THE INFLUENCE OF MANAGEMENT ACCOUNTING INFORMATION SYSTEM CHARACTERISTICS AND MANAGEMENT CONTROL SYSTEM ON MANAGERIAL PERFORMANCE

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Abstrack: Several things that can affect and improve managerial performance at PT Warna Indah Samajaya (WIS), one of which is the characteristics of the management accounting information system and management control system. The characteristics of the management accounting information system that have been carried out by employees of PT Warna Indah Samajaya (WIS) have been implemented properly and correctly to carry out effective work so that they can achieve the predetermined targets. This study aims to determine the effect of the characteristics of the management accounting information system and control system on managerial performance at PT Warna Indah Samajaya (WIS). This research was conducted by means of a survey by distributing questionnaires to employees of PT Warna Indah Samajaya (WIS), this study also used a verification descriptive analysis method by statistically processing using SEM-PLS. The results of this research are expected to be a solution in solving problems of managerial performance at PT Warna Indah Samajaya (WIS).
The results of this study indicate that: (1) the characteristics of the accounting information system affect managerial performance, (2) the control system has an effect on managerial performance.
Keywords: Characteristics of Management Accounting Information Systems, Management Control Systems, Managerial Performance

INTRODUCTION

Yosep & Indriasih (2020) say if the information generated in the scope of the organization plays an important role for company managers because with the information it can make it easier for managers to carry out their duties and can find out to what extent the company's activities are able to develop, thereby reducing the risk of loss for the company. Furthermore, Mardiasmo (2018) argues that management accounting information systems tend to provide reports that are prospective, which are used for planning in the future. Management accounting information systems are more oriented towards the future. (Sunaryo, 2018). Djumen (2019) stated PT Delta Merlin Dunia Textile, which is the largest textile company in Indonesia, was surprisingly unable to pay the interest on its bonds which matured on July 10 2019. In fact, it is a subsidiary of the Duniatex Group. just 4 months ago it issued bonds worth 300 million US dollars. Failure to pay bond coupons not only shocked investors, but also banks. The management control system is a tool to monitor or observe the implementation of company management in carrying out their duties which tries to direct the organization's goals within the company so that the performance carried out by the company's management

can run more efficiently and effectively. (Jannah ,2020) said that the problem of the textile industry

Indonesia currently not only imports products, but also the Corona CO pandemic. Large-scale social restrictions (PSBB) have not made the textile industry come back to life. The root of the problems faced by the textile industry is high import duties on raw materials, while ready-made clothing is not charged. Finally, prices on the market are not competitive. People prefer cheaper imported clothes. Then (Eferin, 2016) gives the opinion that the management control system acts as a system that is able to motivate organizational members to bring out their best abilities for the organization. Performance appraisal shows how much managerial performance is achieved which is the basis for accountability assessment. The performance must be measured and reported in the form of a performance report as material for evaluating organizational performance and useful for internal and external parties of the organization. (Sinaga,2020) Another similar thing was also said by (Albab, 2017) that the managerial ability factor/indicator of this managerial ability is the most prominent indicator, this can mean that work in accordance with the plans that have been made will produce much better performance because of working in accordance with the plans determined by the company. Hadiyantono (2018) said that the problem in the Indonesian textile industry is that the price of domestic raw materials is considered less competitive with the same materials from imported raw materials. such as in the case of import duties on polyester fiber, which requires tightening supervision from the relevant ministry.

H1: Characteristics of Management Accounting Information Systems have an influence on Managerial Performance
Chin (Mawaddah, 2020) believes that the characteristics of information produced by management accounting systems have several dimensions in the form of aggregation, breadth, integration and timeliness which are able to improve manager performance. Managers who have management accounting information are generally able to make better plans and achieve predetermined targets.

H2: Management Control System has an influence on Managerial Performance
Junita (2018) said that the management control system influences managerial performance in a company because one way that can be done to achieve good company performance is by implementing SPM. The aim of SPM is to provide information that is useful in decision making, planning, control and evaluation, which means that SPM plays a very important role for companies in controlling existing management in the company. The management control system plays a very important role for the company

The dimensions of the management accounting information system used in this research are Chenhall and (Moriss, 1986) namely four characteristics of a management accounting system that are useful for decision making;
1. Broad scope
2. Timeliness
3. Aggregated
4. Integrated

Dimensions of the management control system in this research according to Simons, 1995
1. Beliefs System
2. Boundary System
3. Diagnostic Control System
4. Interactive Control System

Mahoney, 1965 argues that there are eight dimensions of overall personal managerial performance carried out in a company or organization, namely:
1. Planning
2. Investigation
3. Coordination
4. Evaluation
5. Supervision (Supervision)
6. Staffing
7. Negotiation
8. Representative

METHODS

In this study all variables use an ordinal scale. The data sources used in this research are primary data and secondary data. The research was conducted at PT Warna Indah Samajaya, with a population of 82 people. The sampling technique in this research used simple random sampling on PT Warna Indah Samajaya employees. The data collection method was by distributing questionnaires to PT Warna Indah Samajaya employees and 33 people returned the questionnaires. This research uses descriptive methods with data analysis techniques using SEM-PLS. Where the minimum sample size is taken using power analysis. With a significance level of 5% and R^2 of at least 0.25, the minimum sample size taken in this research is 33 samples. This research uses validity and reliability tests to measure the validity and reliability of the data.

RESULTS AND DISCUSSION

Characteristics of Management Accounting Information System

Characteristics of management accounting information system variables are measured using 4 dimensions, namely the dimensions of Broad scope, Timeliness, Integration, and Aggregation. This dimension is a reflective dimension, where the results of the estimation of the parameters of this variable measurement model can be shown as in the following figure:
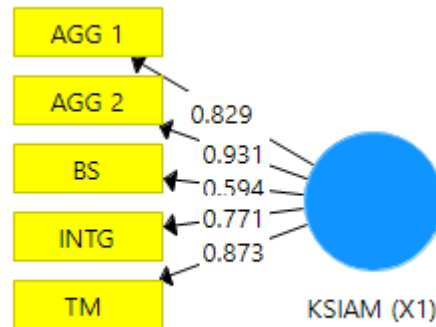
Figure 1. Path Diagram Of Characteristics Of Management Accounting Information System
Source: data processed by SEM-PLS (2021)

From the path diagram of the characteristics of the management accounting information system above, it can be seen that the value contained in each indicator is generated through dimensions derived from reflective internal control. The results of the calculation of the organization's internal control measurement model are as follows:

Table 1. **Calculation Of Characteristics Of Management Accounting Information System**

| Indikator	Loading Factor	Indicator Reliability	t-hitung	p-value
Broad Scope	0,594	0,572	3,501	0,000
Timeliness	0,873	0,865	12,629	0,000
Aggregated 1	0,829	0,828	12,429	0,000
Aggregated 2	0,931	0,932	38,102	0,000
Integration	0,771	0,899	11,583	0,000
Average Variance Extracted (AVE)		0,652		
Composite Reliability		0,902		

Source: data processed by SEM-PLS (2021)

Outer loadings and reflective constructs measuring the characteristics of management accounting information systems are all above 0.50. The Broad Scope dimension has a loading factor value of 0.594 above the 0.50 threshold and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.572). Furthermore, the Timeliness dimension has a loading factor value of 0.873 above the threshold of 0.50 and is significant (p = 0.000) at a significant level of 5%, this dimension has a reliability indicator (0.865). Then the Aggregated 1 (collection) dimension has a loading factor value of 0.829 above the 0.50 threshold and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.828). The Aggregated 2 dimension (collection) has a loading factor value of 0.931 above the threshold of 0.50 and is significant (p = 0.000) at a significant level of 5%, this dimension has a reliability

indicator (0.932). While the integration dimension has a loading factor value of 0.771 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.899). So that the AVE value obtained is 0.652 which is above the minimum required level of 0.50, the composite reliability value of 0.902 above the threshold of 0.70 indicates that the characteristic construct of management accounting information systems has a high level of internal consistency reliability. Discriminant Validity which is tested through cross loading (table 1.) shows that the loading factor value of the aggregated dimension 2 is higher than the other dimensions, thus providing evidence for discriminant validity constructs of the characteristics of management accounting information systems.

Management Control System
The management control system variable was measured using 4 dimensions, namely the dimension of the belief system, the boundary system, the diagnostic control system, and the interactive control system. This dimension is a reflective dimension, where the results of the estimation of the parameters of this variable measurement model can be shown as in the following figure:
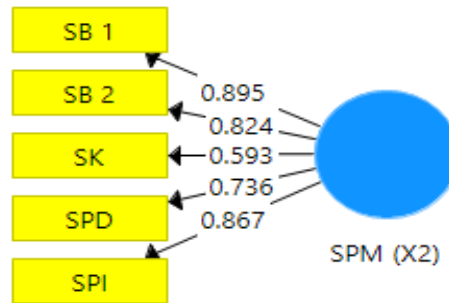
Figure 2. Path Diagram Of Management Control System
Source: data processed by SEM-PLS (2021)

From the management control system path diagram above, it can be seen that the value contained in each indicator is generated through the dimensions derived from the reflective management control system. The results of the calculation of the management control system measurement model are as follows:

Table 2. Calculation Of Management Control System

Indikator	Loading Factor	Indicator Reliability	t-hitung	p-value
Belief System	0,593	0,586	3,530	0,000
Boundary System 1	0,895	0,895	16,664	0,000
Boundary System 2	0,824	0,820	7,344	0,000
Diagnostic Control System	0,736	0,727	5,222	0,000
Interactive Control System	0,867	0,866	12,824	0,000

|	
Average Variance Extracted (AVE)	0,625
Composite Reliability	0,891

Source: data processed by SEM-PLS (2021)

The outer loadings and the reflective constructs of measurements of the management control system are all above 0.50. The dimension of the belief system has a loading factor value of 0.593 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.586). Furthermore, the boundary system dimension 1 has a loading factor value of 0.895 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.895). Then the boundary system dimension 2 has a loading factor value of 0.824 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.820). The dimension of the diagnostic control system has a loading factor value of 0.736 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.727). While the dimensions of the interactive control system have a loading factor value of 0.867 above the threshold of 0.50 and significant (p = 0.000) at a 5% level of significance, this dimension has a reliability indicator (0.866). So that the AVE value obtained is 0.625 which is above the minimum required level of 0.50, the composite reliability value of 0.891 above the threshold of 0.70 indicates that the management control system construct has a high level of internal consistency reliability. Discriminant Validity tested through cross loading (table 2.) shows that the loading factor value of the boundary system dimension 1 is higher than the other dimensions, thus providing evidence for discriminant validity of the management control system construct.

Managerial Performance

Managerial performance variables were measured using 8 dimensions, namely the dimensions of planning, investigation, coordination, evaluation, supervision, staffing, negotiation, representation, where the results of the estimation of the parameters of this variable measurement model can be shown as shown in the following figure:
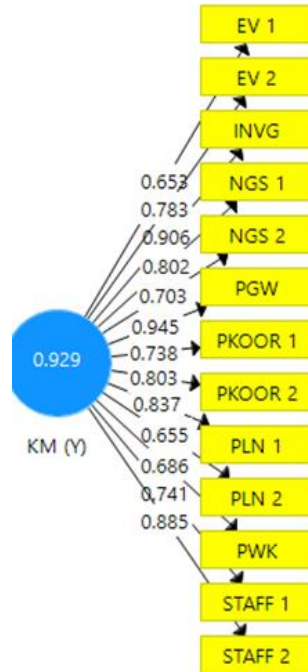
Figure 3. **Path Diagram Of Managerial performance**
Source: data processed by SEM-PLS (2021)

From the managerial performance path diagram above, it can be seen that the value contained in each indicator is generated through the dimensions derived from reflective managerial performance. The results of the calculation of the managerial performance measurement model are as follows:

Table 3. Calculation Of Managerial Perfomance

Indikator	Loading Factor	Indicator Reliability	t-hitung	p-value
Planing 1	0,837	0,844	9,931	0,000
Planing 2	0,655	0,652	4,699	0,000
Investigation	0,906	0,899	11,583	0,000
Coordinating 1	0,738	0,729	6,168	0,000
Coordinating 2	0,803	0,798	8,083	0,000
Evaluation 1	0,653	0,659	4,869	0,000
Evaluation 2	0,783	0,788	11,002	0,000
Controling	0,945	0,951	38,278	0,000
Staffing 1	0,741	0,749	8,385	0,000
Staffing 2	0,885	0,875	12,334	0,000
Negotiation1	0,802	0,809	8,322	0,000
Negotiation 2	0,703	0,704	4,706	0,000

Representative	0,686	0,684	5,992	0,000
Average Variance Extracted (AVE)		0,616		
Composite Reliability		0,954		

Source: data processed by SEM-PLS (2021)

Outer loadings and reflective constructs of measures of managerial performance are all above 0.50. Planning dimension 1 has a loading factor value of 0.837 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.844). Furthermore, the planning dimension 2 has a loading factor value of 0.655 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.652). Then the investigation dimension has a loading factor value of 0.906 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.899). The coordination dimension 1 has a loading factor value of 0.738 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.729). Then the coordination dimension 2 has a loading factor value of 0.803 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.798). Furthermore, the evaluation dimension 1 has a loading factor value of 0.653 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.659). Evaluation dimension 2 has a loading factor value of 0.783 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.788). The supervision dimension has a loading factor value of 0.945 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.951). Then the staffing dimension 1 has a loading factor value of 0.741 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.749). The staffing dimension 2 has a loading factor value of 0.885 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.875). Furthermore, the negotiation dimension 1 has a loading factor value of 0.802 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.809). Then the negotiation dimension 2 has a loading factor value of 0.703 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.704). The representative dimension has a loading factor value of 0.686 above the threshold of 0.50 and is significant (p = 0.000) at a 5% significance level, this dimension has a reliability indicator (0.684). So that the AVE value obtained is 0.616 which is above the minimum required level of 0.50, the composite reliability value of 0.954 above the 0.70 threshold indicates that the managerial performance construct has a high level of internal consistency reliability. Discriminant Validity which is tested through cross loading (table 3.) shows that the value of the loading factor of the supervision dimension is higher than the other dimensions, thus providing evidence for the discriminant validity of managerial performance constructs.

Collinearity Testing

The structural model explains the causal relationship between research variables. Structural model analysis is related to research hypothesis testing. Before the analysis was carried out, it was proved to test the structural model for collinearity. The reason is that the estimation of path coefficients in the structural model is based on the PLS regression of each endogenous latent variable on the constructs associated with it. In multiple regression, the estimated path coefficients will be biased if there is a significant level of collinearity between the predictor constructs. To evaluate collinearity, a measure of variance inflation factor (VIF) is used. In the context of PLS-SEM, a tolerance value of 0.20 or less than a VIF value of 5 or more indicates that there is a collinearity problem (Hair et al, 2017: 186)

Table 4. Collinearity assesment

Konstruk	VIF
KSIAM	4,458
SPM	4,458

Source: data processed by SEM-PLS (2021)

From the calculation results, a collinearity test is carried out on a structure a model that represents the relationship between latent variables of management accounting information system characteristics and the management control system which is also a predictor of the latent variable of managerial performance. Based on the table, the VIF value is outside the tolerance value there is a collinearity problem, so it can be concluded that there is no significant level of collinearity between the two predictor variable. Thus the evaluation of the structural model can be realized which includes the testing of two research hypotheses.

Stuctural Model Evaluation

Result of calculation of standard path coefficient for structure the model of the influence of the characteristics of management accounting information systems on managerial performance is shown in the figure below:
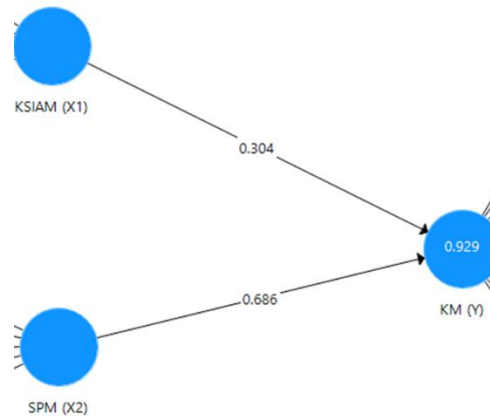
Figure 4. Standardized Structural Model Coefficients
Source: data processed by SEM-PLS (2021)

Hypothesis Testing
Statistical Hypothesis 1
H0 : Y11 = 0 Characteristics of Management Accounting Information Systems have no effect on Managerial Performance
H1 : Y11 0 Characteristics of Management Accounting Information Systems affect Managerial Performance

Statistical Hypothesis 2
H0 : Y12 = 0 Management Control System has no effect on Managerial Performance
H1 : Y12 0 Management Control System has an effect on Managerial Performance

To test this hypothesis, it is necessary to use a t-student as described in the previous chapter. The test criteria is that H0 is rejected if the p-value is less than , with = 0.05. The test results have been summarized in the following table:

Table 5. Hypotesis Testing Result

Statistical Hypothesis	Path Coefficient	t-Count	p-value	f^2	Explanation
$H_0 : Y_{11} = 0$ $H_1 : Y_{11} \neq 0$	0,304	1,979	0,000	0,291	H_0 Ditolak
$H_0 : Y_{12} = 0$ $H_1 : Y_{12} \neq 0$	0,686	4,482	0,000	1,485	H_0 Ditolak

Source: data processed by SEM-PLS (2021)

Hypotesis Testing Result 1

It can be seen that the tcount of the KSIAM variable (1.979) is greater than the critical value (1.96) which means that the result of hypothesis testing 1 is H0 is rejected, so the statistical conclusion is that KSIAM has a significant effect on managerial performance. Then based on the calculation results, the f2 value of the KSIAM variable is 0.291, because the f2 value is above 0.15 (the limit of the effect size medium value) it can be stated that the effect size for the influence of KSIAM on managerial performance is medium.

Hypotesis Testing Result 2

It can be seen that the tcount of the organizational commitment variable (4.482) is greater than the critical value (1.96) which means that the result of hypothesis 2 is rejected, it can be concluded that the management control system has a significant effect on managerial performance.Furthermore, based on the calculation results, the f2 value of the management control system variable is 1.485 because the f2 value is above 0.35

(the limit of effect size is large or high), it can be stated that the effect size for the influence of the management control system on managerial performance is high. Another measure that can be used in evaluating the structural model is the coefficient of managerial performance (R^2). Presenting the relationship between the characteristic variables of management accounting information systems and management control systems as predictors and endogenous latent variables of managerial performance gives the calculation results $R^2 = 0.929$. So it can be concluded that 92.9% of the variance in the managerial performance variable is explained by the characteristics of the management accounting information system and the remaining management control system variables explained by other factors.

Discussion

Research findings on the characteristics of management accounting information systems are in the very good category but not completely perfect. among other dimensions of collection (Aggregation) shows that there are still several employees at PT Warna Indah Samajaya who are not optimal in conveying information where the information is not concise or to the point. Timelines dimension where there are delays in collecting or making financial reports, as well as delays in coming to work. The integrity dimension is not yet optimal in providing information that is interrelated between one part and another. The characteristics of management accounting information systems influence managerial performance. This is in accordance with research (Mawaddah, 2020: 35&36) that the characteristics of a good or bad management accounting information system will influence the increase or decrease in managerial performance.

The management control system is in the very good category but not completely perfect. This is caused, among other things, by interactive control systems and diagnostic control systems, where not all employees can experience this system, only a few divisions can experience this system. then the Belief System in terms of inspiring and directing employees to find new ideas and implement them in the company. The management control system influences managerial performance. This is in accordance with Junita's (2018) research that the higher or lower the management control system, the higher or lower the managerial performance will be.

CONSCLUSION

Based on the results of the research, the conclusions of the study are as follows : Characteristics of management accounting information systems affect managerial performance at PT Warna Indah Samajaya. However, it is not fully optimal because the Aggregated (collection), the broad scope, timeliness, and integration dimensions that have not worked perfectly and The management control system has an effect on managerial performance at PT Warna Indah Samajaya. However, there are still some short comimg and obstacles such as in the dimension of the boundary system, the interactive control system, the belief system and the diagnostic control system because it has not run as expeted

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