# CHAPTER III RESEARCH METHODS

# A. Subject of Research

The population in this research was Regional Device Organization of Bantul Regency, so that the sample in this research were 30 Regional Device Organizations in Bantul Regency.

# **B.** Sampling Technique

The sampling technique used is Purposive sampling, which is a non-probability sample that is selected based on characteristics of a population and the objective of the study.

Table 3.1 **Population and Research Samples** 

	<del> </del>		
No	Regional Device Organization	Population	Sample
1.	Regional House of Representatives Secretariat	1	1
2.	Service	19	19
3.	Agency	6	6
4.	Office	1	1
5.	District	17	4
	Total	44	30

# C. Data Type

The techniques used in data collection are using primary data, (Sekaran, 2011), in which the data refers to information obtained from the first hand by researchers relating to variable interests for specific study purposes. Primary data sources are individual respondents and focus groups. The internet can also be a primary data source if questionnaires are disseminated via the internet.

#### **D.** Data Collection Technique

The data collection technique used in this research was a questionnaire by distributing the questions list. By way of a survey directly to the Regional Device Organization of Bantul Regency using questionnaire instruments, questionnaire surveys are data collection techniques that are carried out by giving respondents a set of questions or questions in writing to answer (Sugiyono, 2005). In compiling the data through questionnaire instrument, the researcher used the Likert Scale. Sugiyono (2007) states that the Likert scale is a scale used to measure attitudes, opinions, one's perceptions of social phenomena.

#### E. Operational Definition of Research Variable

#### 1. Financial Statement Information Quality

Financial Statement Information Quality (Y) is the ability of information presented in financial statements that can be understood and meets the needs of users in decision making, free from errors, and can be relied on so that the financial statements can be a reference in evaluating financial statements.

The quality of financial statements in this research was measured using a questionnaire used by Elvin Andrianto (2017), while the variable financial statement quality indicators consisted of Relevant, Reliable, Comparable, and Understandable measurement using a Likert scale from a score of 1 to 5. Points of assessment in the

questionnaire for each question namely "Strongly Disagree", "Disagree", "Neutral", "Agree", and "Strongly Agree".

#### 2. Competency of Human Resources

Competency of human resources  $(X_1)$  was very necessary for creating a financial statement quality is, therefore, the need for human resources who have the educational background, training, and adequate experience in the financial field to achieve the goal organization effectively and efficiently.

The competence of human resources in this study was measured using a questionnaire used by Elvin Andrianto (2017), while the indicators of the competency variable of human resources consisted of the level of education, training, and experience. The measurements uses a Likert scale from a score of 1 to 5. Points are assessed in the questionnaire for each question namely "Strongly Disagree", "Disagree", "Neutral", "Agree", and "Strongly Agree".

# 3. Utilization of Information Technology

The utilization of information technology  $(X_2)$  is the ability of an accountant to use existing technology both in completing tasks and improving performance. In addition to information technology as computer technology (hardware and software) for process and also serves as a storage of information communication technology for the dissemination of information.

The utilization of information technology in this research was measured using a questionnaire used by Elvin Andrianto (2017), as for the variable indicators of the utilization of information technology which consisted of computer and network usage. measurements using a Likert scale with a score of 1 to 5. Points are assessed in the questionnaire for each question namely "Strongly Disagree", "Disagree", "Neutral", "Agree", and "Strongly Agree".

## 4. Regional Financial Accounting System

The regional financial accounting system  $(X_3)$  is the ability of an accountant in a series of manual and computerized procedures starting from data collection, recording, summarizing, and reporting on the financial position and government operations.

The measurement of regional financial accounting system variables in this study uses a questionnaire used by Putri Novia Fajar Rini (2017), while the variable indicators of regional financial accounting systems consist of an accountant's understanding in data collection, recording of financial statements, reporting of financial statements and reporting of financial position. Measurements use a Likert scale score of 1 to 5. Points are assessed in the questionnaire for each question namely "Strongly Disagree", "Disagree", "Neutral", "Agree", and "Strongly Agree".

#### 5. Organizational commitment

Organizational commitment (Z) is the attitude or form of a person's behavior towards the organization in the form of loyalty and achievement of the organization's vision, mission, values , and goals.

The Measurement of organizational commitment variables in this study used a questionnaire by Elvin Andrianto (2017), in which the indicators of organizational commitment variables are from the components of effective, normative components, and sustainable components. In this instrument, the measurement uses a Likert scale from a score of 1 to 5. Points are assessed in the questionnaire for each question namely "Strongly Disagree", "Disagree", "Neutral", "Agree", and "Strongly Agree".

The operational variable of research is an explanation of Variables, Dimensions, Indicators, and Scale of measurments. Each variable that will be used in this study, based on table 1.3 as follow:

Table 3.2
Operational Variables

operational variables			
Variables	Dimensions	Indicators	Scale of
			Measurement
Financial	Relevant	The Financial	Likert scale
Statements of		statements that	
Local Government		produced can	
Quality (Y)		provide	
		information to	
Source: in		correct	
Statement of		expectations in the	

Variables	Dimensions	Indicators	Scale of
			Measurement
Financial		past.	
Accounting		The financial	
Concepts (SFAC)		statements that	
No. 2 of 1980		produced can	
about the		provide financial	
qualitative		information in the	
characteristic of		next period	
accounting		completing	
information		financial	
		statements on time.	
	Can be understood	Use financial	Likert scale
		statement	
		information to	
		make decisions.	
	Reliable	Financial	Likert scale
		statements present	
		information in the	
		form of cash flow	
		statements	
		Financial	
		statements consist	
		of budget	
		realization reports,	
		balance sheets,	
		and note to	
		financial	
		statements.	
		The financial	
		statements consist	
		of the beginning	
		balance, addition,	
		use, and ending	
		balance of	
		inventory money.	
	Can be compared	Financial	Likert scale
		statements consist	
		of budget	
		realization reports,	
		balance sheets and	
		note to financial	
		statements that can	
		be compared with	

Variables	Dimensions	Indicators	Scale of Measurement
		the financial statements of the previous period in the past	
Human Resources Competency (X <sub>1</sub> )	Background	Accounting staff education background	Likert scale
Source: According to Yosefrinaldi (2013) about the definition of human resources competency	Responsibility	Financial statements based on government regulation 71 of 2010 Financial staff have experience in accounting Financial staff understand about government regulation number 71 of 2010 and 8 of 2006 Knowledge in accounting	Likert scale
	Training	Training about regional finance Understand about organizational structure	Likert scale
Use of Information Technology (X <sub>2</sub> )  Source: According to Haag dan Keen (1996) about the	Use of networks	Maintenance of office equipment Internet network at the office Internet network utilization	Likert scale
definition of information technology	Use of computers	Using a software application Computerized accounting records The use of software application in accordance with	Likert scale

Variables	Dimensions	Indicators	Scale of Measurement
		the regulations	
Regional Financial Accounting System (X <sub>3</sub> )  Source: according to the Indonesian Institute of Accountants about Characteristics of Financial Statements		Application of accounting systems based on government regulation 71 of 2010	Likert scale
		Transaction analysis on every financial transaction	
		Recording on each transaction	
		Recording on each transaction accompanied by evidence	
		Chronological recording of each transaction	
		Classification on each transaction	
		Financial reporting consistently and periodically	
Organizational Commitments (Z) Source: according	Affective Components	Feel proud to be part of the regional work unit Feel emotionally	Likert scale
to Nowday about three aspects of commitment		bound to the workplace Trust in	
		organizational values in regional work unit	

Variables	Dimensions	Indicators	Scale of
			Measurement
	Normative	high loyalty	Likert scale
	Components	Feeling not	
		committed if you	
		do not provide	
		professional	
		capacity for	
		regional work unit	
	Sustainable	Feeling heavy	Likert scale
	Components	leaving regional	
		work unit for other	
		jobs with lower	
		salaries and	
		benefits.	
		Feeling heavy	
		leaving regional	
		work unit because	
		you feel you don't	
		have a better job	
		choice.	
		Will not leave	
		regional work unit	
		because of	
		financial needs	

# f. Data Analysis Techniques

To analyze the relationship of Human Resource Competence  $(X_1)$ , Utilization of Information Technology $(X_2)$ , Regional Financial Accounting System  $(X_3)$  to Financial Statement Information Quality(Y) with Organizational Commitment (Z) as a moderating variable, data quality testing needs to be done first.

# 1. Validity Test

Validity test of items can be done using SPSS software. For this process, the Pearson Product Moment Correlation Test will be used. In this test,

each item will be tested for its relation with the total variable score in question. In this case, each item in the variables X, Y, and Z will be tested for relation to the total score of the variable. An item should have a correlation (r) with a total score of each variable> 0.6.

# 2. Reliability Test

Reliability test can be done with the test Cronbach Alpha. In this case, each item in the variables X, Y, and Z will be tested in relation to the total score of the variable. Requirements that must be met are:

- a. If alpha> 0.90 then reliability is perfect
- b. If alpha is between 0.70 0.90 then reliability is high
- c. If alpha is between 0.50 0.70 then moderate reliability
- d. If alpha <0.50 then reliability is low

#### 3. Descriptive Statistic

Descriptive statistics show the main picture of the condition of each variable in the study. This study uses three parameters in describing the condition. The three parameters are, the range of scores (maximum and minimum), mean, and median (Prasati, 2017) in Islamiyah (2018).

#### 4. Classical Assumption Test

## a. Normality Test

A normality test is performed to test whether the data being analyzed is normal distribution or not. Good data is data that is normally distributed or near normal. Normality can be detected using non-parametric statistical tests Kolmogorov Smirnov. The assumptions are

if Asymp Sig 2 tailed > significance level ( $\alpha = 0.05$ ), thus the data is not distributed normally.

#### b. Multicollinearity Test

Multicollinearity test is to test whether there is a correlation between independent variables (Nazzarudin & Basuki, 2016). Research data can be said well if not exposed to multicollinearity. To detect the presence or absence of multicollinearity by looking at the value of the variance inflation factor (VIF). If the VIF value is < 10, there is multicollinearity among the independent variables.

#### c. Heteroscedasticity Test

The heteroscedasticity test aims to test whether, in the regression model, there is a variance inequality of one residual one observation to another observation. Research data can be said well if not exposed to heteroscedasticity. If the variance of the residual one observation to another observes remains, it is called heteroscedasticity. To detect whether or not heteroscedasticity is used GLEJSER test. If the value of sig > 0.05 it can be said that it is not affected by Heteroscedasticity.

## 5. Hypothesis Test (Regression models)

#### a. Testing with Multiple Regression Analysis

The multiple regression analysis is a set of statistical processes for estimating the relationships between a dependent variable and one or more independent variables. The following is the regression model:

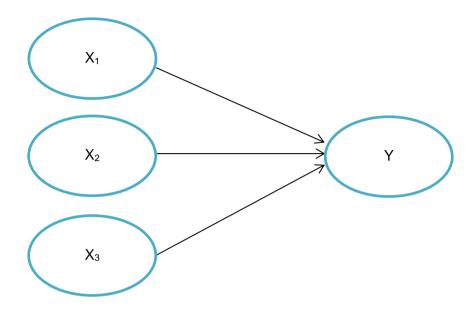


Figure 3.1 Research Models 1 for Hypothesis 1-3

1st Equation

$$Y = \propto + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

# Explanation:

Y = Financial Statement  $\beta_{1}$ -  $\beta_{6}$  = Coefficient Regression X1 = Human Resources

X2 = Technology Information

X3 = Regioal Financial Accounting Systems

e = Error

The equation examines whether the relationship between Human Resources Competency, Technology Information, Regional Financial Accounting Systems, as variable independent and Financial Statement as variable dependent.

# b. Testing with Moderate Regression Analysis

The Moderated Regression Analysis (MRA) is a special application of multiple linear regression in which the regression equation contains an element of interaction. The following is the regression model: :

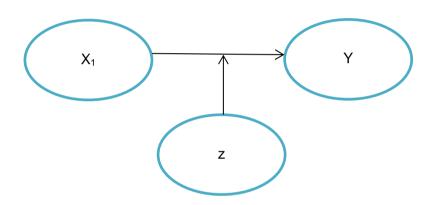


Figure 3.2 Research Models 2 for Hypothesis 4

2<sup>nd</sup> Equation

$$Y = \propto + \beta_4 X_1 + \beta_5 Z_1 + \beta_6 X_1 Z_1 + e$$

# Explanation:

Y = Financial Statement  $\beta_{4}$ -  $\beta_{6}$  = Coefficient Regression X<sub>1</sub> = Human Resources

 $Z_1$  = Organizational Commitment

 $(X_1Z_1)$  = Interaction Human Resources and Organizational

Commitment

e = Error

The equation examines whether the variabel organizational commitment can serve as a moderating variabel that can strengthen or weakan the relationship between Human Resources and Financial Statement, and the Hypothesis criteria are accepted if the values of  $b_4$  and  $b_6$  are significant (sig value < alpha 0,05) and  $b_5$  is not significant (sig value > alpha 0,05)

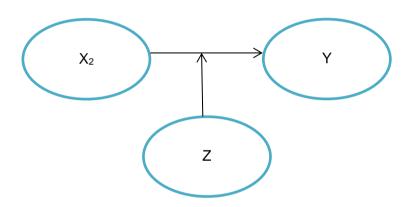


Figure 3.3 Research Models 3 for Hypothesis 5

3<sup>rd</sup> Equation

 $Y = \alpha + \beta_7 X_2 + \beta_8 Z_1 + \beta_9 X_2 Z_1$ 

# Regression Model 3

# Explanation:

Y = Financial Statement  $\beta_4$ .  $\beta_6$  = Coefficient Regression  $X_2$  = Technology Information  $Z_1$  = Organizational Commitment

$$(X_2Z_1)$$
 = Interaction Human Resources and Organizational  
Commitment = Error

The equation examines whether the variable organizational commitment can serve as a moderating variable that can strengthen or weaken the relationship between Technology Information and Financial Statement, and the Hypothesis criteria are accepted if the values of  $b_7$  and  $b_9$  are significant (sig value < alpha (0.05) and  $b_8$  is not significant (sig value > alpha 0.05)

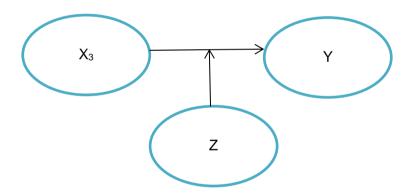


Figure 3.4
Research Models 4 for Hypothesis 6

4<sup>rd</sup> Equation

$$Y = \alpha + \beta_{10}X_3 + \beta_{11}Z_1 + B_{12}X_3Z_1$$

# Explanation:

Y = Financial Statement  $\beta_{10}$ -  $\beta_{12}$  = Coefficient Regression

X<sub>3</sub> = Regioal Financial Accounting Systems

Z = Organizational Commitment

 $(X_3Z_1)$  = Interaction Human Resources and Organizational Commitment

e = Error

The equation examines whether the variable organizational commitment can serve as a moderating variable that can strengthen or weaken the relationship between Regional Financial Accounting Systems and Financial Statement, and the hypothesis criteria are accepted if the values of  $b_{10}$  and  $b_{12}$  are significant (sig value < alpha 0.05) and  $b_{11}$  is not significant (sig value > alpha 0.05)

In this research, the hypothesis is tested through:

#### c. F-Test

F-test aims to show whether or not the independent variables included in each model have a simultaneous influence on the dependent variable. Testing is done by using significance level 0.05 ( $\alpha = 5\%$ ). Acceptance or rejection of the hypothesis is done by the following criteria:

a) If the significance value < 0.05 and  $\beta$  has the same direction with the hypothesis, then Ha is accepted. It means that there is a significant regression coefficient. Thus it can be concluded that there is a significant influence between independent variables towards the dependent variable.

b) If the significance value > 0.05, then Ha is rejected. It means that the coefficient regression is not significant. Thus it can be concluded that the independent variable has no effect or influence towards the dependent variable.

#### d. t-test

The t-test is aimed to show how far the influence of an independent variable in explaining the dependent variable partially is. Testing is done by using significance level 0.05 ( $\alpha = 5\%$ ). Acceptance or rejection of the hypothesis is done by the following criteria:

- a) If the significance value is < 0.05 and  $\beta$  has the same direction with the hypothesis, then Ha is accepted. It means that there is a significant influence between the independent variable towards the dependent variable.
- b) If the significance value is > 0.05, then Ha is rejected. It means that there is no significant influence between the independent variable towards the dependent variable.

# e. Adjusted R<sup>2</sup>

The value of adjusted  $R^2$  is used to measure the capability level of the model in explaining the variation of independent variables. The coefficient of determination us between zero and one. The small value of adjusted  $R^2$  means that the ability of an independent variable to explain the variation of the dependent variable is very limited if adjusted  $R^2$ value

is closer to one (1), it means that the independent variable provides all of the information needed to predict the variation of the dependent variable. To test the moderating variable if the adjusted  $R^2$  value in regression moderating > adjusted  $R^2$  value in regression linear, it means that the moderating variable strengthens the relationship between the independent variable towards the dependent variable.