

The Influence of Management Accounting Information Systems and Total Quality Management on Managerial Performance

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Abstract

This study aims to determine the influence of management accounting information systems and total quality management on managerial performance at PT Tri Mandiri Selaras Daihatsu Samarinda. This study uses a quantitative approach. The population in this study is employees at PT Tri Mandiri Selaras Daihatsu Samarinda. The sampling technique used a saturated sampling method where the entire population is sampled, with a total of 41 samples. This study uses multiple linear regression analysis using the IBM SPSS (Statistical Package for Social Science) version 27 application analysis tool. The results of this study indicate that the management accounting information system has a positive and significant effect on managerial performance, and total quality management has a positive and significant effect on managerial performance.

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1. Introduction

Managing the activities of an organization or the company as a whole in a company or other organization requires effective managerial performance because it can help the organization achieve its goals. In addition, the potential of company management can have added value due to managerial performance. The achievements of an organization are mostly influenced by management policies. In order to improve managerial performance, management needs to have the ability to pay attention and exploit opportunities, recognize problems, and choose appropriate adjustment processes. The main responsibility of management is to ensure that the company can survive and continue to operate (R. M, 2019)

In an effort to help the business achieve its goals, managers and other leaders can be assisted in managing operations by using a management accounting information system. A management accounting information system can play a role in helping to estimate the impact that can occur due to the many activities such as decision-making, control, planning (Rumapea et al., 2018).

N. I. M et al., (2021) It is argued that the information from the management accounting information system can be used as a support for sales, taxation, customer classification, customer level, and promotional programs. It serves as part of the initiative to improve the quality and services of the organization. In addition, a leader and employee who has proficiency in using management accounting information systems, will be able to determine how their company deals with other competition, in providing goods and services to customers at competitive costs.

Total quality management It is a quality controlling system, it is built on the idea that the main goal of any company is to meet customer demands as effectively as possible and maximize the quality of the organization, including in relation to organizational management. A new paradigm in corporate management called *Total Quality Management* aims to improve the competitiveness of the organization in emphasizing customer satisfaction, including every employee, and continuously improve the quality of processes, labor, environment, services, products (Tjiptono & Diana, 2003).

As an effective organizational control mechanism, the management accounting information system plays a role in providing useful information to estimate operational results. The implementation of this management accounting information system has grown significantly and helps managers overcome problems and provide direction by providing non-financial external data that focuses on product innovation, decision-making, marketing, and strategic planning. *Total Quality Management* is a management approach that aims to achieve customer satisfaction in the long run. Deep *Total Quality Management*, all parts of the organization must actively improve the way of product and service development to produce the best quality and meet customer satisfaction (Anggraeni & Rachmawati, 2023).

(Otley, 1980) Stating the contingency theory explains that the variables and factors that exist in a company must ensure that there is harmony, similarity and conformity between the various elements in it. The contingency theory is because it wants to know whether the level of reliability of a management accounting information system will always have the same influence in all circumstances or not.

To improve managerial performance, it is necessary to have a management accounting information system and *total quality management* within a company. The management accounting information system has several functions that can provide accounting information in an appropriate method and at a suitable time. The results of such information can assist managers or management in improving managerial performance, the goal is to help the organization's achievements. *Total quality management* It is implemented so that the organization has access to monitoring some of the significant changes made by its workforce who work there. This has an impact on managerial work because it shows how well the organization is performing in achieving goals (Animah, 2021).

PT Tri Mandiri Selaras Daihatsu is an automotive industry company that sells two-wheeled, four-wheeled, and commercial vehicles, as well as providing after-sales services such as vehicle repair services at workshops and sales of official spare parts. The company aims to provide convenience for customers in owning vehicles and meeting their needs in all service areas.

This is why PT Tri Mandiri Selaras Daihatsu must continue to improve the efficiency, effectiveness, and quality of products and services. The increasing demand for a market company must face stiff competition. PT Tri Mandiri Selaras Daihatsu Samarinda faces significant challenges in maintaining and increasing its market share amid the dominance of other brands. Therefore, effective managerial performance and a strong information system are needed to compete effectively. Management Accounting Information System In the midst of fierce market competition, efficiency in information management and decision-making is crucial. Management Accounting Information Systems play a crucial role in helping companies manage financial and operational information effectively. With the application of *Total Quality Management principles* in this company, it is hoped that it can improve the quality of products, services and customer satisfaction.

Research on the influence of management accounting information systems and *total quality management* managerial performance by Jonnie (2022) demonstrate the results that the management accounting information system and *total quality management* has a significant positive effect on managerial performance. So that with the increase in management accounting information systems and *total quality management* then managerial performance will also increase.

2. Method

2.1. Population and Sample

The population in this study is 41 people, namely employees who work at PT Tri Mandiri Selaras Daihatsu Samarinda whose division includes administrative staff, *sales marketing*, and mechanical services. The sampling technique used in this study is nonprobability sampling with the total sampling method or commonly called saturated sampling, which is a sampling technique in which all members of the population are sampled, namely 41 people.

2.2. Data Types and Sources

The research method used in this study is a type of quantitative research. The data sources in this study were analyzed using primary data derived from questionnaires answered by respondents.

2.3. Data Collection Techniques

The technique used is data collection using the questionnaire method through google form. The questionnaire was distributed to respondents, namely employees of PT Tri Mandiri Selaras Daihatsu Samarinda City. The scale used to measure each variable in this study is the likert scale which consists of if the answer strongly agrees is given a score of 5, agrees is given a score of 4, neutral is given a score of 3, disagrees is given a score of 2 and strongly disagrees is given a score of 1.

2.4. Data Analysis Methods

The analysis tool used in this study is the IBM SPSS (*Statistical Program for Social Science*) statistical application version 27 with a multiple linear regression analysis model to answer the research problem. The data analysis methods used in this study include descriptive statistical analysis, data quality test, classical assumption test, model feasibility test (F test), determination coefficient test, and hypothesis test (t test).

3. Results and Discussion

3.1. Data Analysis

3.1.1. Descriptive Statistical Analysis Test

Descriptive statistical analysis is an analysis that produces data results that can then be described. This study uses descriptive statistical analysis to describe the data by calculating the minimum, maximum, average, and standard deviation values. The results of the descriptive statistical analysis of the study are shown in the following table.

Table 1. Descriptive Statistical Analysis

Variabel	N	Minimum	Maximum	Mean	Hours of deviation
Management Accounting Information System	41	29,00	40,00	35,4146	3,04118
<i>Total Quality Management</i>	41	35,00	50,00	41,0732	4,22723
Managerial Performance	41	29,00	40,00	34,4878	3,35501
Valid N (listwise)	41				

Based on the table above, it can be explained that N is the number of respondents that have been used, namely 41 respondents from the number of samples. The results of descriptive statistical analysis on the management accounting information system variable had a minimum or lowest value of 29.00, a maximum or highest value of 40.00, an average value of 35.4146 and a standard deviation value of 3.04118. In the *total quality management* variable, it has a minimum or lowest value of 35.00, a maximum or highest value of 50.00, an average value of 41.0732 and a standard deviation value of 4.22723. The managerial performance variable has a minimum or lowest value of 29.00, a maximum or highest value of 40.00, an average value of 34.4878 and a standard deviation value of 3.35501.

3.1.2. Data Quality Test

The purpose of using the validity test is to ensure that the instrument or statement in the questionnaire really represents the construct to be measured. The data validity test is carried out using the pearson correlation method where an instrument is declared valid if the calculated r value is greater than the r of the table, in addition if the sig value < 0.05. In this study, the r-value of the table with N = 41 was obtained as 0.308 at the distribution of the r-value of the statistical table at a significance level of 5%.

1) Validity Test

Table 2. Testing the Validity of Management Accounting Information Systems

Statement	R count	R table	Information
X1.1	0,613	0,308	Valid
X1.2	0,579	0,308	Valid
X1.3	0,686	0,308	Valid
X1.4	0,726	0,308	Valid
X1.5	0,608	0,308	Valid
X1.6	0,641	0,308	Valid
X1.7	0,736	0,308	Valid
X1.8	0,750	0,308	Valid

Based on the results of the test above, all statement items were declared valid. From the results of the comparison of the value r of each item with the value of r, the table shows a larger value in the result of the value r of counting all items. Based on these results, there is a calculated r value that is greater than the table r value, which is 0.308. Thus, the variable statement item of the management accounting information system (X1) is declared valid.

Table 3. Total Quality Management Validity Test

Statement	R count	R table	Information
X2.1	0,617	0,308	Valid
X2.2	0,705	0,308	Valid
X2.3	0,808	0,308	Valid
X2.4	0,665	0,308	Valid
X2.5	0,560	0,308	Valid
X2.6	0,526	0,308	Valid
X2.7	0,609	0,308	Valid
X2.8	0,646	0,308	Valid
X2.9	0,658	0,308	Valid
X2.10	0,793	0,308	Valid

Based on the results of the test above, all statement items were declared valid. From the results of the comparison of the value r of each item with the value of r , the table shows a larger value in the result of the value r of counting all items. Based on these results, there is a calculated r value that is greater than the table r value, which is 0.308. Thus, the *total quality management* variable (X2) statement item is declared valid.

Table 4. Managerial Performance Validity Test

Statement	R count	R table	Information
Y1	0,662	0,308	Valid
Y2	0,720	0,308	Valid
Y3	0,516	0,308	Valid
Y4	0,743	0,308	Valid
Y5	0,791	0,308	Valid
Y6	0,629	0,308	Valid
Y7	0,677	0,308	Valid
Y8	0,714	0,308	Valid

Based on the results of the test above, all statement items were declared valid. From the results of the comparison of the value r of each item with the value of r , the table shows a larger value in the result of the value r of counting all items. Based on these results, there is a calculated r value that is greater than the table r value, which is 0.308. Thus, the statement item of the managerial performance variable (Y) is declared valid.

2) Reliability Test

Table 5. Reliability Test

Variabel	Cronbach's Alpha	Cronbach's Alpha Required	Information
Management Accounting Information System	0,820	0,60	Reliabel
<i>Total Quality Management</i>	0,856	0,60	Reliabel
Managerial Performance	0,835	0,60	Reliabel

The variable can be declared reliable if Cronbach's Alpha value > 0.60 . Based on the results of the analysis that has been carried out, it can be seen that the Cronbach's Alpha value from the Management Accounting Information System variable (X1) is 0.820 so that it is declared reliable. The variable *total quality management* (X2) with Cronbach's Alpha 0.856 was declared reliable. The managerial performance variable (Y) with Cronbach's Alpha of 0.835 was declared reliable. From these results, all instruments from the three variables were declared reliable.

3) Heteroscedasticity Test

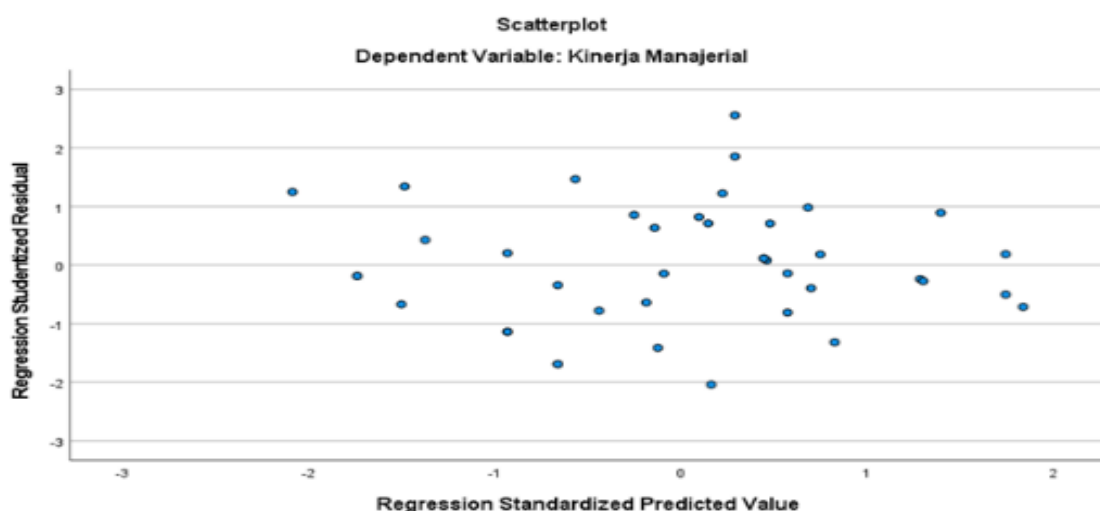


Figure 1. Heteroscedasticity Test

Based on the heteroscedasticity test image above, it states that the *scatterplot* graph produces a pattern with points scattered around zero or in other words, the points on the graph are not arranged as if a pattern is formed. Therefore, in this study, it can be concluded that there is no heteroscedasticity.

4) Coefficient of Determination Test (R2)

Table 6. Coefficient of Determination Test (R2)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,895a	0,802	0,791	1,53224

a. Predictors: (Constant), Total Quality Management, Management Accounting Information System

Based on the table above, the result shows the *Adjusted R Square* (R2) value of $0.791 = 79.1\%$, so it can be concluded that the management accounting information system and *total quality management* together affect the managerial performance variables by 79.1% while the remaining 20.9% are influenced by external variables or factors that are not included in this study.

5) Hypothesis test (t-test)

Table 7. Hypothesis test (t-test)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4,429	3,147		-1,407	0,168
	Management Accounting Information System	0,714	0,086	0,647	8,270	0,001
	Total Quality Management	0,332	0,062	0,418	5,350	0,001

a. Dependent Variable: Managerial Performance

Based on table 7. Above it can be seen that the results of the t-test show that:

The significance value of the influence of the management accounting information system (X1) on managerial performance (Y) is 0.001 less than 0.05 and the calculated t-value of 8.270 is greater than the t-value of table 2.024, then H0 is rejected and H1 is accepted. Therefore, the hypothesis that the management accounting information system has a positive and significant effect on managerial performance is accepted.

The significance value of the influence of total quality management (X2) on managerial performance (Y) is 0.001 less than 0.05 and the t-value of 5.350 is greater than the t-value of table 2.024, then H0 is rejected and H1 is accepted. Therefore, the hypothesis that *total quality management* has a positive and significant effect on managerial performance is accepted.

3.2. Discussion

1) The Influence of Management Accounting Information Systems on Managerial Performance

The results obtained in this study are that the management accounting information system (X1) has a positive and significant effect on the managerial performance (Y) of PT Tri Mandiri Selaras Daihatsu Samarinda. The results of the statistical regression test showed that the tcal value of 8.270 was greater than the ttable value of 2.024, and the significance value of 0.001 was less than 0.05. So H1 in this study is proven to be "Management Accounting Information System has a positive and significant effect on Managerial Performance at PT Tri Mandiri Selaras Daihatsu Samarinda".

Management accounting information systems can be described as an information system that produces outputs through the use of data or information as input, as well as through various processes used to achieve management goals. The effectiveness of a management accounting information system depends on the extent to which the company's needs are met. This management accounting information system has been recognized to have a very important role in supporting

managerial decision-making, so that improving the quality of the management accounting information system will improve managerial performance (Ria Mawaddah et al., 2021).

With the results of the research on management accounting information systems that have been proven to have a positive and significant effect on managerial performance, this result has been supported by the theory used in this study, namely the contingency theory where the contingency theory has stated that the variables and factors that exist in an organization or company must have compatibility, similarity and suitability (Otley, 1980). The purpose of a management accounting information system is to provide relevant and timely accounting information to support strategic and operational decisions. The integration of contingency theory with management accounting information systems ensures that the applied information systems can adapt to the needs of the organization and help achieve strategic objectives through effective management and sound decision-making.

The results of this study are in line with previous research that has been conducted by Here et al., (2023), Jonnie (2022), Suprانتiningrum & Lukas (2021) and Sani & Andriany (2020). This shows that the management accounting information system has a positive and significant influence on managerial performance. Therefore, along with the improvement of the management accounting information system, managerial performance is also increasing.

2) The Influence of *Total Quality Management* on Managerial Performance

The results obtained in this study are that *total quality management* (X2) has a positive and significant effect on the managerial performance (Y) of PT Tri Mandiri Selaras Daihatsu Samarinda. The results of the statistical regression test showed that the tcal value of 5.350 was greater than the ttable value of 2.024, and the significance value of 0.001 was less than 0.05. So H2 in this study is proven to be "*Total Quality Management* has a positive and significant effect on Managerial Performance at PT Tri Mandiri Selaras Daihatsu Samarinda".

Total quality management has a strategy to increase the company's competitiveness by making continuous improvements to products, services, labor, processes and the environment. *Total quality management* Designed as an integrated system that emphasizes the consumer approach by improving the quality of products and services, so that customer satisfaction is reflected in the reduction of complaints received and the improvement of the company's performance is higher (Febrianti et al., 2021).

So that it is related to the theory of contingency put forward by Otley (1980) There is no universal control system that can be applied to all organizations. On the other hand, a certain control system is only effective under certain conditions in an organization or company. At PT Tri Mandiri Selaras Daihatsu Samarinda, the success of the control system in improving managerial performance is highly dependent on the application of variables *total quality management* that is appropriate to the company's situation. Precise adjustment of variables *total quality management* Not only supporting operational efficiency but also strengthening the company's ability to compete in an increasingly competitive market. Thus, the implementation of a control system that is appropriate to the company's specific context is key to achieving optimal and sustainable managerial performance goals.

The results of this study are in line with previous research that has been conducted by (Fitria, 2017), Pratiwi (2019) and Squirrel (2022) which shows that *total quality management* has a positive and significant effect on managerial performance. So that with the increase in *total quality management* So managerial performance is increasing.

4. Conclusion

Based on the results of the data analysis produced and the existing explanations, the following conclusions can be drawn from the following, namely the Management Accounting Information System has a positive and significant effect on managerial performance. This is evidenced from the results of the t-test obtained and means that the higher the level of the management accounting information system of PT Tri Mandiri Selaras Daihatsu Samarinda, the more its managerial performance will improve, because with the use of the management accounting information system

by the company, the quality of management accounting information in the company will be improved. *Total quality management* has a positive and significant effect on managerial performance. This is evidenced by the results of the t-test obtained and means that the more the *total quality management* of PT Tri Mandiri Selaras Daihatsu Samarinda, the more its managerial performance will improve. This means that PT Tri Mandiri Selaras Daihatsu Samarinda in implementing *total quality management* well and can benefit PT Tri Mandiri Selaras Daihatsu Samarinda.

References

- Anggraeni, A. P., & Rachmawati, T. (2023). The Influence of Good Corporate Governance, Total Quality Management, and Management Accounting Information System on Managerial Performance. *Economic and Business Management International*, 5(3), 2715–3681.
- Animah, A. (2021). The Influence of Management Accounting Information Systems and Environmental Uncertainty on Managerial Performance. *Journal of Accounting and Business Research*, 5(2), 155. <https://doi.org/10.35308/akbis.v5i2.3998>
- Cincing, S. (2022). The Effect of Total Quality Management (TQM) and Awards (Reward) on Managerial Performance (Empirical Study on Credit Plus Palangka Raya Branch Office). *Journal of Science and Organizational Management*, 3(1), 1–9. <https://doi.org/10.52300/jmso.v3i1.3515>
- Febrianti, S. A., Suastina, I. G. P. B., Ulum, M. B., & Putrianti, E. (2021). The Effect of Total Quality Management (TQM) on Managerial Performance with the Award System as a Moderation Variable (Study on Supermarkets in Mataram). *Scientific Journal of Hospitality*, 9(2), 235–240. <https://doi.org/10.47492/jih.v9i2.341>
- Fitria. (2017). The Effect of Total Quality Management on Managerial Performance (Empirical Study on Bank BRI). *Journal of Social and Economic Sciences*, I (November 2016), 158–163.
- Hammi, M. A., Hasugian, H., & Aslami, N. (2023). The Influence of Management Accounting Information Systems and Performance Measurement Systems on Managerial Performance in Case Study Units at PT. Sentosa Plastic Industry. *Accounting*, 2(4), 1–19.
- Jonnie, N. E. (2022). The Influence of Total Quality Management and Management Accounting Information System on Managerial Performance in Hotel Companies in Palembang City. *Journal of Accounting Information*, 1(2). <http://eprints.ukmc.ac.id/7318/>
- M, N. I., Mus, A. R., & Ahmad, H. (2021). The Influence of Management Accounting System and Environmental Uncertainty on Managerial Performance at Pt. Adira Dinamika Multi Finance Tbk Jayapura Branch Office. *Journal of Accounting Sciences*, 3(1), 129–144. <https://doi.org/10.26618/inv.v3i1.4977>
- M, R. (2019). The Influence of Management Accounting Information System, Environmental Uncertainty, and Human Capital on Managerial Performance at PT Bosowa Berlian Motor Makassar. *Bongaya Journal for Research in Accounting (BJRA)*, 2(2), 22–31. <https://doi.org/10.37888/bjra.v2i2.191>
- Otley, D. T. (1980). The contingency theory of management accounting achievement and prognosis. *Accounting, Organizations and Society*, 413–428.
- Pratiwi, A. (2019). The Influence of Total Quality Management, Organizational Culture, Leadership Style and Organizational Commitment on Managerial Performance (Study on PT. Bank Rakyat Indonesia in Jambi City). *Journal of Applied Managerial Accounting*, 3(2), 300–310. <https://doi.org/10.30871/jama.v3i2.1450>
- Ria Mawaddah, Animah, & Jumaidi, L. T. (2021). The Influence of Management Accounting Information System, Budget and Environmental Uncertainty on the Managerial Performance of Sharia Cooperatives on Lombok Island. *Journal of Accounting Student Research*, 1(3), 117–140. <https://doi.org/10.29303/risma.v1i3.99>
- Rumapea, M., Sinaga, M., & Saragih, R. E. (2018). The Effect of the Application of Management Accounting Information System, Performance Measurement Methods and Award System on Managerial Performance at Estomihi Medan Hospital. *Methomics: Journal of Informatics Management & Computerized Accounting*, 2(1), 12–21. <https://doi.org/10.46880/jmika.Vol2No1.pp12-21>

- Sani, C., & Andriany, Y. (2020). The Influence of Management Accounting Information Systems, Human Capital and Environmental Uncertainty on Managerial Performance (Case Study on Employees in the Financial Management Sector of PT. Semen Padang). *Journal of Accounting and Financial Development*, 2(4), 269–290. <https://ejurnal-unespadang.ac.id/index.php/PJ/article/view/234>
- Suprantiningrum, S., & Lukas, A. D. (2021). Management Accounting Information System, Management Control of Managerial Performance with Information Technology Moderation Variables. *Author*, 5(1), 174–185. <https://doi.org/10.33395/owner.v5i1.368>
- Tjiptono, F., & Diana, A. (2003). *Total Quality Management (Revised Edition)*. Yogyakarta: Andi Offset.