#### **CHAPTER IV**

#### ANALYSIS

In this research, data analysis was carried out through two stages of analysis, namely descriptive analysis and quantitative analysis. Descriptive analysis basically deals with whats there's inside data. It deals with analyzing your datasets and driving insights. It doesn't deal with coming with the right recommendation/active to solve a particular problem (Verma, 2017), while quantitative is a technique that seeks to understand behavior by using mathematical and statistical modeling, measurement, and research (Kenton, 2019). Then this analysis is divided into four parts. Firstly, the results of data collection that explains the amount of data that is ready to be analyzed. Secondly, the results of data collection that describe in detail the number and grouping of respondents based on gender criteria. Thirdly, the results of data testing is related to the validity and reliability test. Fourthly, the discussion of research results related to hypothesis testing.

## 4.1. Validity Test and Reability Test

#### a.Validity Test

This validity test used 114 pople as respondent. Validity test aims to measure the extent to which the accuracy of a measuring instrument performs its measuring function. The technique used to test validity is product moment correlation analysis. The measurement instrument is said to have high validity if the tool runs a measuring function that is in accordance with the purpose of the measurement. Statistically, the

number of correlation coefficients obtained must be compared with the r table criticism number (0.184). If the correlation coefficient is > 0.184 and p-value <0.05, the instrument is declared valid and vice versa if the correlation coefficient <0.184 and p-value > 0.05, the item is declared null and void.

Validity Test Results can be shown in the following table:

			Coefficient				
No	Variable	Indikator	Correlation	r table	p-value	Annotation	
1	Perceived ease of use	PEoU1	0.8555	0.184	0.000	Valid	
		PEoU2	0.8962	0.184	0.000	Valid	
		PEoU3	0.8620	0.184	0.000	Valid	
		PEoU4	0.8870	0.184	0.000	Valid	
2	Perceived usefulness	PU1	0.9262	0.184	0.000	Valid	
		PU2	0.8894	0.184	0.000	Valid	
		PU3	0.9018	0.184	0.000	Valid	
		PU4	0.8927	0.184	0.000	Valid	
2	Attitude toward using			()			
3	electronic money	ATU1	0.5775	0.184	0.000	Valid	
		ATU2	0.8592	0.184	0.000	Valid	
		ATU3	0.8187	0.184	0.000	Valid	
4	Behavioral Intention to						
4	use electronic money	BI1	0.7179	0.184	0.000	Valid	
	""" ?(()	BI2	0.8476	0.184	0.000	Valid	
	Nul	BI3	0.7195	0.184	0.000	Valid	
	"91"	BI4	0.8805	0.184	0.000	Valid	

## Table 4.1 Validity Test Result

Source : Primery data proceesed, 2018

From Table 4.1 above, it can be known that the magnitude of the correlation of all questions consisted of 4 questions for Perceived ease of use variables, 4 questions for Perceived usefulness, 3 items for Attitude variables toward using electronic money and

4 items for Behavioral Intention to use variables. From the results of the calculation of the correlation coefficient, it has value of > r table (0.184) and p-value of <0.05. It can be concluded that all items are declared valid. Thus, all the questions in the research instrument can be declared feasible as instruments for measuring research data.

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#### b. Reability Test

This test is conducted to determine the extent to which a measuring instrument can provide consistent results when used to measure the same object with the same measuring instrument. The technique used to assess reliability is Cronbachis Alpha, by distributing questionnaires / questionnaires to consumers who know and own Apple laptops and students at several universities in Yogyakarta. A research instrument can be said to be reliable (reliable), if it is more than the value of 0.6.

The results of reliability test can be shown in the following table:

	Coef. Alpha	Critical	
Variable	Cronbach	Value	Annotation
Perceived ease of use	0.887	0.6	Reliable
Perceived usefulness	0.992	0.6	Reliable
Attitude toward using electronic money	0.629	0.6	Reliable
Behavioral Intention to use electronic money	0.796	0.6	Reliable

Tabel 4.2 Reability Test Result

Source: Primery proceesed data, 2018

Based on the summary of reliability test results as summarized in the table above, it can be seen that the value of the Cronbach Alpha coefficient on all variables is greater than the critical value of 0.6. All the questions in the research variable are reliable. Thus, the questions in the research variable can be used for further research.

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## 4.2. Descriptive Analysis

Descriptive analysis is intended to explain research data in the form of frequency. The data is usually in the form of tables and analysis based on research data. Descriptive analysis describes the description of the respondent's characteristics and explains the respondent's assessment of the Perceived ease of use variables, Perceived usefulness, Attitude toward using and Behavioral Intention to use in using e-money.

## 4.3. Respondent Characteristic

The characteristics of the respondents analyzed in this research included gender.

The characteristics of the respondents can be explained as follows:

## a.Gender

The characteristics of the respondents can be explained as follows:

	Table 4.5						
Classification of Respondents by Gender							
Gender	Sum	Percentage					
Man	52	45.6%					
Woman	62	54.4%					
Total	114	100.0%					

Table 4.3

Source: Primery proceesed data, 2018

Based on Table 4.3, it can be seen that 54.4% of respondents were female and 45.6% of respondents were male. This shows that women had the intention to use larger e-money application.

#### 4.4. Descriptive Statistic Valuation Research Variable

Descriptive statistics were used to explain the nature of each variable that was included in the research model. Descriptive statistics generated in the analysis were in the form of average values and standard deviations of the research variables used. The analysis were based on the answers of 114 respondents in the research questionnaire. These statistics can be seen as follows:

	-				
	n	Minimum	Maximum	Mean	Std. Deviation
PEoU1	114	2.00	5.00	4.5789	.65032
PEoU2	114	2.00	5.00	4.4737	.76668
PEoU3	114	1.00	5.00	4.2719	.98919
PEoU4	114	1.00	5.00	4.2632	.92222
Peou	114	2.25	5.00	4.3969	.72854
PU1	114	1.00	5.00	4.2895	.91906
PU2	114	1.00	5.00	4.1930	.93956
PU3	114	1.00	5.00	4.3684	.87505
PU4	114	1.00	5.00	4.1491	1.05790
PU	114	1.25	5.00	4.2500	.85510
ATU1	114	2.00	5.00	4.4474	.76531
ATU2	114	1.00	5.00	4.2018	1.08228
ATU3	114	1.00	5.00	3.9035	1.30329
ATU	114	2.33	5.00	4.1842	.81299
BI1	114	1.00	5.00	4.3009	.97179
BI2	114	1.00	5.00	4.3860	.86739
BI3	114	1.00	5.00	4.2193	1.06230
BI4	114	1.00	5.00	4.0614	1.08314
BI	114	2.00	5.00	4.2325	.80080

Table 4.4 Descriptive Statistics

Source: Primery proceesed data, 2018

Based on the results in Table 4.4, it can be seen that the assessment on Perceived ease of use variable was 4.3969 and the standard deviation was 0.72854. This shows that respondents had given a high assessment of Perceived ease of use variables. Thus, consumers had felt the ease of using e-money. Respondents in using electronic money found simple and easy to understand, easy to make transactions using electronic money, does not require much effort and feels comfortable using electronic money.

The results of data analysis on the Perceived usefulness variable was 4.2500 and the standard deviation was 0.85510. This shows that respondents had given a very high assessment of Perceived usefulness variables. Thus, the perceptions of respondents that would give benefit from e-money was quite large. The perceived benefits include using electronic money to improve performance in transactions, increase productivity, increase effectiveness in transactions. Overall, electronic money was useful in transaction activities.

The results of data analysis on the Attitude toward using variable was 4.1842 and the standard deviation was 0.81299. This shows that respondents had given high assessment of the Attitude toward using variable. Thus, consumers had good attitude toward electronic money. A good attitude was shown when using electronic money was a good idea, had enjoy feeling when using electronic money and using electronic money was a fun thing.

The results of data analysis on the Behavioral Intention to use variable was 4.2325 and the standard deviation was 0.8008. This shows that the respondent had given a very high assessment of the intention to use e-money. The desire for great intention was indicated by the desire to use electronic money in the future that will use electronic money because the application is not difficult, using electronic money in daily transaction activities is fun and had the intention to always use electronic money continuously in every transaction.

## 4.5. Multiple Linear Regretion Analysis

Multiple linear regression analysis explains the effect of perceived ease of use on perceived usefulness, the effect of perceived ease of use and perceived usefulness on attitude toward using new technology and the influence of perceived usefulness and attitude toward using new technology and behavioral Intention to use new technology. Regression analysis is divided into three stages of analysis. Firstly, to carry out the influence of perceived ease of use new technology on perceived usefulness. Secondly, to influence perceived ease of use new technology and perceived usefulness on attitude toward using new technology. Thirdly, to influence perceived usefulness and attitude toward using new technology and behavioral Intention to use fulness and attitude toward using new technology. Thirdly, to influence perceived usefulness and attitude toward using new technology and behavioral Intention to use. The results of regression analysis can be shown in Table 4.11.

		Koef.						
Model	Independent Variable	Reg	BETA	t	sig	R2	F	Sig
Ι	(Constant)	-0.185		-0.733	0.465			
	Perceived Ease of Use	1.009	0.859	17.790	0.000	0.859	316.488	0.000
	Dependent Var: Perceived usefulnesss							
II	(Constant)	1.577		3.934	0.000			
	Perceived Ease of Use	0.588	0.527	3.352	0.001	0.283	21.866	0.000
	Perceived usefulnesss	0.005	0.005	0.034	0.973			
	Dependent Var: Attitude Toward Using							
III	(Constant)	0.628		2.267	0.025			
	Perceived usefulnesss	0.612	0.653	10.084	0.000	0.632	95.318	0.000
	Attitude Toward Using	0.240	0.244	3.762	0.000			
	Dependent Var: Behavioral Intention to Use							

 Tabel 4.5 Regretion Analysis Result

Annotation \* : significant in level 5% (p<0,05)

Source : Primary data processed, 2018

#### 4.5.1. F Test and Coefficient Determination

The results of F test on model 1 obtained the F Statistic value of 316.488 and the p-value of 0.000 <0.05. Thus, simultaneously the perceived ease of use variable had a significant effect on perceived usefulness in the use of electronic money. While the magnitude of the determination coefficient of 0.859 shows that perceived usefulness of 85.9% can be explained by perceived ease of use variables, while the remaining 14.1% perception of the benefits of using electronic money can be explained by other variables.

The results of the F test in model 2 obtained the F Statistic value of 21.866 and the p-value of 0.000 < 0.05. Thus, simultaneously the perceived ease of use and

perceived usefulness variables significantly influence attitude toward using the use of electronic money. While the magnitude of the determination coefficient of 0.283 shows that Attitude toward using in the use of electronic money as much as 28.3% can be explained by Perceived ease of use and Perceived usefulness variables, while the remaining 71.7% of attitude toward using the use of electronic money can be explained by other variables.

The results of the F test in model 3 obtained the F Statistic value of 95,318 and p-value of 0.000 <0.05. Thus, simultaneously the perceived usefulness and attitude toward using variables had significant effect on behavioral intention to use on the use of electronic money. The magnitude of the determination coefficient of 0.632 shows that Behavioral Intention to use electronic money was 63.2% which was explained by the perceived usefulness and attitude toward using variables while the rest was 36.87%. Behavioral Intention to use electronic money can be explained by other variables.

## 4.5.2. T Test

The t test is used to test the effect of partial independent variables on the dependent variable. T test in this research was proven by hypothesis 1 up to hypothesis 3b.

The first hypothesis (H1) in this research stated that "There is a positive relationship between the perceived ease of use of e-money and perceived Usefulness of use of e-money". In this test as seen in Table 4.5, Model I Significance test on hypothesis 1 proved that the first hypothesis (H1) gave positive impact because it obtained positive beta coefficient value of 0.859 with t count of 17.790 and p-value of

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0.000 or smaller than 0.05 which means significant at the level significance of 5%. Thus, H1 in this research was supported by data. This means that the influence of perceived variables ease of use on perceived usefulness in the use of electronic money. The easier the consumer's perception in using electronic money, the higher the perceived benefits.

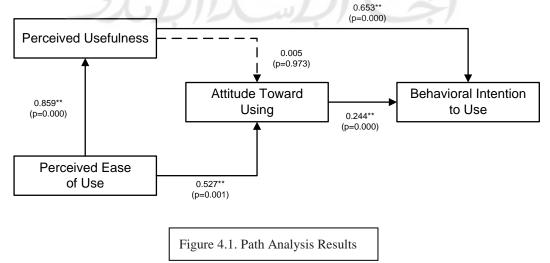
The second hypothesis (H2a) in this research stated that "H2a: There is a positive relationship between perceived usefulness and attitude toward using e-money". In this test, Model II regression analysis used was shown in Table 4.5. Significant test on hypothesis 2a was not proven significantly because positive beta coefficient values was 0.005 and p-value was 0.973 or greater than 0.05, which means the relationship of benefit perception variables and non-significant attitudes at 5% significance level. Thus, H2a is rejected. This means that there is no influence between perceived usefulness variable on attitude toward using electronic money.

The second hypothesis (H2b) in this research stated that "H2b: There is a positive relationship between perceived ease of use e-money and the attitude toward using e-money". In this test, Model II regression analysis is used was shown in Table 4.5. Significant test on the H2b hypothesis was proven that the second hypothesis (H2b) gave positive impact because the positive beta coefficient value obtained was 0.527 and the p-value was 0.001 or smaller than 0.05 which means significant at the 5% significance level (H2b was supported). This means that the easier the use of e-money, the higher the respondent's attitude toward electronic money.

The third hypothesis (H3a) in this research stated that "H3a: There is positive relationship between attitudes toward using e-money and behavioral intention to use e-money". In this Model III test, regression analysis was shown in Table 4.5. Significant test on hypothesis 3a was proven positively to give impact because positive beta coefficient value was 0.244 and p-value was 0.000 or less than 0.05 which means significant at 5% significance level or in other words that H3a was supported by data. This means that the higher the attitude of respondents in the use of electronic money, the intention to behave using electronic money is also higher.

The third hypothesis (H3b) in this research stated that "H3b: There is a positive relationship between perceived usefulness of e-money and behavioral intention to use e-money". In this test Model III, regression analysis was used as shown in Table 4.5. Significant test on hypothesis 3a was proven significantly because positive beta coefficient values was 0.653 and p-value was 0.000 or less than 0.05 which means significant at 5% significance level or in other words that H3b is supported in data. This means that the greater the perceived benefit of the respondents in using electronic money, the higher the intention to behave using electronic money.

Based on the test results, the results of path analysis can be described as shown in Figure 4.1.



The results of path analysis shows that most of the relationships among hypothesized variables proved to have significant effect on the level of 5%. Only the influence of perceived usefulness on attitude toward using electronic money was not proven to be significantly related to Attitude toward using electronic money.

## 4.5.3. The Effect of Perceived ease of use on perceived usefulness

The test results partially found that perceived ease of use had a significant effect on Perceived usefulness. This means that the perception of respondents was the easier the use of e-money, the higher the perceived benefit. Davis (1989) defined perceived ease of use as the level of one's belief that in using a particular system, it had no hard effort. Even though the business according to each person is different, but in general, to avoid rejection from system users on the system being developed, the system must be easily applied by users without issuing a business that is considered burdensome. Ease of perceived use is one of the constructs in TAM that has been tested in the research of Davis et al. (1989). The results of these studies indicate that this factor is proven to explain a person's reasons for using the information system and explain that the new system being developed is accepted by the user. If someone finds it easy to use information technology (in this case e-money), they will feel that information technology is beneficial to them.

The results of the research supported the research of Teo et al. (2008) that also found perceived ease of use was supported by perceptions of the usefulness / benefits of using technology before the teaching process in Singapore and Malaysia. Furthermore, Zahra (2009) proved that the perception of ease of use has positive influence on the perception of usability / benefits of the internet as a reference for students.

#### 4.5.4. The Effect of Perceived usefulness on Attitude Toward Using E-money

The test results partially found that Perceived usefulness did not significantly influence Attitude toward using. This means that the size of the benefits felt by respondents in using e-money had not been able to improve the attitude of respondents. This was probably due to the imbalance between the benefits felt by attitudes toward emoney. Based on the facts in the field, it shows that there were still many problems with e-money in various regions, such as e-money refilling that is often problematic, problems with payment receipts that often run out, less responsive or slow tapping machines, and tapping distances that are still difficult to reach by some motorists. This was because the e-money information system is relatively new. Thus, were still many evaluations and improvements to this system, and this will somewhat disrupt the operation of the system.

## 4.5.5. The Effect of Perceived Ease of Use on Attitude Toward Using E-Money

The test results partially found that Perceived ease of use had significant effect on Attitude toward using electronic money. This means that the respondents' perceptions of using e-money were easier. The attitude toward e-money will also be higher. According to Davis et al. (1989), perceived ease of use is defined as the degree to which someone believes that using a technology will be free from effort. From the definition it is known that the perception of ease of use is also a belief about the decision making process. If someone feels that the information system is easy to use, he will form a good attitude because trust is one of the components of attitude. Conversely, if someone feels that the information system is not easy to use, he will not evaluate that the system is not good or has a negative attitude (Hartono, 2007)

The results of the research supported the research of Kim et al. (2009) who found that attitudes toward the use of the system were postulated to partly mediate the influence of perceived ease of use and perceived usefulness in behavioral intentions.

# 4.5.6. The Effect of Attitude Toward Using E-money on Behavioral Intention Use E-money

The test results of this research found that Attitude toward using had a significant effect on Behavioral Intention to use. This means that the higher the attitude of respondents in using e-money, the higher their interest in using e-money. Attitudes toward behavior are defined as positive or negative evaluations of individuals in carrying out behavior. This involves an individual's assessment that behavior was good or bad and also a general evaluation that an individual tends to or is reluctant to do behavior (Ajzen & Fishbein, 1980). The attitude toward the use of the system conceptually and empirically differs from strength in attitude (for example, weak or strong). Attitudes influence a person's behavior by filtering information and forming individual perceptions (Fazio, 1986), while strength in attitudes reinforces or neutralizes the influence of attitudes on behavior (Petty & Krosnick, 1995). For example, users who feel useful by using certain technologies can use the technology continuously but if users feel uncomfortable using certain technologies, they will leave the technology behind and look for new technology.

#### 4.5.7. The Effect of Perceived Usefulness on Behavioral Intention to Use E-Money

The test results partially found that Perceived usefulness had significant effect on Behavioral Intention to use. This means that the greater the benefits felt by users in using e-money, the higher their interest in using e-money. Usefulness is as a level where someone believes that the use of a particular technology will improve the work performance of that person (Davis, 1986). The usefulness of estimating one factor is that work is easier (makes job easier), useful (usefull), increasing productivity (increase productivity), encouraging effectiveness (enchance effectiveness), improving job performance (improve job performance). Benefit perceptions can also be interpreted as the benefits of using e-money that can improve performance and the performance of people who use it. A person will intend to use e-money if the person believes that emoney can provide benefits to his work and his achievement.

The results of the research supported the research of Zahra (2009) which proved that perceived usefulness had positive and significant effect on behavioral intention in using the internet. In addition, Puschel & J. A. Mazzon (2010) found that behavioral control significantly affected the intention to adopt E-money as a new technology to do transactions.