession on Managerial Performance

Based on the results of the calculation regarding the hypothesis test above, it shows that the significance value is 0.05. This means that the obsession with quality variable has an influence on managerial performance. Then the first hypothesis (H3) in this study is accepted.

Obsession with quality is important for every company considering that increasing the quality of the company will increase consumer confidence in the company. Every company has a goal to produce the best. This goal can trigger staff enthusiasm to improve their performance. This is indicated by the results of the research above which are in line with the results of research conducted by Dewi & Putri (2020) which states that quality obsession has a positive influence on improving managerial performance.

d. The Effect of Quality Obsession on Managerial Performance mediated by the Performance Measurement System

Based on the results of calculations using the sobel test, the z count of 0.84 is smaller than the z table of 1.96. This means that the performance measurement system variable cannot mediate quality obsession on managerial performance. So the first hypothesis (H4) in this study is rejected.

The research that has been conducted is inversely proportional to the research conducted by Adhiputra (2018) which states that the application of Total Quality Management and performance measurement systems has a positive effect on managerial performance. The company has several specific criteria in measuring performance. Providing facilities to staff is felt to have not been able to fulfill the wishes of the staff so that the resulting quality is felt to be not optimal. The impact is that it can reduce or even have no impact on managerial performance.

e. The Effect of Long-Term Commitment on Managerial Performance

Based on the results of the calculation regarding the hypothesis test above, it shows a significance value of 0.116. This means that the long-term commitment variable has no effect on managerial performance. So the first hypothesis (H5) in this study is rejected.

Long-term commitment can be reflected in the form of consistency given by staff to the company. Some staff still cannot do consistency to carry out their responsibilities. The low level of consistency causes the spirit of performance to decline. The instability of the consistency given by employees to the company can be caused by several factors such as the company has not been maximized in appreciating its staff. So that long-term commitment does not affect managerial performance. From the results of the calculations that have been carried out, it is also known that this research is not in line with research conducted by Parwitasari & Wirasedana (2018) which states that organizational commitment has a significant effect on managerial performance.

f. The Effect of Long-Term Commitment on Managerial Performance mediated by the Performance Measurement System

Based on the results of calculations using the sobel test, the z count of 1.5 is smaller than the z table of 1.96. This means that the performance measurement system variable cannot mediate long-term commitment to managerial performance. So the first hypothesis (H6) in this study is rejected. From the results of the above research in line with research conducted by (Ridwan & Sandi (2019) which states that Total Quality Management with a performance measurement system has no effect on managerial performance. Staff have a fairly high level of commitment and trust in the company. However, performance measurement is carried out over a long period of time, this causes the consistency provided by staff to decrease so that it has no impact on managerial performance.

g. The Effect of Continuous Improvement on Managerial Performance

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Based on the results of the calculation regarding the hypothesis test above, it shows that the significance value is 0.934. This means that the continuous improvement variable has no effect on managerial performance. So the first hypothesis (H7) in this study is rejected. Continuous improvement moves straight with information systems and developing technology. Some staff are not yet proficient in utilizing these information systems and technology. This causes the activities of submitting suggestions made by staff and customer complaints not to have a perfect container. With the difficulties in submitting suggestions and complaints, continuous improvement has no significant effect on employee performance. From the explanation and calculation results show that the research that has been done is not in line with research conducted by Dewi & Putri (2020) which states that continuous improvement has a positive effect on managerial performance.

h. Effect of Continuous Improvement on Managerial Performance mediated by Performance Measurement System

Based on the results of calculations using the sobel test, the z count of -1.27 is smaller than the z table of 1.96. This means that the performance measurement system variable cannot mediate the continuous improvement variable on managerial performance. So the first hypothesis (H8) in this study is rejected. The results of this study are not in line with research conducted by Adhiputra (2018) which states that the application of Total Quality Management and performance measurement systems has a positive effect on managerial performance. Program planning carried out by the company to improve continuous improvement has been carried out, but in its implementation it is still not running smoothly. The program has not been able to be completed properly or has not been able to be realized. The length of the performance measurement period is one of the factors that continuous improvement has no impact on the performance measurement system. As a result, managerial performance also has no significant change.

i. Simultaneous Effect of Customer Focus, Quality Obsession, Long-term Commitment, Continuous Improvement on Managerial Performance

Based on the calculation results obtained from the f test above, it can be obtained that the calculated f value is $8.797 > f$ table of 2.51 and a significance value of $0.000 < 0.05$. This shows that the variables of customer focus, quality obsession, long-term commitment, continuous improvement simultaneously have an influence on managerial performance. The results of this study are in line with research conducted by (Parwitasari and Wirasedana 2018) which states that the application of TQM can affect managerial performance. Companies always try to focus on customer satisfaction, especially in providing services to the community. The company's obsession with the quality produced is one of the company's missions. In order to provide maximum service and produce good quality, continuous improvement is needed by various parties from both staff and managers. Continuous improvement can run smoothly if the consistency provided by the staff is always growing. Consistency is one of the tangible manifestations of long-term commitment made by staff to the company. If the application of customer focus, quality obsession, long-term commitment, and continuous improvement are carried out together, it will encourage the company's managerial performance.

j. Effect of Performance Measurement System on Managerial Performance

Based on the results of the calculation regarding the hypothesis test above, it shows a significance value of 0.043. This means that the performance measurement system variable affects managerial performance. So the first hypothesis (H10) in this study is accepted. The results of this study are in line with research conducted by Rumampea (2018) which states that the performance measurement system has an influence on managerial performance. The more detailed the measurements provided by the company, the more it will affect managerial performance.

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CONCLUSION

Of the several characteristics of TQM, only obsession with quality affects managerial performance. Perumda Air Minum Tirta Moedal Semarang has good quality standards by providing customer needs that have good quality. Meanwhile, customer focus, long-term commitment, and continuous improvement are not enough to influence managerial performance. This is due to several factors such as errors in the delivery of information.

As a mediating variable, the performance measurement system is unable to mediate Total Quality Management which is represented by indicators of customer focus, quality obsession, long-term commitment, and continuous improvement on managerial performance. For further research, researchers should expand the research object and research sample so that the results obtained are maximized.

BIBLIOGRAPHY

- Adhiputra, Made Wahyu. 2018. "Analisis Penerapan Tqm Terhadap Kinerja Manajerial Pada Rumah Sakit Umum Di Denpasar." *Jurnal Ilmiah Akuntansi* 3(1):49–60. doi: 10.23887/jia.v3i1.16628.
- Almansour, Dr. Yaser Mansour. 2012. "The Impact of Total Quality Management Adoption on Small and Medium Enterprises' Financial Performance." *Accounting and Finance* 52(2):421–38. doi: 10.1111/j.1467-629X.2011.00402.x.
- Amirullah. 2015. *Pengantar Manajemen*. Jakarta: Mitra Wacana Media.
- Dewi, I. Gusti Ayu Tri Bhuwana, and I. Gusti Ayu Made Asri Dwija Putri. 2020. "Pengaruh Implementasi Total Quality Management Pada Kinerja Manajerial Perusahaan Otobus Pariwisata Di Kota Denpasar." 30(10):2487–99.
- Dharma, Surya. 2012. *Manajemen Kinerja Falsafah Teori Dan Penerapannya*. Yogyakarta: Pustaka Belajar.
- Evelyne Evelyne, and Juniarti Juniarti. 2003. "Hubungan Karakteristik Informasi Yang Dihasilkan Oleh Sistem Informasi Akuntansi Manajemen Terhadap Kinerja Manajerial Pada Perusahaan-Perusahaan Manufaktur Di Jawa Timur." *Jurnal Akuntansi Dan Keuangan* 5(2):110–22.
- Ghozali, Imam. 2018. *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25*. 9th ed. Semarang: Badan Penerbit Universitas Diponegoro.
- Handayani, Bestari Dwi. 2011. "PENGUKURAN KINERJA ORGANISASI DENGAN PENDEKATAN BALANCED SCORECARD PADA RSUD KABUPATEN KEBUMEN." *Jurnal Dinamika Manajemen* 2:78–91.
- Irmadhani, Allia, Diyah Atika, and Listya Devi Junaidi. 2019. "Pengaruh Penerapan Total Quality Management (TQM) Dan Keunggulan Bersaing Terhadap Kinerja Manajerial (Studi Kasus Pada Universitas Swasta Di Medan)." *Juurnal Warta* 13(4):54–67.
- Mangkunegara, A. A. Anwa. Prabu. 2009. *Manajemen Sumber Daya Manusia Perusahaan*. Bandung: PT Remaja Rosdakarya.

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Masram, H., and Hj Mu'ah. 2018. *Manajemen Sumber Daya Manusia Membangun Daya Saing*. Depok: PT RAJAGRAFINDO PERSADA.

Moeheriono. 2012. *Pengukuran Kinerja Berbasis Kompetensi*. Jakarta: Raja Grafindo Persada.

Mufahamah, Euis, Lestari Wuryanti, and Muhammad Muhammad. 2022. "Pengaruh Sistem Pengukuran Kinerja, Motivasi Dan Komitmen Organisasi Terhadap Kinerja Manajerial Disnakertrans Provinsi Banten." *Jurnal Gentiaras Manajemen Dan Akuntansi* 14(2):97–109.

Nasution, M. Nu. 2010. *Manajemen Mutu Terpadu*. Bogor: Ghalia Indonesia.

Pamungkas, Kurniawan Tricahyo. 2015. "Pengaruh Total Quality Management Terhadap Kinerja Manajerial (Studi Empiris Di Perusahaan Daerah Pasar Surya)." *AKRUAL: Jurnal Akuntansi* 6(2):178. doi: 10.26740/jaj.v6n2.p178-194.

Parwitasari, Anak Agung Sagung Istri Devi, and I. Wayan Pradnyantha Wirasedana. 2018. "Pengaruh Penerapan Total Quality Management, Komitmen Organisasi Pada Kinerja Manajerial Dengan Reward Sebagai Variabel Moderasi." *E-Jurnal Akuntansi* 25:2072. doi: 10.24843/eja.2018.v25.i03.p17.

Puji Isyanto. 2019. "Pengaruh Komitmen Dan Implementasi Total Quality Management (Tqm) Terhadap Kinerja Manajerial Di Kawasan Industri Karawang." *Jurnal Manajemen & Bisnis Kreatif* 5(1):32–49. doi: 10.36805/manajemen.v5i1.823.

Ramlawati. 2020. *Total Quality Management*. Makasar: Nas Media Pusataka.

Ridwan, Muhammad, and Hengki Erik Sandi. 2019. "Pengaruh Interaksi Antara Total Quality Management Dengan Sistem Penghargaan, Komitmen Organisasi Dan Sistem Pengukuran Kinerja Terhadap Kinerja Manajerial (Studi Empiris Pada Perusahaan Otomotif Dan Komponen Di Kota Jambi)." *Jurnal Manajemen Terapan Dan Keuangan* 8(1):13–28. doi: 10.22437/jmk.v8i1.6931.

Rumampea, Melanthon. 2018. "Pengukuran, Metode Dan, Kinerja Penghargaan, Sistem." 2(1):63–73.

Sugiyono. 2015. *Metode Penelitian Kuantitatif, Kualitatif Dan R&D*. Bandung: ALFABETA.

Tatontos, A., Palandeng, I. D., & Karuntu, M. M. 2019. "Analisis Total Quality Management (TQM) Terhadap Kinerja Manajerial Pada PT. Enseval Putera Megatrading Minahasa Utara." *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi* 7(4):4748–56.

Tenner, Arthur, and Irving De Toro. 2016. *Total Quality Management: Three Steps To Continuous Improvement*. Virginia: Addison-Wesley.

Tjiptono, Fandy, and Anastasia Diana. 2000. *Total Quality Management*.