QUALITY ANALYSIS OF MANAGEMENT ACCOUNTING INFORMATION SYSTEMS AND ORGANIZATIONAL STRUCTURES ON MANAGEMENT DECISION MAKING

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Abstract: Management decision making is expected to provide great benefits in the business world. Management of a company requires a variety of fast information and accuracy needed for various management decisions. Without the support of relevant data and information, the management's decisions at various levels of the organization can be wrong and not according to needs. Phenomena in the field regarding management in decision making do not think about problems that will occur in the future that can harm the company and management to make decisions unilaterally based on the input of information received that is not yet relevant. This study aims to determine the effect of the quality of management accounting information systems and organizational structure on management decision-making. The method used in this study is a descriptive method with a quantitative approach through data collection techniques with questionnaires that are distributed directly throughout the section heads in PT. Macrosentra Niagaboga. The statistical test instrument used in this study is the Sructural Equation Model (SEM) with Partial Least Square (PLS) assessment. Application of quality management accounting information systems, organizational structure, and management decision making at PT. Macrosentra Niagaboga is in good criteria. The results of this study show 1) There is a significant influence on the quality of management accounting information systems on management decision making. 2) organizational structure has a significant influence on management decision making.

Keywords: Quality Management Accounting Information System, Organizational Stucture, Management Decision Making.

INTRODUCTION

Globalization and economic change from an industry-based economy to an information-based economy have demanded business management to be able to operate more effectively, efficiently and in a controlled manner by prioritizing competitive advantage, both at the local and global level through improving the quality of human resources, goods and services produced and effective use of information technology. Yuli Djahir & Dewi Pratati (2015: 5). The information age is a period that involves a lot of information in decision making. Yuli Djahir & Dewi Pratati (2015: 1).

Then Amirullah (2015: 99) states that decision making (decision making) is one of the important management processes for every organization. This is due to the fact that the implementation of other management functions is based on the existence of decisions made by top managers, which are then hierarchically made by management lines at the level of staff needed, so decision makers are a key part of every activity manager.

Management information system is a combination of human resources and information technology applications to select, store, manage, and retrieve data in order to support a company's decision making process. Eti Rochaety (2016: 11).

Furthermore Yuli Djahir & Dewi Pratita (2015: 13) said the management information system must be able to provide the information needed by management at various levels and functions of the business in general. And for now the management information system is not only operated to meet the needs of management at various levels and sections, but also helps smooth the company's operations. Yuli Djahir & Dewi Pratita (2015: 15).

A clear and orderly organizational structure can help to obtain the information needed, because in a clear and organized organizational structure there are tasks and responsibilities for each part that must be done. This is to implement changes more effectively and efficiently while achieving the desired organizational goals. Adjustment of the organizational structure is a step that must be done and is quite strategic. Therefore, the organizational structure must also be given sufficient flexibility to be able to always adapt to a very dynamic external environment including the development of the business and technology world. Erna Novitasari (2017: 81).

Based on the background that has been described above, then several problems were found in this study as follows: 1. How much influence the management accounting information system has on management decision making.2. How much influence the organizational structure of management decision making.

Management Accounting Information System
According to Hasen and Mowen (2009: 4): "Management accounting information systems provide information needed to meet certain management objectives. The essence of management accounting information systems is the process described by activities, such as data collection, measurement, storage, analysis, reporting and information management ".

Organizational structure
According to Robbins & J Rudge (2013: 480) "organizational structure is the formal framework of the organization with which work tasks are divided and coordinated. This understanding can be illustrated as a human being who has a framework that determines their shape, the organization has a structure that determines its shape ".

Management Decision Making
According to Ibnu Syamsi (2010: 10) defines decision making as follows: "Decision making is a leadership action to solve the problems faced in the organization he leads by selecting one of the possible alternatives".

Framework
The Effect of the Quality of Management Accounting Information Systems on Management Decision Making
The role of management accounting information systems is very important to support all internal management information systems so that management should always be available, and the information available must be relevant because it involves the company's future. Hendri Jhon Hevi (2014). In addition, the very important role of companies in management accounting information systems in the decision making process is to provide input in the form of quantitative financial information for management's basic considerations in making decisions both for planning and controlling management. Lambok Vera Riana P (2013).

So the role of management accounting information systems for management decision making, can be

seen by the ability of accounting in processing data, especially those that are financial to financial, which are very much needed by those who have an interest in the company in order to make decisions. Angrita Denziana and Erlin Handayani (2015).

Effect of organizational structure on management decision making

According to Syamsi (2010: 23), one of the factors that influence decision making is the internal state of the organization, the internal state of the organization has to do with what is in the organization, the internal state of the organization includes the available funds, the state of human resources, the ability of employees , completeness of organizational equipment and organizational structure.

With an organizational structure in accordance with the company will be more efficient in making decisions in the company. Hendri Jhon Hevi (2014). Furthermore, in a study conducted by Erni Ernawati (2016), stated that the organizational structure affects employee performance improvement mainly supported by the existence of accuracy in the division of tasks and responsibilities.

METHODS
Research design

The design of this study is a descriptive research method with a quantitative approach used to analyze the magnitude of the influence of the quality of management accounting information systems and organizational structures on decision making. This research is a verification study that aims to test the truth of hypotheses carried out through data collection in the field.

Sources and Methods of Data Collection

There are two data sources in this study, namely primary data sources and secondary data. Where the data obtained by the author is data obtained from processing questionnaires and using data indirectly. Data sources are one of the most vital in research. Error in using or understanding the data source, then the data obtained will also be missed than expected.

Data Collection Methods

In this study, to obtain the required data, the authors use data collection techniques that will be examined according to variables through: Questionnaire (questionnaire).
According to Sugiyono (2017: 123) the questionnaire is a series or list of questions that are arranged systematically, then sent to be filled in by respondents. The questionnaire is an efficient data collection technique if the researcher knows with certainty the variables to be measured and knows what can be expected from the respondent. The questionnaire contained a list of questions that were shown to respondents who were related in this study. The results of this questionnaire are in the form of data about the influence of the quality of management accounting information systems and organizational structures on decision making. With questionnaires distributed to 42 respondents

Data analysis

Data analysis in this study was carried out with two types of analysis to obtain results in accordance with the objectives of the study, namely:
1. Descriptive analysis to explain the characteristics of the variables studied to support problem solving to obtain operational errors.
2. Analysis through modeling structural equation (Structural Equation Model-SEM) in order to answer the problem formulation and answer hypotheses.

In drawing the PLS parameter model, in this study using a relatively small sample size that is 1 unit of analysis.

Within the SEM-PLS there are two sub-models, namely:

1) Inner model that specifies the relationship between latent variables (Structural Model)

2) Outer model that specifies the relationship between latent variables and their indicator variable (measurement model)

RESULTS AND DISCUSSION
Verification of Research Results

In this study, there are 19 manifest variables and 3 latent variables namely Management Accounting System Quality (X1) which are by 9 manifest variables, Organizational Structure (X2) with 6 manifest variables and Management Decision Making (Y) with 4 manifest variables. The following are the models that will be tested in this study.

The results of calculations of the whole model using SmartPLS 2.0 are as follows:
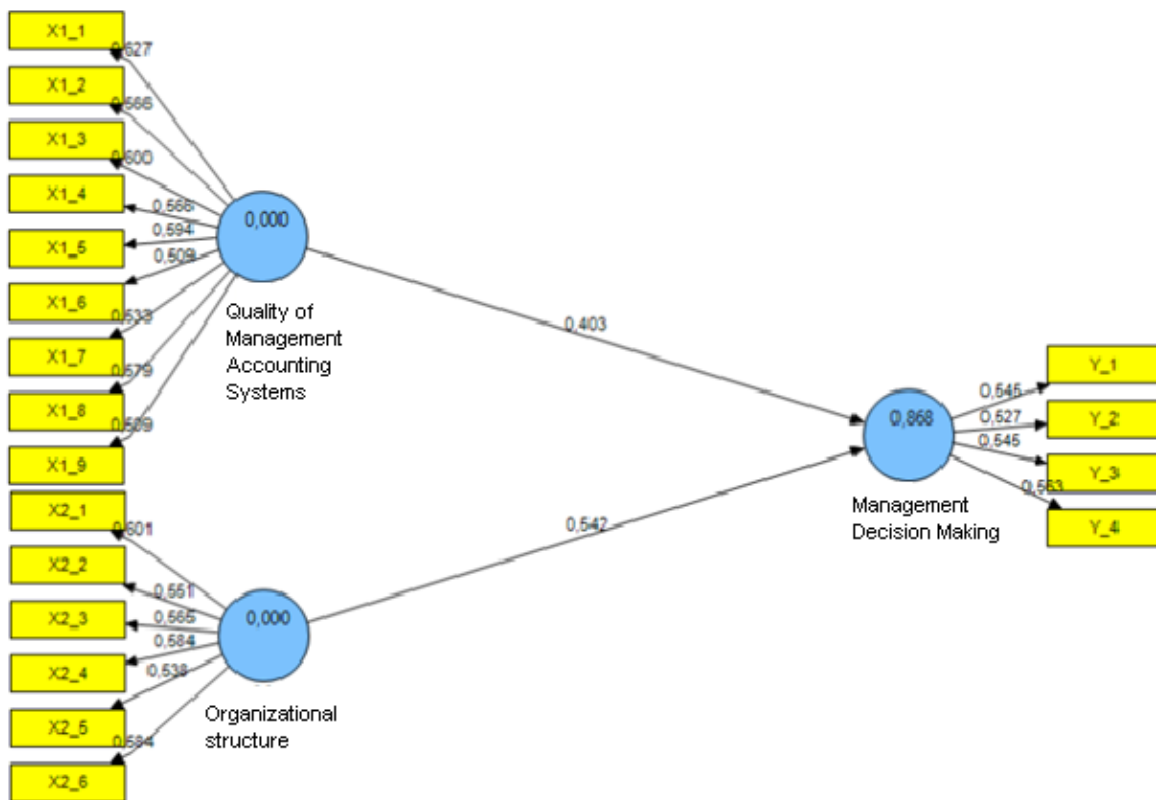

Figure Complete Model Path Chart

Measurement Model Testing (Outer model)

Testing the measurement model (outer model) is used to determine the specification of the relationship between latent variables with manifest variables, this test includes convergent validity, discriminant validity and reliability.

1) Convergent Validity

Table 1
Loading Factor Indicator Variable Quality Management Accounting Information System (X1)

	Variable Manifes	LoadingFactorr	t_{count}	Information
$X_{1.1}$	(*Broadscope*)	0,627	10,05	Valid
$X_{1.2}$	(*Timeliness*)	0,566	12,28	Valid
$X_{1.3}$	(*formart*)	0,600	9,64	Valid
$X_{1.4}$	(*Accuracy*)	0,566	12,28	Valid
$X_{1.5}$	(*Integration*)	0,594	9,70	Valid
$X_{1.6}$	(*Flexibility*)	0,509	9,97	Valid
$X_{1.7}$	(*Accessibility*)	0,533	11,49	Valid
$X_{1.8}$	i (*Formalization*)	0,579	8,67	Valid
$X_{1.9}$	(*Media Richness*)	0,509	9,98	Valid

Source: Data processed using PLS software

The table above provides information about the loading factor values for each manifest variable of the Quality of Management Accounting Information Systems. In the table above, it appears that the highest loading factor value of 0.627 is found in the scope indicator (X1.1) with a calculated value of 10.05. The right time indicator (X1.2) has a loading factor value of 0.566 with a tcount of 12.28. Formart indicator (X1.3) has a loading factor value of 0.600 with a tcount of 9.64. The accuracy indicator (X1.4) has a loading factor value of 0.566 with a tcount of 12.28. The integration indicator (X1.5) has a loading factor value of 0.594 with a tcount of 9.70. The indicator of flexibility (X1.6) has a loading factor value of 0.509 with a tcount of 9.97. The accessibility indicator (X1.7) has a loading factor value of 0.533 with a tcount of 11.49. Formalization indicator (X1.8) has a loading factor value of 0.579 with a tcount of 8.67. The media wealth indicator (X1.9) has a loading factor value of 0.509 with a tcount of 9.98.

Table 2
Loading Factor Indicator for Organizational Structure (X2)

	VariableManifes	LoadingFactor	t_{count}	Information
$X_{2.1}$	*(Work Spesialization)*	0,601	9,07	Valid
$X_{2.2}$	*(Departementalization)*	0,551	8,26	Valid
$X_{2.3}$	*(Chain of command)*	0,565	7,98	Valid
$X_{2.4}$	*(Span of Control)*	0,584	8,34	Valid
$X_{2.5}$	*(Centralization and Decentralization*	0,538	7,86	Valid
$X_{2.6}$	*(Formalization)*	0,584	8,34	Valid

Source: Data processed using PLS software

The table above provides information about the loading factor values for each manifest variable of the Organizational Structure. In the table above, it appears that the highest loading factor is 0.601 found in the indicator of work specialization (X2.1) with a tcount of 9.07. The departmentation indicator (X2.2) has a loading factor value of 0.551 with a tcount of 8.26. The chain of command indicator (X2.3) has a loading factor value of 0.565 with a tcount of 7.98. Control range indicator (X2.4) has a loading factor value of 0.584 with a tcount of 8.34. Indicators of centralization and decentralization (X2.5) have a loading factor of 0.538 with a tcount of 7.86. Formalization indicator (X2.6) has a loading factor value of 0.584 with a tcount of 8.334.

Table 3
Loading Factor Management Decision Making Indicator (Y)

	VariableManifes	LoadingFactor	tcount	Information
Y.1	Aim	0,545	8,40	Valid
Y.2	Alternative identification	0,527	7,30	Valid
Y.3	Unknown factors	0,545	8,40	Valid
Y.4	A means is needed to measure the results achieved	0,563	8,93	Valid

Source: Data processed using PLS software

The table above provides information about the loading factor values for each manifest variable from Management Decision Making. In the table above, it appears that the highest loading factor is 0.563 owned by the indicator needed a means to measure the results achieved (Y.4) with a tcount of 8.93. The destination indicator (Y.1) has a loading factor value of 0.545 with a tcount of 8.40. Alternative identification indicator (Y.2) has a loading factor value of 0.527 with a tcount of 7.30. Indicator factors that can not be known in advance (Y.3) has a loading factor value of 0.545 with a tcount of 8.40.

Table 4
AVE Test Results and Communality

Variable Laten	AVE	*Communality*
Quality of Management Accounting Information Systems (X1)	0,32	0,99
Organizational Structure (X2)	0	0,99
Management Decision Making (Y)	0	0,99

Source: Data processed using PLS software

In the table above, it can be seen that the three latent variables have AVE values and communality that are greater than the specified value of 0.3, so that all manifest variables regarding the Quality of Management Accounting Information Systems (X1), Organizational Structure (X2) and Retrieval Management Decision (Y) is declared to have fulfilled the convergent validity requirements.

Discriminant Validity

This discriminant validity is related to the principle that different constructors (manifest variables) should not be highly correlated with other manifest variables. Discriminant validity test with PLS software can be known from the cross loading value by comparing the correlation of indicators with their latent variables must be greater than the correlation between indicators with other latent variables or by comparing the square root AVE for each construct with the correlation value between constructs in the model. Good discriminant validity is shown from the square root AVE for each construct must be greater than the correlation between constructs in the model.

Based on the test results using SmartPLS 2.0 software, the following results are obtained:

Table 5
Cross Loading Test Results

	X_1	Y	X_2
$X_1.$	0,62	0,57	0,59
$X_1.$	0,56	0,49	0,51
$X_1.$	0,60	0,53	0,57
$X_1.$	0,56	0,49	0,51
$X_1.$	0,59	0,57	0,56
$X_1.$	0,50	0,46	0,48
$X_1.$	0,53	0,48	0,48
$X_1.$	0,57	0,54	0,55
$X_1.$	0,50	0,46	0,48
$X_2.$	0,59	0,57	0,60
$X_2.$	0,52	0,52	0,55
$X_2.$	0,51	0,49	0,56
$X_2.$	0,55	0,53	0,58
$X_2.$	0,45	0,48	0,53
$X_2.$	0,55	0,53	0,58
$Y_.1$	0,49	0,54	0,48
$Y_.2$	0,47	0,52	0,50
$Y_.3$	0,49	0,54	0,48
$Y_.4$	0,52	0,56	0,52

Source: Data processed using PLS software

In the table above, it appears that the cross loading value for each indicator (colored column) is higher when compared to the correlation of indicators with other latent variables, so that the latent variable has adequate discriminant validity.

Table 6
Comparison Results of AVE Root with Correlation of Latent Variables

Variable Laten	AVE		Correlation Between Latent Variables		
			X1	X2	Y
X	0,566				
Ẋ	0,545	X1	1,000		
Ῡ	0,571	X2	0,913	1,000	
		Y	0,941	0,921	1,000

Source: Data processed using PLS software

In the table above, you can see the root value of AVE for each variable is smaller than the correlation value between latent variables, so that latent variables are declared to have a fairly good discriminant validity.

Based on the description above, the size of the cross loadings and the comparison of the AVE roots with the correlation of latent variables have fulfilled the requirements, so it can be concluded that the discriminant validity requirements have been fulfilled.

Reliability Test
In addition to the validity test, the measurement of the model (outer model) also carried out the construct reliability test in order to prove the accuracy, consistency and accuracy of the instrument in measuring the construct. In PLS to measure the reliability of a construct with reflexive indicators can be done with composite reliability test with the provisions if the construct has a composite reliability value greater than 0.6, it can be concluded that the manifest variable has a good accuracy, consistency and accuracy of instruments in measuring the construct. The test results using the SmartPLS 2.0 software are presented in the following table:

Table 7
Composite Reliability Test Results

Variable Laten	Composite Reliability
Quality of Management Accounting Information Systems (X1)	0,809
Organizational Structure (X2)	0,628
Management Decision Making (Y)	0,743

Source: Data processed using PLS software

In the table above, it appears that the composite reliability value produced by all constructs is very good, namely above 0.6 so that it can be concluded that all construct indicators are reliable or in other words all manifest variables of the three latent variables are proven to have accuracy, consistency and accuracy of instruments in measure the construct well.

Structural Model Testing (Inner model)
Testing the structural model (inner model) can be seen from the R-Square value for each endogenous variable as the predictive power of the structural model. Changes in the value of R-Square can be used to explain the effect of certain exogenous latent variables on endogenous latent variables.
Effect Size

Effect Size is a number that shows the degree of association (closeness of the relationship) between exogenous latent variables and endogenous latent variables. Based on the test results using SmartPLS 2.0 software, the following results are obtained:

Table 8 Effect Size

Latent Variable	Correlations	TStatistics
Quality of Management Accounting Information Systems (X$_1$)-> Management Decision Making (Y)	0,913	3,143
Organizational Structure (X$_2$ Management Decision Making (Y)	0,921	3,814

Source: Data processed using PLS software

Cofficients of determination (R^2 *value*)
Cofficients of determination is a number that shows the amount of influence contributed exogenous latent variables to the dependent variable. Based on the test results using SmartPLS 2.0 software, the following results are obtained:

Table 9 Cofficients of determination

LatentVariable	RSquare
Kualitas Sistem Informasi Akuntansi Manajemen (X$_1$)→ Management Decision Making (Y) Organizational Structure (X$_2$)→ Management Decision Making	0,868

Source: Data processed using PLS software

In the table above, it can be seen that the R Square value obtained is 0.868 or 86.8%. These results indicate that the Quality of Management Accounting Information Systems (X1) and Organizational Structure (X2) together provide an effect of 86.8% on Management Decision Making (Y), while as many as (1-R Square) the remaining 13.2% is the amount of influence contributed by other factors not examined.
To find out the contribution of each independent variable to the Bound variable can be seen in the following table:

Table 10 Contribution of the Effect of Independent Variables on Bound Variables

LatentVariable	Line Coefficient	Direct Influence	Influence No Live		Total Influence
			X$_1$	X$_2$	
Quality of Management Accounting Information Systems (X$_1$)→ Management Decision Making (Y)	0,403	0,162	-	0,206	0,368
Organizational Structure (X$_2$)→Management Decision Making (Y)	0,542	0,294	0,206	-	0,500
TOTAL					0,868

The Effect of the Quality of Management Accounting Information Systems on Management Decision Making

The Quality of Management Accounting Information Systems for Management Decision Making has an effect of 36.8%, and the tcount for the Quality of Management Accounting Information System obtained Effect Size of 3.143. This value is greater than tcritic 1.96, so it can be concluded that the better application of Management Accounting Information Systems will increase Management Decision Making. This research supports what has been studied by Hendri Jhon Devi (2014) and Erni Ernawati (2016) where management information systems influence management decision making.

Of the nine questionnaire statements submitted, there were two statements that were answered the smallest, namely flexibility and wealth of the media where some respondents answered so far Mr / Mrs provided flexible accounting information (the system can adapt to sharing user needs and changing conditions) with the acquisition of values on loading factor of 0.509. Therefore, the main weakness lies in the software side where accounting information has not been able to adapt to the needs of each user. Another statement with the smallest respondent's answer is that Mr / Ms convey accounting information through personal interaction media such as Yahoo, Google, and so on with the acquisition of a loading factor of 0.509. Therefore, another weakness lies in the use of electronic media where users of information systems have not been able to utilize electronic media to the full.

Effect of Organizational Structure on Management Decision Making

Organizational Structure on Management Decision Making gives an effect of 50.0%, and tcount for Organizational Structure variables obtained Effect Size of 3.814. This value is greater than tcritic 1.96, so it can be concluded that the better the Organizational Structure created, the better Management Decision Making. This research supports what has been studied by Hendri Jhon Devi (2014), Angrita Denziana and Erlin Handayani (2015) and Erni Ernawati (2016) where organizational structure influences management decision making.

Of the six questionnaire statements submitted, there was one statement that was answered the smallest, namely on centralization and decentralization in which several respondents answered that Mr / Ms had been grouped together with colleagues and carried out the same activity in one section with the acquisition factor loading value of 0.538 . Therefore, the most important weakness lies in improving work responsibilities and authority of each employee.

CONCLUSION

From the results of research regarding the Effect of Management Information System Quality Management and Organizational Structure Against Management Decision Making at PT. Macrosentra Niagaboga, the following conclusions are obtained: The Quality of Management Accounting Information Systems influences Management Decision Making at PT. Macrosentra Niagaboga. This is because the scope of PT. Macrosentra Niagaboga, has been running well, providing information in the form of mass data and then to the next mass in the form of financial and non-financial reports (management) so that employees / employees are given the ease of finding that information. Organizational Structure influences Management Decision Making at PT. Macrosentra Niagaboga. This is because the Work Specialization at PT.

Macrosentra Niagaboga, has gone well all work has been done by one employee, each employee has a job that is still determined by the company and there are no double jobs for each employee. So the work becomes more effective and efficient.

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