

ANALYSIS THE EFFECT OF PERFORMANCE EXPECTANCY, EFFORT EXPECTANCY, SOCIAL INFLUENCE, FACILITATING CONDITION AND PERCEIVED TRUST ON THE INTEREST USER OF BANK'S ELECTRONIC MONEY SERVICES (E-MONEY) IN INDONESIAN

(Empirical Study of Users Electronic Money Services (e-money) in Jabodetabek) By:

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ABSTRACT

This study aims to determine the effect of performance expectations, business expectations, social influences, facilitating conditions and perceived trust in how public interest in using electronic money is in transactions with cards that have been issued by banks in Indonesia.

Data collection methods used are primary in the form of questionnaire data distributed to correspondents of electronic money users in the Greater Jakarta area. By using a sample of 100 respondents from the communities of Jakarta, Bogor, Depok, Tangerang and Bekasi who make transactions using electronic money.

The analytical method used is individuals who use electronic money in their daily transactions. The data analysis technique used for this research is SPSS 23 software by testing normality, namely kolmogrov-Smirnov and followed by two average difference tests to test the hypothesis of five independent variables using Paired T-test and test the Wilcoxon Signed Rank Test hypothesis with a level 0.05 significance.

The results of this study are the influence of the five dependent variables on the interest of users of electronic money services. Based on this study, the conditions of facilitating conditions are the main factors that influence people's interest in using e-money services in addition to other variables that have a significant influence as well.

Keywords: E-money, Modification of UTAUT, Community Interest, SPSS 23

1. INTRODUCTION

Payments The development of technology today is so rapid that almost every human activity cannot be separated from technology. The banks are currently carrying out various innovations through modern technology to provide the best service. One of the innovations developed by banks is in terms of payment. (Kim, 2013, p.103-104).

The development of e-money through information technology innovation continues to this day. The development of e-money is able to create a trendless cash society, namely a society's behavior using non-cash transactions, by utilizing the facilities offered by the electronic transaction tools.

Pikkarainen, et al. (2004) developed a model of acceptance of e-banking technology taken from one theory of the use of an information technology system (Technology Acceptance Model). After going through further testing, they found four main factors that play an important role as a direct determinant of behavioral intention and user interest namely, performance expectancy, effort expectancy, social influence, and facilitating conditions. While others are not significant as determinants directly from behavioral intention.

In response, an empirical study is needed to evaluate the real conditions of users towards the applied electronic technology services. What is the perception of each user, what factors must be corrected in the implementation of the new system so that it is effective, uses and uses it optimally. This test uses the UTAUT model by analyzing the effect of performance expectancy, effort expectancy, social influence, facilitating conditions, and perceived trust on user interest of electronic money transaction services (e-money)

2. THEORY STUDY

2.1 Bank

The Bank is a business entity that is engaged in the financial sector whose main tasks include raising funds, from the public in the form of demand deposits, savings and time deposits or other forms and channeling them to the public. In accordance with Law No. 10 of 1998, a bank is a business entity that collects funds from the public in the form of deposits and distributes it to the public in the form of credit and / or other forms in order to improve the standard of living of the people. So basically a bank is a business entity that is engaged in the financial sector whose main duties include collecting funds from the public in the form of demand deposits, savings and time deposits or other forms that are equalized in lending as well as providing banking services both domestically and abroad for meet customer needs (Riyadi, 2017, pp 50).

2.2 Electronic Money (E-Money)

E-money is carrying out the function of money with electronic equipment. Next is a valuable information that is explained by a digital signal where a bank sends it by guaranteeing the nominal value (Kim et.al, 2013).

2.3 Acceptance Theory and Use of Technology Modifications (UTAUT Model)

UTAUT is an integrated theory of technology acceptance and use, which aims to explain users' intentions to use information systems and user behavior (Venkatesh et al, 2003).

2.3.1 Performance Expectations

Performance expectations are defined as the extent to which an individual believes that using the system will help him to achieve profits in job performance and is the strongest predictor of intention. Performance expectations are related to perceived usefulness, as long as individuals believe the system will help them do their jobs better (Venkatesh et al., 2003).

2.3.2 Effort Expectations

Business Expectation is the level of ease of use of the system that will reduce the efforts (energy and time) of individuals in carrying out their work (Venkatesh et al., 2003).

2.3.3 Social Influence

Social Influence reflects the influence of environmental factors such as the opinions of friends of users, relatives, and people who have special relationships, convincing the user to use a new technology (Venkatesh et al., 2003).

2.3.4 Facilitating Conditions

Where someone believes that the infrastructure owned by the organization and other technical facilities are available to support the use of the system (Venkatesh et al., 2003).

2.3.5 Perceived trust

Key factors and foundations in developing a business in online transaction services. Trust is determined because taking a more understanding of trust as an important feature that affects consumers (Venkatesh et al., 2003).

2.4 The Frame of Mind

The Frame of mind is a conceptual model of how theory relates to various factors that have been identified as important. The following is a picture of the relationship between each variable determinant of interest in the user interest of electronic money transaction services (e-money).

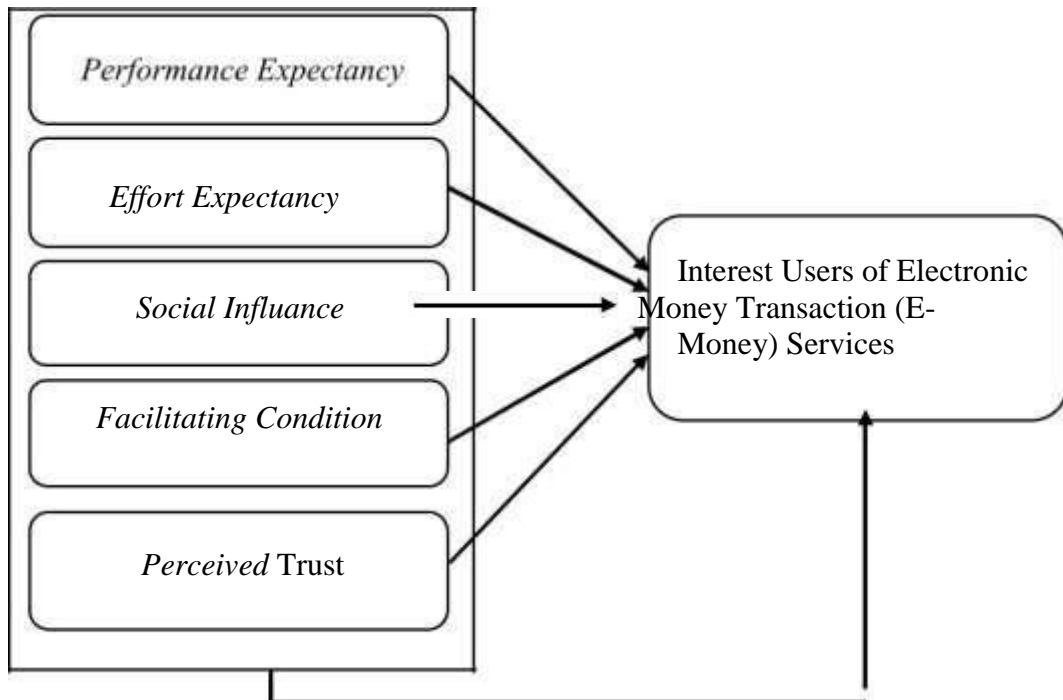


Figure 1. Frame of Mind

Hypothesis:

H1: Performance Expectancy affects the user interest of electronic money transaction services (e-money)

H2: Effort Expectancy affects the user interest of electronic money transaction services (e-money)

H3: Social Influence influences the user interest of electronic money transaction services (e-money)

H4: Facilitating Conditions affect the user interest of electronic money transaction services (e-money)

H5: Perceived Trust affects the user interest of electronic money transaction services (e-money)

H6: Performance expectations, effort expectations, social influences, facilitating conditions and perceived trust in the user interest of electronic money transaction services (e-money)

3. RESEARCH METHODS

Research design is a plan or design made by the researcher, as a threat to the activities to be carried out. This study uses validity and reliability tests to determine whether the research measuring instrument is valid. Data collection will be carried out through survey techniques with questionnaires to respondents. Then, the data that has been obtained will be processed with a statistical model using the SPSS Version 23. The variables used are independent variables which include performance expectations, effort expectations, social influences, facilitating conditions and perceived trust and dependent variables. includes user interest of electronic money transaction services (e-money).

4. ANALYSIS AND DISCUSSION OF RESULTS

4.1 Descriptive Analysis

All questionnaires that have been collected will be processed for the purpose of data analysis. Processed data are all respondents' answers to each question in the questionnaire. The data is processed using the SPSS 23 program which produces statistical descriptions of the research variables as will be shown in Table 4.1 below:

Table 4.1
Responden's Answer

Descriptive Statistics			
	Mean	Std. Deviation	N
Behavior Intention	20.6400	1.58605	100
Performance Expectancy	20.3600	1.69682	100
Effort Expectancy	20.7100	1.67148	100
Social Influence	18.9300	2.15207	100
Facilitating Conditions	20.5300	1.81717	100
Perceived Trust	20.1900	1.76209	100

Source: Data Processing Results from SPSS 23 Program

4.2 Test Validity and Reliability

This study uses SPSS Software to carry out the validity and reliability test of the questionnaire.

4.2.1 Validity Test

Validity test is used to measure the validity of whether a questionnaire is used. The Product Moment Coefficient of Correlation formula is used by looking at r table as a guide to see the validity value of 0.05% or $\alpha = 5\%$. The following are the results of the validity of the research variables which can be seen in the following table:

Table 4.2
Validity Test

Variable	Question	Rule of numb	Corrected Item-Total Correlation
Performance Expectancy (PE)	PE1	0.196	0.530
	PE2	0.196	0.498
	PE3	0.196	0.544
	PE4	0.196	0.560
	PE5	0.196	0.421
Effort Expectancy (EE)	EE1	0.196	0.417
	EE2	0.196	0.503
	EE3	0.196	0.507
	EE4	0.196	0.564
	EE5	0.196	0.454
Social Influence (SI)	SI1	0.196	0.567
	SI2	0.196	0.656
	SI3	0.196	0.628
	SI4	0.196	0.522
	SI5	0.196	0.538
Facilitating Conditions (FC)	FC1	0.196	0.506
	FC2	0.196	0.537
	FC3	0.196	0.560
	FC4	0.196	0.649
	FC5	0.196	0.525
Perceived Trust (PT)	PT1	0.196	0.601
	PT2	0.196	0.568
	PT3	0.196	0.642
	PT4	0.196	0.408
	PT5	0.196	0.511

User Interest (UI)	UI1	0.196	0.432
	UI2	0.196	0.407
	UI3	0.196	0.502
	UI4	0.196	0.535
	UI5	0.196	0.435

Source: Data processing results from SPSS 23 program

Based on the test table of the independent variables and the dependent variable above which is calculated using SPSS software version 23 shows that the results of the correlation coefficient value test the overall validity of the r count value is greater than the table ($r_{table} = 0.196$). This also proves that the reliability test of the research data is valid and feasible to proceed to the next test.

4.2.2 Reliability Test

Reliability test is to determine a value that shows the consistency of a research instrument. This test aims to calculate the Cronbach's Alpha coefficient of each instrument in a variable. The basis for decision making is as follows:

1. If Cronbach's Alpha > 0.60 is reliable
2. If Cronbach's Alpha < 0.60 is not reliable

The following is the result of the reliability of the research variables which can be seen in the following table:

Table 4.3

Reliability Test

Variable	Cronbach's Alpha
Performance Expectancy	0.744
Effort Expectancy	0.726
Social Influence	0.798
Facilitating Conditions	0.780
Perceived Trust	0.766
User Interest	0.703

Source: Data processing results from SPSS 23 program

Based on the test table of the independent variables and the dependent variable above which is calculated using SPSS software version 23 shows that the results of the correlation coefficient value of the overall reliability test r count value is greater than the table ($r_{table} = 0.196$). This also proves that the reliability test of the research data is valid and feasible to proceed to the next test.

4.3 Classic Assumption Test

4.3.1 Normality Test

This test is conducted to see whether the independent variables and the dependent variable have normal distribution, because one of the requirements in the parametric analysis is that the data distribution must be normal.

Table 4.4
Normality test
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.72265304
	Most Extreme Differences	
	Absolute	.079
	Positive	.060
	Negative	-.079
Test Statistic		.079
Asymp. Sig. (2-tailed)		.125 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Source: Data processing results from SPSS 23 program

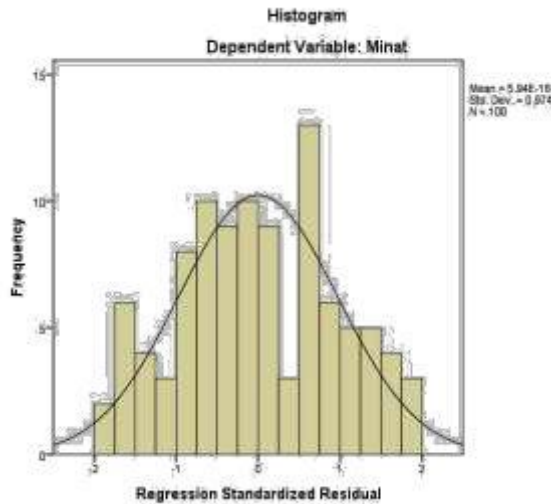


Figure 2. Normality Test

In this case the residual standard is tested, because the histogram above forms a bell facing upwards, so the residual standard is normally distributed.

4.3.2 Multicollinearity Test

To detect the existence of multicollinearity problems, it can be done by looking at the values of Tolerance and Variance Inflation Factor (VIF) and the magnitude of the correlation between independent variables. Table 4.5 shows the results of the multicollinearity test in this study.

**Table 4.5
Collinearity Test**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Performance Expectancy	.471	2.121
Effort Expectancy	.523	1.913
Social Influence	.653	1.532
Facilitating Conditions	.566	1.768
Perceived Trust	.552	1.813

a. Dependent Variable: User Interest

Source: Data processing results from SPSS 23 program

In the case of table 4.5 it can be concluded that no VIF value greater than 10 means there is no multicollinearity.

4.3.3 Heteroscedasticity Test

Heteroscedasticity test can be seen by the dots on the regression scatterplot. If the points spread with a pattern that is not clear above and below the number 0 on the Y axis, there will be no heteroscedasticity problem. Scatterplots can be seen in the regression output and are presented in Figure 3 as follows.

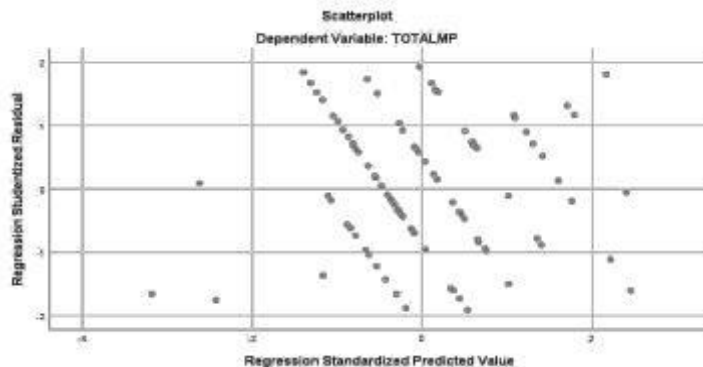


Figure 3. Heteroscedasticity Test

Seen in Figure 3 the points on the Scatterplot spread on the zero line and without forming a particular pattern it can be said to be free of heteroscedasticity.

4.4 Hypothesis Test

After determining which regression model to use in the study, then the dependent variable is partially and simultaneously.

4.4.1 Multiple Linear Regression Test

The hypothesis testing used is multiple linear analysis. This analysis is to predict the dependent variable and independent variables are raised or lowered. Furthermore, from the results of the regression equation, the predicted value of the dependent variable will be obtained.

Table 4.6
Multiple Linear Regression Test Results

Descriptive Statistics

	Mean	Std. Deviation	N
User Interest	20.6400	1.58605	100
Performance Expectancy	20.3600	1.69682	100
Effort Expectancy	20.7100	1.67148	100
Social Influence	18.9300	2.15207	100
Facilitating Conditions\	20.5300	1.81717	100
Perceived Trust	20.1900	1.76209	100

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.890 ^a	.792	.781	.74162	.792	71.759	5	94	.000	1.919

a. Predictors: (Constant), Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Condition, Perceived Trust

b. Dependent Variable: User Interest

Source: Data processing results from SPSS 23 program

Seen in Standard Error of the Estimate value above 0.74162 where $<$ standard deviation of the dependent variable or behavior intention 1.58605 ($0.74162 < 1.58605$) is a valid regression model to be a prediction model.

4.4.2 T-test Statistical (Partial)

The partial test (T-test) shows how far the influence of an explanatory/independent variable individually in explaining the variation of the dependent variable tested at the 0.05 significance level. T-test testing uses the following criteria:

1. If the Sig t counts < 0.05 , then Ho is rejected and Ha is accepted
2. If the Sig t counts > 0.05 , then Ho is accepted and Ha is rejected

Table 4.7

T-test Statistical (Partial)

Coefficients^a

Model	Rule of Numb	t	Sig.
1 (Constant)		.892	.375
Performance Expectancy	0,05	2.149	.034
Effort Expectancy	0,05	2.448	.016
Social Influence	0,05	4.522	.000
Facilitating Condition	0,05	4.692	.000
Perceived Trust	0,05	4.203	.000

a. Dependent Variable: User Interest

Source: Data processing results from SPSS 23 program

Based on Table 4.7 it can be seen that in this study, the value of t-test (partial) of all constructs in this study is greater than the value of rule of thumb so that the construct in this study can be said to affect the variables of user interest.

4.4.3 F-test Statistics (Simultaneous)

F-test (simultaneous) shows whether all independent or independent variables included in the model have a joint effect on the dependent or dependent variable tested at a significant level of 0.05. F test testing simultaneously using the following criteria:

1. If sig (F) < 0.05 , then Ho is rejected and Ha is accepted
2. If sig (F) > 0.05 , then Ho is accepted and Ha is rejected

Table 4.9
F-test Statistical Results
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	197.339	5	39.468	71.759	.000 ^b
	Residual	51.701	94	.550		
	Total	249.040	99			

a. Dependent Variable: User Interest

b. Predictors: (Constant), performance expectancy, effort expectancy, social influence, facilitating condition, perceived trust

Source: Data processing results from SPSS 23 program

The results in table 4.9 show that the calculated F value is 71.759 greater than F table of 2.31 ($71.759 > 2.31$) then the independent variables simultaneously have a significant effect on the dependent variable.

4.4.4 Determination Coefficient Test (R^2)

The coefficient of determination (R^2) is carried out to measure the ability of independent variables, namely performance expectancy, effort expectancy, social influence, facilitating condition and perceived trust in explaining the dependent variable, namely User Interest. The determination coefficient test results can be seen in the following table 4.10:

Table 4.10

Determination Coefficient Test Results (R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.890 ^a	.792	.781	.74162	1.919

a. Predictors: (Constant), Performance expectancy, effort expectancy, social influence, facilitating condition, perceived trust
b. Dependent Variable: User Interest

Source: Data processing results from SPSS 23 program

Based on table 4.10 shows the test results of the coefficient of determination (R^2) where R square is 0.792 which indicates that the relationship between the dependent variable and the independent variable is strong because the R square number is greater than 0.05 or > 0.05 . While the adjusted R square value is 0.781 or 78.1% which indicates that the variation of the variable Performance Expectancy, Business Expectancy, Social Influence, Facilitating Condition and Perceived Trust can only explain 78.1%. Whereas the remaining 21.9% is explained by other factors not included in this research variable.

5. CONCLUSION AND

RECOMMENDATION 5.1 Conclusion

Based on the data that has been collected and testing the analysis carried out, it can be concluded as follows:

1. Effect of Performance Expectancy on the level user interest in electronic money is significant and positive.
2. Effect of Effort Expectancy on the level user interest in electronic money is significant and positive.
3. Effect of Social Influence on the level user interest in electronic money is significant and positive.
4. Effect of Facilitation Condition on the level user interest in electronic money is significant and positive.
5. Effect of Perceived Trust on the level user interest in electronic money is significant and positive.
6. Effect of performance expectancy, effort expectancy, social influence, facilitation condition and perceived trust on the level user interest in electronic money is significant and positive.

5.2 Recommendation

The results of this study are expected to be used as a reference and can support further research in conducting research related to performance expectancy factors, effort expectancy, social influences, facilitating conditions, perceived trust and interest in users of electronic money services. The next research should be able to extend the study period, expand the research area so that more samples can be obtained. This is expected to produce more accurate conclusions.

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