

The Effect of Management Accounting on Decision-Making at PT. PLN (Persero) UP3 Medan

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ABSTRACT

This study is supposed to determine the effect of management accounting on decision-making at PT. PLN (Persero) UP3 Medan. This type of research is survey research because it takes samples from a population. This study uses an explanatory research approach, which aims to explain the causal relationship between research variables and test hypotheses. The population in this study amounted to 325 employees of PT PLN (Persero) Up3 Medan and the population in this study amounted to 76 people using a simple random sampling technique. Data collection techniques in this study used questionnaires and data analysis techniques using SEM PLS version 4.0. Based on the results of research and discussion, shows that Management Accounting has a positive and significant effect on Decision Making at PT. PLN (Persero) UP3 Medan. It is mean the management accounting applied to PT. PLN (Persero) UP3 Medan is effective in influencing decision-making. Decision-making from the head of the organization affects the implementation of the tasks assigned to subordinates because the decisions taken by a leader are expressed in the form of words and formulated in a regulation, order, instruction, policy, and other forms desired by the leader. Errors in decision-making by leaders such as the preparation of subordinate task implementation guidelines can result in errors in the implementation of employee (subordinate) tasks which in turn can hinder the achievement of organizational goals. This can happen because the guidelines for carrying out the tasks given by the leadership are not clear. The task implementation guidelines are less clear due to the lack of effectiveness of the leadership in decision-making.

Keywords: Management accounting, decision making

INTRODUCTION

A well-managed company, of course, requires the application of sound management principles, which include many factors related to all activities, until the achievement of goals. The activities in question include the Preparation of short and long-term plans, formulating company goals, and developing basic policies for the management of the company. for this achievement, management accounting is needed, where management accounting is the process of identifying measurements, accumulating analysis, preparing interpretations, and communicating finances used by management to plan, assess and supervise something in the organization to ensure proper use and good accountability for company resources.

Management accounting is a management tool to provide information about financial events in a certain period for leaders to make decisions through existing options. In its implementation, the field of planning and supervision is to prepare budgets and standards that are limited to the field of operations. To influence, mobilize, control, or direct subordinates, leaders must be able to carry out leadership tasks such as decision-making activities. Decision-making is a systematic approach to the nature of a problem, the collection of facts and data, a mature determination of the alternatives faced, and action according to

the calculation is the most appropriate action.

Decision-making from the head of the organization affects the implementation of the tasks assigned to subordinates because the decisions taken by a leader are expressed in the form of words and formulated in a regulation, order, instruction, policy, and other forms desired by the leader. Errors in decision-making by leaders such as the preparation of guidelines for carrying out subordinate tasks can result in errors in the implementation of employee (subordinate) tasks which in turn can hinder the achievement of organizational goals.

To make decisions, a management accounting system is needed Robbins (2007; 23) suggests decision-making as the main function of a leader, starting from the lower level to the top level in an organization, the decision-making position determines whether an organization will succeed or not. This is because the decisions that have been made will bind all components in the organization to carry out these decisions. Decisions are the beginning of all conscious and directed human actions, either individually or in groups.

The focus of this research is PT. PLN (Persero) UP3 Medan, where PT. PLN (Persero) UP3 Medan is one of the companies selling electricity services in Indonesia. In the service of distributing electricity, PLN divides the function of its parent unit into several parent units based on the electric power system, namely generation, transmission, and distribution. From the Research Focus above, it appears that there is a mismatch between the policy and the implementation or activities in the field. This has an impact on policy realization activities that seem less effective. According to the author, it is caused by an error in decision-making or rather inappropriate management decisions such as improving the production climate where the improvement of the production climate in the region has not been maximally achieved. Therefore, researchers are interested in conducting research related to management

accounting and its influence on decision-making.

LITERATURE REVIEW

Accounting Management

According to Tanopruwito and Khaerul (2012: 5) Management Accounting is the "Provision of information or important data for managers, namely people in organizations who provide direction and control organizational operations". So that it can be concluded that management accounting is an activity process activity from accounting that has the aim of providing information to managers, to decide before the information is analyzed first so that the information can be right for making a decision. According to Rudianto (2013: 9), management accounting is a tool system, namely the type of information it produces is aimed at internal parties of the organization, such as financial managers, production managers, marketing managers, and so on for decision-making. Murphy (2001: 4) suggests that management accounting is "a presentation of accounting information to mobilize and conduct supervision by management in a company". Jerry Hans (2015: 4) says that management accounting information is also very useful for managers, especially at the stage of analyzing the consequences of any actions that can be taken in the process of making decisions. The availability of the necessary information can produce the best decision from various alternative actions considered to achieve company goals. Management accounting plays a role in providing information from accounting data to assist management in making rational decisions related to the problems faced by the company. The function of management accounting in the field of business management is a technique for collecting and recording information needed for planning, supervision, monitoring, and renewal of the company ". One of the objectives of Management Accounting is to provide the information needed by management in making

decisions. The role of accounting in decision-making, namely (Mulyadi, 2015): a. Stimulate management in realizing and identifying problems. b. Separate one alternative action from another. c. Explain the consequences of various alternative actions to be selected. d. Help analyze and assess various alternative actions to be taken. Help analyze and assess various alternative actions to be chosen.

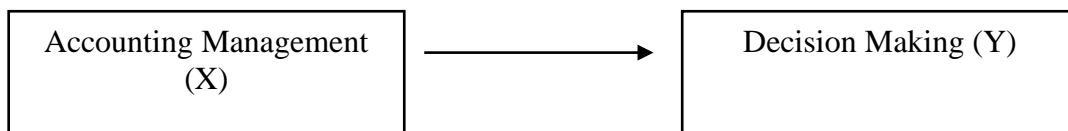
Decision Making

Harold and O'Donnel (2013: 15) state that decision-making is a choice between alternatives regarding a way of acting, which is the essence of planning, a plan cannot be said if there is no decision, a reliable source, instructions, or reputation that has been made. Sinoem (2013: 4) states that decision-making in uncertain conditions (*Decision Making Under Certainty*) is decision-making where the following occurs (1) The number and possibility of these conditions are unknown. (2) Decision makers cannot determine the probability of occurrence of various conditions or outcomes that come out. (3) What is known is only the possible results of an action, but it cannot be predicted how much the probability of each result is. (4) Decision

makers do not have complete knowledge or information about the chances of various conditions occurring. (5) The matter to be decided is usually relatively unprecedented. The level of uncertainty of this kind of decision can be reduced in several ways, including seeking more information, through research or research and using subjective probabilities.

According to Hariadi (2020), the most appropriate steps in decision-making are: a. Identify the problem. b. Identify alternative solutions to the problem and exclude alternatives that are not feasible to implement. c. Identify all costs and revenues associated with the alternatives considered for selection and exclude costs that are considered irrelevant. d. Consider qualitative factors. e. Make decisions based on the quantitative and qualitative factors discussed above. Consider qualitative factors. e. Make decisions based on the quantitative and qualitative factors discussed above.

According to Sugiyono (2017: 60), the framework is a conceptual model of how theory relates to various factors that have been identified as important problems. The framework of this research is as follows:



The Effect of Management Accounting on Decision Making

According to Kamaruddin Ahmad (2015), "The management accounting system is one of its main objectives to present reports of a particular business unit or organization for the benefit of internal parties to carry out management processes which include planning, decision making, organizing and directing and controlling. Decision-making based on the ability to understand management accounting systems can encourage Accounting information systems are accounting data processing systems that

are in a unified structure in an entity, such as a business company or organizational container to transform data into financial accounting information and structured management accounting information so that it becomes the basis for leaders to make decisions in planning the control of companies or organizations in achieving goals and satisfying information users. The success of a company's information system depends on how the system is run, the ease of the system for its users, and the utilization of the technology used. Research conducted by Dinda wulandarii (2017) on

the Effect of Management Accounting on Decision Making at Bank Sumut Up3 Aek Kanopan North Labuhan Batu Regency shows the results that the application of management accounting at Bank Sumut Up3 Aek Kanopan North Labuhan Batu Regency has a significant effect on decision making. The following is the hypothesis in this study:

Ha: Management Accounting affects decision-making.

H0: Management Accounting does not affect decision-making.

METHODS

Type of Research

This type of research is survey research because it takes samples from a population. This study uses an explanatory research approach, which aims to explain the causal relationship between research variables and test hypotheses. (Nasution et al., 2020).

Population and Sample

In this study, the population that researchers will take is all employees of PT. PLN (Persero) UP3 Medan totaling 325 people. Sampling. The sample is part of the number and characteristics possessed by the population, the sampling technique used in this study is simple random sampling. To determine the size of the sample taken from the population, the researcher used the formula proposed by Slovin with a confidence level of 80% with a value of $e = 20\%$ as follows: (Sugiyono, 2016)

Formula:

$$n = N / (1 + Ne^2)$$

$$n = 325 / (1 + (325) \times (0,1)^2)$$

$$n = 325 / 1 + 3,25$$

$$n = 325 / 4,25$$

$$n = 76$$

So it can be concluded that the number of samples in this study was 76 respondents.

Data collection techniques

The collection of this research was obtained by distributing questionnaires/surveys to all employees of PT. PLN (Persero) UP3

Medan which became the research sample using Google form.

Data analysis technique

The data analysis technique in this study uses SEM-PLS version 0.4 with the outer model and inner model stages.

RESULTS AND DISCUSSION

Respondent identity

The description of respondent characteristics is used to explain the criteria for respondents based on education, gender, and age which are explained in tabular form.

Table 1 Respondent Identity

Respondent Characteristics	Frequency	Percentage
Age		
20 - 30 years	15	20%
31 - 40 years	29	38%
41 - 50 years	20	26%
> 50 years	12	16%
Education		
High School	8	11%
D3	17	22%
S1	42	55%
S2	9	12%
Gender of respondent		
Male	53	70%
Female	23	30%

Source: Data processed by the author 2023

From the table above, it can be seen that respondents with ages 20-30 years were 15 people (20%), respondents with ages 31-40 years were 29 people (38%), respondents with ages 41-50 years were 20 people (26%) and respondents with ages > 50 years were 12 people (16%). From the table above, it can be seen that respondents with high school education were 8 people (11%), respondents with D3 education were 17 people (22%), respondents with S1 education were 42 people (55%) and respondents with S2 education were 9 people (12%). From the table above, respondents with male gender were 53 people (70%) and respondents with female gender were 23 people (30%).

PLS-SEM Analysis Results

Measurement Analysis (Outer Model)

Convergent Validity

An indicator is said to be fulfilled when the *loading factor* value is > 0.5. The *loading*

factor value shows the weight of each indicator/item as a measure of each variable. Indicators with large loading factors

indicate that the indicator is the strongest (dominant) variable measure.

Table 2: Convergent Validity

Variables	Indicator	Outer Weights	Loading Factor	Description
Management Accounting (X)	AM1	0,141	0,980	Valid
	AM2	0,139	0,980	Valid
	AM3	0,124	0,891	Valid
	AM4	0,139	0,970	Valid
	AM5	0,136	0,962	Valid
	AM6	0,119	0,895	Valid
	AM7	0,138	0,979	Valid
	AM8	0,161	0,673	Valid
Decision Making (Y)	PK1	0,127	0,767	Valid
	PK2	0,125	0,775	Valid
	PK3	0,133	0,973	Valid
	PK4	0,132	0,968	Valid
	PK5	0,127	0,944	Valid
	PK6	0,115	0,878	Valid
	PK7	0,133	0,974	Valid
	PK8	0,113	0,909	Valid
	PK9	0,109	0,883	Valid

Source: Data processed PLS V. 04

Discriminant Validity

Discriminant validity testing in this study uses cross-loading and square root of average (AVE) values intending to test whether the research instrument is valid in explaining or reflecting latent variables.

Table 3: Cross Loading

Indicator	Management Accounting	Decision Making
AM1	0.749	0.247
AM2	0.734	0.345
AM3	0.777	0.398
AM4	0.572	0.105
AM5	0.721	0.291
AM6	0.772	0.265
AM7	0.791	0.336
AM8	0.787	0.359
PK1	0.745	0.207
PK2	0.734	0.345
PK3	0.771	0.405
PK4	0.630	0.131
PK5	0.671	0.304
PK6	0.211	0.762
PK7	0.214	0.560
PK8	0.258	0.571
PK9	0.244	0.740

Source: Data processed PLS V. 04

Composite Reliability dan Cronbach's alpha

Evaluation of composite reliability is done by looking at the composite reliability value of the indicator block that measures the construct and Cronbach's alpha value. A construct is said to be reliable if its composite reliability value is above 0.7 and the Cronbach's alpha value is recommended above 0.6.

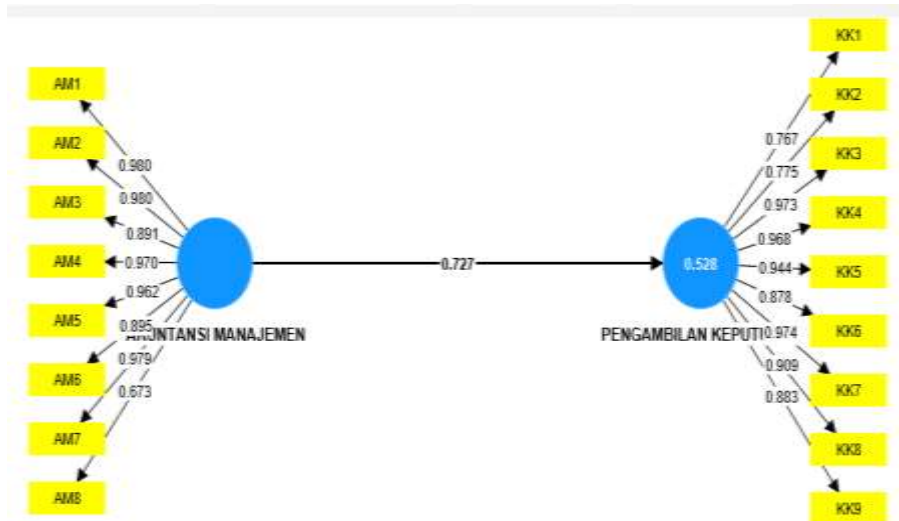
Table 4: Composite Reliability & Cronbach's alpha

Variables	Composite Reliability	Cronbach's alpha	Description
Management Accounting	0.974	0.973	Reliable
Decision Making	0.972	0.970	Reliable

Source: Data processed PLS V. 04

Structural Model Analysis (Inner Model)

The structural model analysis aims to analyze research hypotheses. There are at least two parts that need to be analyzed in this model, namely: the coefficient of determination and hypothesis testing. Here is the bootstrapping output:



Coefficient of Determination (r Square)

R-square is a measure of the proportion of variation in the influenced value (endogenous) that can be explained by the variables that influence it (exogenous) This is useful for predicting whether the model is good/bad. The *r-square* result for endogenous latent variables of 0.75 indicates that the model is substantial (good); 0.50 indicates that the model is moderate (medium) and 0.25 indicates that the model is weak (bad).

Table 5: r square test

	R SQUARE	R SQUARE ADJUSTED
Decision Making	0,528	0,522

Source: Data processed PLS V. 04

F- Square

F-square is a measure used to assess the relative impact of an influencing variable (exogenous) on the influenced variable

Table 7: Direct Effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ((O/STDEV))	P values
Management Accounting -> Decision Making	0,727	0,738	0,083	8,724	0,000

Source: Data processed PLS V. 04

The effect of management accounting on decision-making has a path coefficient of 0.727. This shows that the higher the management accounting, the higher the decision-making at PT. PLN (Persero) UP3 Medan. This effect has a probability value (p-values) of 0.000 <0.05, there is a

(endogenous). The criteria for concluding are if the f2 value is 0.02, there is a small (weak) effect of the exogenous variable on the endogenous, the f2 value is 0.15, there is a moderate effect of the exogenous variable on the endogenous or moderate, the f2 value is 0.35, there is a large effect of the exogenous variable on the endogenous.

Table 6: F square Test

	Management Accounting	Decision Making
Management Accounting		1,119
Decision Making		

Source: Data processed PLS V. 04

Hypothesis Test/Direct Effect

Direct effect (I Ghozali & Latari, 2015) is a direct effect that can be seen in the long term from the results of the path coefficient on *exogenous* and *endogenous* variables as follows:

significant influence between management accounting on decision making, and it can be interpreted that management accounting can have a direct positive influence on decision-making.

DISCUSSION

Based on the results of research and discussion, shows that Management Accounting has a positive and significant effect on Decision Making at PT. PLN (Persero) UP3 Medan. The meaning that the management accounting applied to PT. PLN (Persero) UP3 Medan is effective in influencing decision-making. In the PT. PLN (Persero) UP3 Medan. Decision-making from the head of the organization affects the implementation of the tasks assigned to subordinates because the decisions taken by a leader are expressed in the form of words and formulated in a regulation, order, instruction, policy, and other forms desired by the leader. Errors in decision-making by leaders such as the preparation of subordinate task implementation guidelines can result in errors in the implementation of employee (subordinate) tasks which in turn can hinder the achievement of organizational goals. This can happen because the guidelines for carrying out the tasks given by the leadership are not clear. The task implementation guidelines are less clear due to the lack of effectiveness of the leadership in making decisions.

Field facts show that the effectiveness of Management Accounting is due to Decision making from the head of the organization affects the implementation of tasks assigned to subordinates because decisions taken by a leader are expressed in the form of words and formulated in a regulation, order, instruction, policy, and other forms desired by the leader. Errors in decision-making by leaders such as the preparation of subordinate task implementation guidelines can result in errors in the implementation of employee (subordinate) tasks which in turn can hinder the achievement of organizational goals. This can happen because the guidelines for carrying out the tasks given by the leadership are not clear. The task implementation guidelines are less clear due to the lack of effectiveness of the leadership in making decisions.

The above research is supported by the results of Hasnawati's research (2020) which states in her research that Management Accounting has a positive and significant effect on decision-making at PT. BRI Bulukumba supported by Denziana's research (2015) Management accounting information is effective for decision-making for management.

CLOSING

Based on the results of research and discussion of the Effect of Management Accounting on Decision Making at PT. PLN (Persero) UP3 Medan can be concluded as follows: Management Accounting has a positive and significant effect on Decision Making at PT. PLN (Persero) UP3 Medan. The meaning that the management accounting applied to PT. PLN (Persero) UP3 Medan is effective in influencing decision-making. In the Medan up3 of PT PLN (Persero).

Declaration by Authors

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