Analysis of Acceptance of E-Wallet Technology using UTAUT 2

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Abstract— The Unified Theory of Acceptance and Use of Technology (UTAUT), which explains a person's interest in utilizing information technology and subsequent user behavior, is commonly employed when a new technology is introduced, regardless of whether people can embrace it. UTAUT is an evolution of the Technology Acceptance Model (TAM). One new technology that needs to be evaluated and is widely used in today's society is the e-wallet or electronic wallet. Many payment transactions currently use e-wallet technology either directly to stores or buying and selling online. Of course, e-wallet usage cannot be separated from internet use. In Indonesia, the largest internet users are the millennial generation. This study aims to identify the e-wallet technology acceptance characteristics that influence reuse among the millennial age by reviewing academic publications that examine the application of UTAUT. Because e-wallet technology influences reuse in the millennial age, this analysis concludes that there is a chance to develop and deploy UTAUT for its acceptability.

Keywords— e-wallet, online transaction, tam, technology acceptance, utaut, utaut 2

I. INTRODUCTION

The advancement of technology has altered people's lifestyles. Numerous technological advancements were purposefully made to make life easier for people. The need for quick information that is inextricably linked to the internet is exacerbated by the rapid pace of modern life. The growth of the internet has also inspired innovators to produce portable technology that enhances human existence [1].

A lot of innovations, particularly those related to financial technology (fintech) [2], have been made in response to technological advancements and information systems, according to Bank Indonesia Regulation No. 18/40/PBI/2016 regarding the implementation of payment transaction processing [3]. This includes the development of tools, organizers, mechanisms, and infrastructure for the implementation of payment transaction processing, as well as other innovations related to meeting societal needs.

The electronic wallet, or e-wallet, is a popular technology in payment systems today [4]. An e-wallet is a digital service that stores data about payment methods such as credit cards and electronic money. However, many people still refuse to believe e-wallet [5].

The Unified Theory of Acceptance and Use of Technology (UTAUT) is the culmination of eight previous theories about technology acceptance behavior, including the Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behavior (TPB), Decomposed Theory of Planned Behavior or Combined TAM-TPB, Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory [6].

UTAUT aims to explain a person's interest in using or using an information technology system, as well as subsequent user behavior [6]. Factors or constructs in UTAUT, such as Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Condition (FC), influence Behavioral Intention (BI) with age. Gender (Gender), Experience (Experience), and Voluntariness of Use serve as moderators of the interaction between constructs. UTAUT 2

ISSN 2442-7888 (online) DOI 10.24167/Sisforma

contains the same construct as the previous UTAUT, but it also includes external constructs such as Hedonic Motivation (HM), Price Value (PV), and Habit.

Price value is the consumer's cognitive tradeoff between the perceived benefits of an application and the monetary costs of using it [7]. Habit is defined as the extent to which a person tends to behave automatically due to previous learning [8]. Repeat Purchasers continue to buy the same brand despite not having an emotional tie to it [9]. Repeat purchases indicate a desire to continue purchasing the same product or service brand, as buyers have no emotional attachment to alternative items or services.

II. METHOD

Research related to the use of e-wallets is designed in the form of field research (Field Research), where in this research, the data and information obtained are the result of field research activities. While the approach used in this research is descriptive quantitative.

The technique used in determining the sample is non-probability sampling by using purposive sampling technique. The sample criteria in this study are as follows:

Table 1. Sample Characteristic

No	Characteristics	Results
1	Gender	Boy and girl
2	Age	22-39 years
3	E-wallet	Gopay
4	Duration of use	More than 1x a week
5	Location	Semarang City

Primary data sources are data obtained directly from research subjects as a source of information sought. This data is also known as first-hand data. Meanwhile, secondary data sources are data sources that cannot provide direct information to data collectors [10]. Primary data sources in this study are questionnaires and observations.

Secondary data sources are data obtained through other parties, not directly obtained by researchers from their research subjects [10]. The secondary data source in this research is literature study.

There are various kinds of data collection techniques used in a study. Data collection techniques are the main steps in a study, because the original purpose of research is to obtain data. If the research does not use data collection techniques, the researcher will not obtain data that meets the standards [11].

The data collection method used in this study is a questionnaire. Questionnaire is a research technique that is carried out by distributing questionnaires, so that in a short time it can reach many respondents. The questionnaire was carried out by dividing a list of written and systematic questions.

According to Sugiyono [11], a questionnaire or questionnaire is a data collection technique that is carried out by giving a set of questions or written statements to respondents to answer.

The Likert scale used in this study is a minimum score of 1 and a maximum score of 4, because it will be known with certainty whether the respondents' answers tend to agree or disagree. So that the results of the respondents' answers are expected to be more relevant [11].

A. VALIDITY TEST

The data that has been collected is then processed to obtain values that can be used for interpretation and basis for decision making. As for this research [12], validity is a measure that shows the levels of validity and validity of an instrument. Valid and valid instruments have high validity, and vice versa. A valid instrument can accurately reveal the variables studied. It can also be said that a valid instrument means that the instrument can be used to measure what should be measured [11].

Table 2. Validity Test Results

Variables/ Indicators	Value	Description
Performance Expectations (X1)		
-Trust (X1.1)	,708	Valid
-System usage (X1.2)	,635	Valid
-Performance gain (X1.3)	,585	Valid
Business Expectations (X2)		
-Hope (X2.1)	,668	Valid

ISSN 2442-7888 (online) DOI 10.24167/Sisforma

-Ease of a system (X2.2)	,772	Valid
-Reduced effort and time (X2.3)	,693	Valid
Social Influence (X3)		
-Social environment (X3.1)	,614	Valid
-Social factors (X3.2)	,594	Valid
-A person's trust (X3.3)	,510	Valid
-Environmental influence (X3.4)	,362	Valid
Facilitating Conditions (X4)		
-Complete facilities (X4.1)	,618	Valid
-Ease of facilities (X4.2)	,700	Valid
-Condition of facilities (X4.3)	,656	Valid
Hedonic Motivation (X5)		
- Ease of technology (X5.1)	.648	Valid
- Technological enjoyment (X5.2)	.591	Valid
- Intention to use technology (X5.3)	.512	Valid
Price Value (X6)		
Technology benefits (X6.1)	.258	Valid
Technology value (X6.2)	.434	Valid
Technology price (X6.3)	.462	Valid
Habit Habits (X7)		
Experience using technology (X7.1)	.574	Valid
Environmental influence (X7.2)	.641	Valid
Trust (X7.3)	.582	Valid
Reuse E swallow (Y)		
-Add balance (Y1)	,669	Valid
-Reuse (Y2)	,763	Valid
-Refer (Y3)	,820	Valid
-Willing to act as a brand advocate (Y4)	,743	Valid

B. RELIABILITY TEST

According Sugiyono [11], an instrument is said to be reliable if it produces data that remains the same after the instrument is used several times to measure the same object. Reliability indicates that the instrument can be trusted enough to be used as a data collection tool because the instrument is good [12].

Table 3. Reliability Test Results

Variables/ Indicators	Value	Description
Performance Expectations (X1)	0,797	Reliable
Business Expectations (X2)	0,842	Reliable
Social Influence (X3)	0,725	Reliabel
Facilitating Conditions (X4)	0,809	Reliable
Hedonic Motivation (X5)	0,740	Reliable
Price Value (X6)	0,767	Reliable
Habits (X7)	0,765	Reliable
E-Wallet Reuse (Y)	0,884	Reliable

Source: SPSS output

C. NORMALITY TEST

The data must first be tested for normality because in parametric statistics the data for each variable must be normally distributed before being analyzed. The normality test in this study uses the Chi Square formula [11].

Table 4. Kolmogorov-Smirnov Test Results

		Unstandardized Residual
N		100
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	,43776324
Most Extreme Differences	Absolute	,201
	Positive	,124
	Negative	-,201
Test Statistic		,201
Asymp. Sig. (2-tailed)		,055[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
Source: SPSS output

D. MULTICOLLINEARITY TEST

One independent variable with other independent variables is not allowed to have a perfect relationship (multicollinearity) [13].

Table 5. Multicollinearity Test Results

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	x1	,681	1,469
	x2	,586	1,706
	x3	,845	1,184
	x4	,789	1,268
	x5	,371	2,697
	x6	,410	2,438
	x7	,418	2,395

a. Dependent Variable: y

ISSN 2442-7888 (online) DOI 10.24167/Sisforma

E. MULTIPLE LINEAR REGRESSION ANALYSIS

Multiple linear regression analysis techniques are used to examine the relationship between several independent variables (X_1 X_2... X_n) and the dependent variable (Y) [14]. This analysis is also used to determine the direction of the relationship between each independent variable and the dependent variable.

F. HYPOTHESIS TEST

Hypothesis testing in this study uses partial testing (t test) and simultaneous presentation (F test) [15].

- H1 : The performance expectancy factor has a significant effect on e-wallet reuse.
- H2: The effort expectancy factor has a significant effect on the reuse of e-wallets.
- H3: The social influence factor has a significant effect on the reuse of e-wallets.
- H4: The Facilitating condition factor has a significant effect on the reuse of e-wallets.
- H5: The Hedonic motivation factor has a significant effect on the reuse of e-wallets.
- H6: The Price Value factor has a significant effect on the reuse of e-wallets.
- H7: The Habit factor has a significant effect on the reuse of e-wallets.

G. SIMULTANEOUS TEST (F TEST)

This test is carried out by testing the parameter β (Correlation Test) using the F-statistic test [16]. To test the effect of the independent variables together (simultaneously) on the dependent variable, the F test is used.

III. RESULTS AND DISCUSSION

The regression equation for the results of the regression analysis can be explained as follows:

E-Wallet Reuse = 0.137 Performance Expectation + 0.144 Effort Expectation + 0.162 Social Influence + 0.866 Facilitating Conditions + 0.050 Hedonic Motivation + 0.153 Price Value + 0.268 Habit

- X1 Based on the above equation it can be explained that performance expectations can increase e-wallet reuse by 0.137, the direction of the positive regression coefficient indicates a positive effect of performance expectations on e-wallet reuse.
- X2 Business expectations are able to increase e-wallet reuse by 0.144 the direction of the positive regression coefficient indicates a positive effect of business expectations on e-wallet reuse.
- X3 Social influence is able to increase e-wallet reuse by 0.162 the direction of the positive regression coefficient indicates a positive influence of social influence on e-wallet reuse.
- X4 Facilitating conditions can increase e-wallet reuse by 0.866, the direction of the positive regression coefficient indicates a positive effect of facilitating conditions on e-wallet reuse
- X5 Hedonic motivation is able to increase e-wallet reuse by 0.050 the direction of the positive regression coefficient indicates a positive effect of hedonic motivation on e-wallet reuse
- X6 The price value can increase e-wallet reuse by 0.153 the direction of the positive regression coefficient indicates a positive effect of price value on e-wallet reuse
- X7 Habit is able to increase e-wallet reuse by 0.268 the direction of the positive regression coefficient indicates a positive effect of habit on e-wallet reuse.

Tabel 5. T Test Results

No	Dependent Variable	Independent Variable	B	t count	Sign	Remarks
1	E-Wallet Reuse	Performance Expectations	,137	2,076	,044	Ha Accepted
2	E-Wallet Reuse	Business Hope	,144	2,028	,046	Ha Accepted
3	E-Wallet Reuse	Social Influence	,162	2,197	,031	Ha Accepted

ISSN 2442-7888 (online) DOI 10.24167/Sisforma

4	E-Wallet Reuse	Facilitating Conditions	,866	13,451	,000	Ha Accepted
5	E-Wallet Reuse	Hedonic motivation	,050	,459	,647	Ha Rejected
6	E-Wallet Reuse	Price value	,153	1,574	,119	Ha Rejected
7	E-Wallet Reuse	Habit	,268	2,522	,013	Ha Accepted

Source: Regression output results, 2022
Description: significant at the 1% level
significant at the 5% level

Based on the table above, it is explained that the hypothesis is accepted if the calculated t value is greater than t table (1.96) and the significance is below 0.05.

A. EFFECT OF PERFORMANCE EXPECTATIONS (X1) ON E-WALLET REUSE (Y)

Partial testing of variable XI (performance expectations) has a regression coefficient of 0.137, a calculated t value of 2.076 with a significance of 0.044. The calculated t value is 2.076 which is greater than t table (1.96) and the significance value is smaller than 0.05 which is equal to 0.044, then Ho is rejected, and Ha is accepted. This shows that the performance expectation variable has a significant effect on e-wallet reuse, so hypothesis 1 can be accepted.

The direction of the positive regression coefficient indicates a positive effect of performance expectations on e-wallet reuse. This indicates that performance expectations can increase e-wallet reuse.

B. EFFECT OF BUSINESS EXPECTATIONS (X2) ON E-WALLET REUSE (Y)

Partial testing of variable X2 (business expectancy) has a regression coefficient of 0.144, a calculated t value of 2.028 with a significance of 0.046. The calculated t value is 2.028 which is greater than t table (1.96) and the significance value is less than 0.05 which is equal to 0.046, then Ho is rejected, and Ha is accepted. This shows that the effort expectation variable has a significant effect on e-wallet reuse, so hypothesis 2 can be accepted.

The direction of the positive regression coefficient indicates a positive effect of business expectations on e-wallet reuse. This indicates that the business hopes to be able to increase e-wallet reuse.

C. EFFECT OF SOCIAL FACTORS (X3) ON E-WALLET REUSE (Y)

Partial testing of variable X3 (social factors) has a regression coefficient of 0.162, a calculated t value of 2.197 with a significance of 0.030. The calculated t value is 2.197 which is greater than t table (1.96) and the significance value is less than 0.05 which is equal to 0.030, then Ho is rejected, and Ha is accepted. This shows that social factor variables have a significant influence on e-wallet reuse, so hypothesis 3 can be accepted.

The direction of the positive regression coefficient indicates a positive influence of social factors on e-wallet reuse. This indicates that social factors can increase e-wallet reuse.

D. EFFECT OF FACILITATING CONDITIONS (X4) ON E-WALLET REUSE (Y)

Partial testing of variable X4 (facilitating conditions) has a regression coefficient of .866, a calculated t value of 13.451 with a significance of 0.000. The calculated t value is 13.451 which is greater than t table (1.96) and the significance value is less than 0.05 which is equal to 0.000, then Ho is rejected, and Ha is accepted. This shows that the variable facilitating conditions have a significant effect on e-wallet reuse, so hypothesis 4 can be accepted.

The direction of the positive regression coefficient indicates a positive effect of facilitating conditions on e-wallet reuse. This indicates that facilitating conditions can increase e-wallet reuse.

E. EFFECT OF HEDONIC MOTIVATION ON (X5) E-WALLET REUSE (Y)

Partial testing of variable X5 (hedonic motivation) has a regression coefficient of

ISSN 2442-7888 (online) DOI 10.24167/Sisforma

0.050 with a t-value of 0.459 with a significance of 0.647. The calculated t value is 0.459 which is smaller than t table (1.96) and the significance value is greater than 0.05 which is equal to 0.647, then Ho is accepted, and Ha is rejected. This shows that the hedonic motivation variable does not have a significant effect on e-wallet reuse, so hypothesis 5 is rejected.

The direction of the positive regression coefficient indicates a positive effect of hedonic motivation on e-wallet reuse. This indicates that hedonic motivation is not able to increase e-wallet reuse.

F. EFFECT OF PRICE VALUE (X6) ON E-WALLET REUSE (Y)

Partial testing of variable X6 (price value) has a regression coefficient of 0.153 with a t-value of 1.574 with a significance of 0.119. The calculated t value is 1.574 which is smaller than t table (1.96) and the significance value is greater than 0.05 which is 0.119, then Ho is accepted, and Ha is rejected. This shows that the price value variable does not have a significant effect on e-wallet reuse, so hypothesis 6 is unacceptable.

The direction of the positive regression coefficient indicates a negative effect of the price value on e-wallet reuse. This indicates that the price value is not able to increase e-wallet reuse.

G. EFFECT OF HABITS (X7) ON E-WALLET REUSE (Y)

Partial testing of the X7 variable (habit) has a regression coefficient of 0.268 with a t-value of 2.522 with a significance of 0.013. The calculated t value is 2.522 which is greater than t table (1.96) and the significance value is less than 0.05 which is equal to 0.013, then Ho is rejected, and Ha is accepted. This shows that the habit variable has a significant influence on e-wallet reuse, so hypothesis 7 can be accepted. The direction of the positive regression coefficient indicates that there is a positive effect of habit on e-wallet reuse. This indicates that habits can increase e-wallet reuse.

H. TEST MODELS

Overall regression testing was carried out using the F test. This test was carried out using a significance level of 5%.

Tabel 6. F Test Results

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54,745	7	7,821	40,811	,000[b]
	Residual	17,630	92	,192		
	Total	72,375	99			

a. Dependent Variable: y

b. Predictors: (Constant), x7, x3, x1, x4, x2, x6, x5

H0 : independent variables consisting of performance expectations, effort expectations, social influence, facilitating conditions, hedonic motivation, price values, and habits.

H1 : Re-use of e-wallet

a. If the significant value of F <0.05 then H0 is rejected and H1 is accepted. This means that all independent/free variables have a significant influence on the dependent/dependent variable.
b. If the significant value of F > 0.05 then H0 is accepted and H1 means that all independent/free variables have no significant effect on the dependent/dependent variable.

The test results of the f-test which show the feasibility of the model have an F estimate of 40.881 with a significance of 0.000, meaning that if the calculated F value is 40.881 greater than F table (1.96) and the significance value is smaller than 0.05 which is equal to 0.000, then it indicates that the model is feasible to study.

IV. CONCLUSION

Effect of performance expectations (X1) on e-wallet reuse (Y). The direction of the positive regression coefficient indicates a positive effect of performance expectations on e-wallet reuse. This indicates that performance expectations can increase e-wallet reuse.

Effect of business expectations (X2) on e-wallet reuse (Y). The direction of the positive regression coefficient indicates a positive effect of business expectations on e-wallet

ISSN 2442-7888 (online) DOI 10.24167/Sisforma

reuse. This indicates that the business hopes to be able to increase e-wallet reuse.

The influence of social factors (X3) on the reuse of e-wallets (Y) The direction of the positive regression coefficient indicates a positive influence of social factors on the reuse of e-wallets. This indicates that social factors can increase e-wallet reuse.

The effect of facilitating conditions (X4) on e-wallet reuse (Y) the direction of the positive regression coefficient indicates a positive effect of facilitating conditions on e-wallet reuse. This indicates that facilitating conditions can increase e-wallet reuse.

The effect of hedonic motivation (X5) on e-wallet reuse (Y) the direction of the regression coefficient indicates that hedonic motivation does not have a positive effect on e-wallet reuse. This indicates that hedonic motivation is not able to increase e-wallet reuse.

Effect of price value (X6) on e-wallet reuse (Y) the direction of the regression coefficient indicates a negative effect of price value on e-wallet reuse. This indicates that the price value is not able to increase e-wallet reuse.

The effect of habit (X7) on e-wallet reuse (Y) the direction of the positive regression coefficient indicates a positive effect of habit on e-wallet reuse. This indicates that habits can increase e-wallet reuse.

From the seven X variables above, it can be concluded that performance expectations (X1), business expectations (X2), social factors (X3), facilitating conditions (X4), and habits (X7) show a positive influence on e-wallet reuse. Whereas hedonic motivation (X5) and price value (X6) show that hedonic motivation does not have a positive effect on e-wallet reuse.

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ISSN 2442-7888 (online) DOI 10.24167/Sisforma

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