

Measurement the Quality of ShopeePay E-Wallet Service Features in the Shopee Application Based on User Perspective with the End User Computing Satisfaction Approach

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ABSTRACT

At present, society is facilitated in carrying out various activities through the development and innovation of technology. One of the conveniences introduced is the process of digital financial transactions. The number of transactions with digital payments in Indonesia, according to the e-economy SEA 2023 report, is estimated to reach USD 82 billion in 2023 and to reach USD 110 billion in 2025. A popular alternative for non-cash transactions in Indonesia is ShopeePay, a digital wallet service. Surabaya as one of the cities with a significant number of digital wallet users, faces some challenges according to pre-research conducted. Users still encounter certain obstacles. It is important to conduct research to evaluate the quality of ShopeePay based on user satisfaction using a modified EUCS approach with the addition of the price variable. This research is conducted on Generation Z individuals aged 17-28 years in Surabaya City. Based on the EUCS variables accuracy, format, timeliness, ease of use, content, and price, there are 5 variables that have a significant positive influence on user satisfaction, namely accuracy, format, timeliness, ease of use, and content. Meanwhile, the price variable has a significant negative influence on user satisfaction. This study suggests that ShopeePay should maintain its quality and offer affordable prices to users for various transaction activities.

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1. INTRODUCTION

The advancement of technology has made it easier for society to carry out various activities. One of the conveniences introduced is the process of digital financial transactions. The use of digital wallets has been widely accepted in various countries

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and is extensively implemented in developed nations, and it is starting to become known in developing countries as well. The number of transactions with digital payments in Indonesia, according to the e-economy SEA 2023 report, is estimated to reach USD 82 billion in 2023 and to reach USD 110 billion in 2025 (Redjalam, 2023). Digital wallets are essentially a type of server-based electronic money used online (Adimia et al., 2019). Various digital wallet services are already widely available in Indonesia. Several fintech companies that issue digital wallet services have begun to compete in creating the advantages of their products and services. The digital wallet service, ShopeePay, serves as a popular alternative for non-cash transactions in Indonesia. It has successfully become the largest digital wallet by users since June 2020 and experienced the fastest growth since the beginning of 2020, competing with other digital wallets such as OVO, DANA, GoPay, and others. ShopeePay is one of the features within the Shopee application that focuses on providing comprehensive digital transaction services.

In line with the use of the ShopeePay digital wallet, researchers have identified issues that require further evaluation and development for the ShopeePay provider. These issues were identified through pre-research conducted among ShopeePay users. Pre-research is the activity of gathering data and information on a topic related to the research, using various sources of reference (Julianto, 2013). User complaints could pose significant problems for the ShopeePay provider if not reviewed and evaluated, potentially resulting in a drastic decline in users over time without improvements. To maintain user trust in the long term, the company developing the ShopeePay digital wallet service needs to analyze the quality of this feature from the user's perspective for evaluation and follow-up actions to improve service facilities. Digital wallet usage is now widespread among the public because it provides an easy and flexible transaction model in practice (Karim et al., 2020).

This research evaluates the quality of ShopeePay usage among the community in the city of Surabaya. Data from the Representative Office of Bank Indonesia East Java indicates that in 2021, there was an 84,6% increase in transactions using electronic money (e-money) in East Java Province, with Surabaya city ranking first in the highest transactions, amounting to 10,46 trillion rupiah. In this study, the focus is on respondents from the Generation Z demographic in the city of Surabaya. Generation Z is considered to be experienced in using the internet and gadgets, as well as leveraging current technological advancements (Pratiwi, 2021). Generation Z refers to the generation born between 1995 and 2010 (Nagy & Kölcsey, 2017). The research conducted by Lavinda (2022) indicates that in 2021, the percentage of digital wallet users among Generation Z in Indonesia reached 68%, while the usage of bank for financial transactions was only around 35,4%. The research respondents are targeted towards ShopeePay users aged 17-28 years old residing in Surabaya City, who have

experience using the ShopeePay digital wallet service with a minimum usage frequency of three times.

The approach used in this study is the End User Computing Satisfaction (EUCS) method with the addition of the price variable, focusing on end-user satisfaction (Kurniasih & Pibriana, 2021). The EUCS method is commonly used as a measure of the quality of an information system from the end-user's perspective, consisting of variables such as content, accuracy, format, ease of use, and timeliness. Those five aspects will serve as references in the preparation of the questionnaire for respondents, with the addition of the price variable as one of the benchmarks in evaluating user satisfaction. This quality measurement serves as important learning for developers of digital wallet service applications amidst the high competition with similar types of services. Users do not rely on just one digital wallet service; instead, they choose to switch to other providers as a better alternative (Pratiwi et al., 2021). Satisfaction is a person's perception after comparing the performance results they perceive with what they expected (Gultom et al., 2020). Kepuasan pengguna memiliki peranan yang sangat penting bagi sebuah perusahaan agar dapat bertahan dalam persaingan dengan perusahaan lain (Ishak, 2005).

2. RESEARCH FRAMEWORK

Based on the problem statement and background explained earlier, a literature review will be conducted to support the theory in the upcoming research. This theory serves as the foundation for solving the research problem and drawing conclusions.

2.1 End User Computing Satisfaction

The End User Computing Satisfaction (EUCS) approach aims to measure the level of end-user satisfaction with the use of a system or application to serve as an indicator of the success of that system. In the EUCS approach, there are five variables used as parameters to measure user satisfaction. Doll & Torkzadeh (1988) formulated five variables in the End User Computing Satisfaction (EUCS) approach, namely content, accuracy, format, ease of use, and timeliness. User satisfaction measurement of a system or application will be assessed based on these five variables. The EUCS approach is considered effective as a method for measuring user satisfaction because it focuses on the overall perception of end users regarding the usage of a system or application (Aji & Kusasih, 2021). The EUCS method uses the concept of approaching the perspective of end users regarding technology dimensions (Setyoningrum, 2020).

The five EUCS variables have different measurement focuses. For instance, the content variable evaluates the system's suitability in displaying information according to user needs. The accuracy variable focuses on the system's accuracy in providing information to users. There are several indicators to assess accuracy, including the

accuracy of data and information provided to users, up-to-date data, and the frequency of system errors (Nursanto et al., 2022). The format variable measures the quality of the system in terms of the interface it produces. The ease of use variable assesses user satisfaction with the system's ease of operation. Lastly, the timeliness variable measures the accuracy and speed of the system in delivering the required information to users. In a fintech company, a crucial aspect is the quality of information technology (Ryu & Ko, 2020).

2.2 SEM-PLS

In this study, a causal or influence relationship model is utilized. Meanwhile, hypothesis testing is conducted using the Structural Equation Modeling (SEM) analysis technique. The type of SEM approach employed is Partial Least Squares SEM (PLS-SEM). PLS SEM aims to test whether there are relationships or effects between constructs (Hamid & Anwar, 2019). Data processing is carried out with the assistance of SmartPLS software. Through the SEM approach, the data analysis process measures indicators of a research concept that are dimensional and can assess the level of influence between factors in the regression analysis.

The SEM approach is conducted through two testing stages: outer model (measurement model) and inner model (structural model). The outer model analyzes the relationship between constructs (latent variables) and their indicators, where these relationships are based on certain assumptions or theories (Farida, 2014). The inner model analysis is conducted to examine the relationships between variables or it can be said that the inner model specifies the relationships between latent constructs (Amalita & Rahma, 2022).

2.3 Hypothesis

Hypotheses are assumptions that need to be answered as research conclusions and require verification for their accuracy. Proper hypotheses can help researchers identify techniques for testing research data. Hypotheses in the study based on the EUCS approach with the addition of the price variable. The research hypotheses are summarized in Figure 2.1.

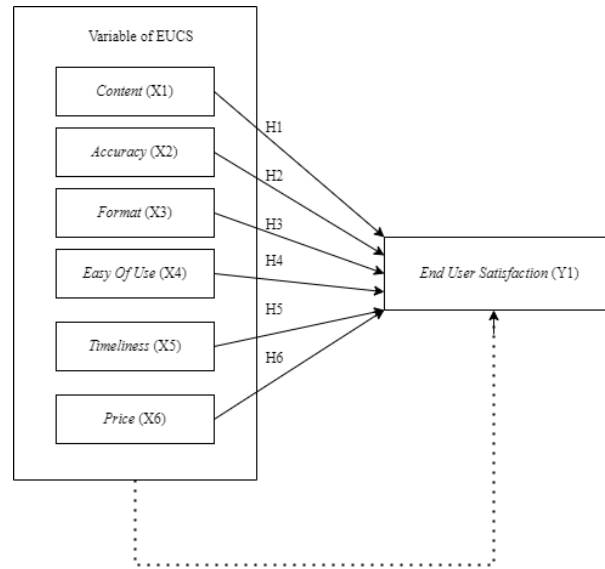


Figure 2.1 Research Hypothesis

H1 = The content variable has a significant influence on end user satisfaction

H2 = The accuracy variable has a significant influence on end user satisfaction

H3 = The format variable has a significant influence on end user satisfaction

H4 = The ease of use variable has a significant influence on end user satisfaction

H5 = The timeliness variable has a significant influence on end user satisfaction

H6 = The price variable has a significant influence on end user satisfaction

3. RESEARCH METHODS

This study employs a quantitative method. The quantitative approach seeks to test a theory using statistical data calculations to obtain accurate results (Sarwono & Si, 2021). This research consists of several stages that will be explained in Table 3.1.

Table 3.1. Research Steps

No	Stage	Activities
1	Introduction	Observation
2	Planning	Pre research (Determining the research object and subject) Planning formulation the problem Determining the required data Determining the research method Questionnaire preparation
3	Data collection	Distribution of questionnaires Collecting questionnaire results Coleccting relevant literature

No	Stage	Activities
4	Data Processing	Data Processing and hypothesis
5	Analysis and discussion	Data analysis based on the EUCS approach with the modification of adding the price variable
6	Conclusion	Formulating conclusions and recommendations

Based on the table above, each stage is outlined as follows:

3.1 Introduction

The initial stage of the research begins with observing on ShopeePay digital wallet users. Observation is conducted to determine problems and the latest field facts. Observation helps researchers find supporting data for the study so that the research results can be more accurate.

3.2 Planning

In this section is carried out the pre-research the problem. Next, the research object and subject are determined, which are ShopeePay, with the research respondents being ShopeePay users from Surabaya City aged 17-28 years, with a minimum usage of three times. The method used is quantitative, with purposive sampling technique based on specific criteria as the sampling technique. The variables used in this study are based on the EUCS approach with the addition of the price variable. In this stage, the required data will also be determined. Based on the results of the pre-research, issues experienced by users were identified. These issues require further evaluation for improvement and enhancement.

3.3 Data Collection

In the data collection stage, a series of activities are carried out such as collecting questionnaires from respondents based on the predetermined criteria. Subsequently, literature review and previous research are conducted to support the theory used in this study. The questionnaires are distributed utilizing social media platforms such as WhatsApp, Instagram, Twitter, and Telegram to reach a wider and faster audience. The questionnaire is structured based on the indicators of the EUCS variables with the addition of the price variable.

3.4 Data Processing

The data analysis process utilizes the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique with the assistance of SmartPLS software. The SEM approach is conducted through two testing stages: the outer model (measurement model) and the inner model (structural model). Before proceeding to test the outer and inner models, a data screening process will be conducted to remove biased data that could affect the testing and descriptive analysis will be conducted to provide an

overview, demonstrate, and summarize the key points of the respondent data collection results.

In the outer model analysis, convergent validity, discriminant validity, and reliability tests will be conducted. As for the inner model analysis, several tests will be performed, including model fit testing, coefficient of determination testing (R^2), effect size testing (F^2), predictive relevance testing (Q^2), and hypothesis testing by examining the path coefficient values obtained through bootstrapping techniques. The bootstrapping method will produce a column of T-values to determine the significance level of the coefficients and a column of P-values to indicate whether the hypothesis can be accepted or rejected (Sumardi et al., 2023).

3.5 Analysis and Discussion Data

After a series of testing, the results of the tests will be evaluated and analyzed to draw research conclusions. The testing results include hypothesis testing outcomes and understanding the influence between variables. The data analysis is based on the hypotheses formulated earlier using the EUCS approach with the modification of adding the price variable. The data analysis of the testing results will yield values indicating the relationship between variables and the level of user satisfaction with ShopeePay.

3.6 Conclusion

After the process of data collection and testing, the next stage is drawing conclusions. This research has objectives based on the problem statement determined in the previous chapter. The objective of this study is to measure the satisfaction of ShopeePay users. The results of the conducted tests will be aligned with the questions and problem statements, and will be adjusted to fit the research objectives. After deriving the conclusions, appropriate recommendations will be determined for ShopeePay provider as a subject for evaluation.

4. RESULTS AND DISCUSSION

The data and research collected will be tested and evaluated based on the results obtained. The discussion in this study elaborates on the research findings to provide a clear understanding of the results. The results will be presented in the form of an exposition related to the data that has been processed and tested using the techniques and methods decided beforehand.

4.1 Results and Discussion of Screening Data

This research obtained 180 respondents, and there are 16 data points with a decreasing scale data type that need to be deleted. Therefore, the total clean data consists of 170 data points for further testing.

4.2 Measurement Model Test Results (Outer Model)

4.2.1 Gender

Research respondents are divided into male and female categories. Some previous studies have shown that women are the largest users of ShopeePay. Therefore, the results of this study are expected to reinforce the previous research.

Table 4.1. Demographics by Gender

Demographics by Gender	
Male	Female
15,9%	84,1%

Based on Figure 4.1 specifically on gender classification, there are two categories male and female. ShopeePay users are predominantly female. The percentage of male users is 15,9% and female users are 84,1%. ShopeePay is used more by women because women tend to be more consumptive compared to men (Eva et al., 2022).

4.2.2 User Age

Research respondents are divided into the age category of 17-28 years. This age group represents Generation Z. Some previous studies have shown that Generation Z are the largest users of ShopeePay. Therefore, the results of this study are expected to reinforce the previous research.

Table 4.2. Demographics by User Age

Demographics by User Age								
19 years old	22 years old	20 years old	25 years old	26 years old	18 years old	21 years old	23 years old	24 years old
5,9%	19,4%	3,5%	11,2%	2,4%	1,8%	14,1%	23,5%	18,2%

In this study based on Table 4.2, the target respondents belong to Generation Z with an age range of 17 – 28 years old. Based on Figure 4.2, the percentage of user ages is distributed as follows: 5,9% are 19 years old, 19,4% are 22 years old, 3,5% are 20 years old, 11,2% are 25 years old, 2,4% are 26 years old, 1,8% are 18 years old, 14,1% are 21 years old, 23,5% are 23 years old, and 18,2% are 24 years old.

4.2.3 Occupation of Users

Research respondents are categorized based on their occupation. The categories include employees of state-owned enterprises, private sector employees, entrepreneurs or businesspeople, and students. Some previous studies have shown that students are the largest users of ShopeePay. Therefore, the results of this study are expected to reinforce the previous research based on Table 4.3.

Table 4.3. Demographics by Occupation of Users

Demographics by Occupation of Users			
BUMN Employee	Private Employee	Entrepreneur	Student
1,2%	4,7%	13,5%	80,6%

This research requires data regarding the distribution of occupations among ShopeePay users. This information can be used to evaluate users who have the highest interest and usage of ShopeePay. Based on Figure 4.3, the distribution of users based on occupation is divided as follows: 1,2% are civil servants (BUMN employees), 4,7% are private employees, 13,5% are entrepreneurs, and finally, the majority are students, accounting for 80,6%. The high majority of digital wallet users among students is due to their minimal income, which still depends on allowance from their parents. To save money, they rely on cashback promotions and discounts offered by digital wallets (Angelica & Soebiantoro, 2022).

4.2.4 Occupation of ShopeePay Usage

Research respondents are categorized based on the length of usage. This indicates that users feel ShopeePay can be relied upon for long-term use based on Table 4.4.

Table 4.4. Demographics by Duration of Usage

Demographics by Duration of Usage		
3-6 months	<3 months	>9 months
1,2%	3,5%	95,3%

ShopeePay users who meet the research criteria are those who have used it at least three times. This study analyzes the duration of respondents' usage. Based on Figure 4.4, the duration of respondents' usage of ShopeePay is predominantly more than 9 months, with a percentage of 95,3%, followed by usage duration of less than 3 months at 3,5%, and lastly, usage duration ranging from 3-6 months at 1,2%.

4.2.5 Activities Conducted Within ShopeePay

Research respondents are categorized based on their usage of ShopeePay. These uses may include bill payments, purchase transactions, and several other activities based on Table 4.5.

Table 4.5. Demographics by Activities Conducted Within ShopeePay

Demographics by Activities Conducted Within ShopeePay			
Loan Feature	Utility Bill Payment	Payment tool for purchasing at offline merchant ShopeePay	Payment tool for purchasing products on Shopee
2,9%	4,1%	3,5%	89,4%

Based on Figure 4.5, data is generated showing that the majority of ShopeePay users utilize ShopeePay as a payment tool for purchasing products on Shopee, as evidenced by the high percentage value of 89,4%. Furthermore, users also use ShopeePay as a utility bill payment tool, with the percentage of users making this statement being 4,1%. Additionally, users also utilize ShopeePay as a payment tool for purchasing products at offline ShopeePay merchants, indicating a percentage response of 3,5%. Lastly, with a percentage of 2,9%, it is shown that users use ShopeePay as a loan feature.

4.2.6 Distribution of User's Residential Areas

Research respondents are categorized based on their region of origin. This can provide an overview of which areas have the highest user levels. The regions in question are the sub-districts throughout the city of Surabaya based on Table 4.6.

Table 4.1. Demographics by User's Residential Areas

Demographics by User's Residential Areas								
Gunung Anyar	Bubutan	Wiyung	Kenjeran	Krembangan	Genteng	Wonokromo	Gubeng	Karangpilang
5,9%	2,9%	7,1%	5,3%	2,9%	8,2%	17,6%	14,1%	28,2%

Surabaya has 30 districts that are spread out. In this section, tabulation of ShopeePay users is conducted based on their place of origin to subsequently group them, thereby determining which area has the highest or lowest number of ShopeePay users. Based on Figure 4.6, the largest number of ShopeePay users come from the KarangPilang area at 28,2%, followed by Wonokromo at 17,6%, Gubeng at 14,1%, Genteng at 8,2%, Wiyung at 7,1%, Gunung Anyar at 5,9%, Kenjeran at 5,3%, Krembangan at 2,9%, and lastly, the Bubutan area at 2,9%.

4.3 Descriptive Statistics Results

Descriptive statistics are performed to provide results and a general overview of the highest values or opinions from respondents. This is based on the mean values based on Table 4.7.

Table 4.7. Descriptive Statistics Results

Variable	Mean	Median	Standard Deviation
C1	3,859	5,000	1,448
C2	3,829	5,000	1,471
C3	3,924	5,000	1,410
C4	3,718	4,000	1,329
A1	3,694	4,000	1,223
A2	3,735	4,000	1,088
A3	3,682	4,000	1,281
A4	3,688	4,000	1,334

Variable	Mean	Median	Standard Deviation
F1	3,582	4,000	1,323
F2	3,841	5,000	1,407
F3	3,959	5,000	1,416
F4	3,847	5,000	1,410
E1	3,959	5,000	1,317
E2	3,929	5,000	1,235
E3	4,012	5,000	1,302
E4	3,894	5,000	1,389
T1	3,894	5,000	1,410
T2	3,665	4,000	1,227
T3	3,659	4,000	1,143
T4	3,682	4,000	1,098
P1	3,771	4,000	1,355
P2	3,759	4,000	1,437
P3	3,941	5,000	1,349
P4	3,776	5,000	1,466
Y1	3,600	4,000	1,299
Y2	3,494	4,000	1,261
Y3	3,435	4,000	1,283
Y4	3,465	4,000	1,452

Based on the test results Table 4.7, all indicators in variable C, which represent the content aspect, fall into the category of sufficiently satisfied for users. Additionally, variable A, which represents accuracy, also falls into the category of sufficiently satisfied. Furthermore, all indicators in variable F, representing format, fall into the category of sufficiently satisfied. These results are similar to those of the test results for variable T (timeliness), variable P (price), and variable Y (user satisfaction). In variable E, which represents ease of use, indicator E3 falls into the satisfied category for users, while others fall into the sufficiently satisfied category.

4.4 Results of The Outer Model Testing

4.4.1 Convergent Validity

Convergent validity aims to determine the extent of validity of the relationship between indicators and latent variables or constructs (Hair et al., 2014). Convergent validity testing considers the outer loading values, which should be at least 0,7 or higher, and the Average Variance Extracted (AVE) values. For validity, the AVE value should be at least 0,5. The following are the results of the testing with outer loading values. The results of the outer loading are displayed in Table 4.8.

Table 4.8. Outer Loading Results

Indicator	Accuracy	Content	Easy Of Use	End User Satisfaction	Format	Price	Timeliness
A1	0,929						
A2	0,919						
A3	0,758						
A4	0,456*						
C1		0,943					
C2		0,934					
C3		0,910					
C4		0,823					
E1			0,945				
E2			0,941				
E3			0,970				
E4			0,965				
F1					0,872		
F2					0,927		
F3					0,381*		
F4					0,822		
P1						0,940	
P2						0,905	
P3						0,949	
P4						0,961	
T1							0,868
T2							0,862
T3							0,909
T4							0,879
Y1				0,883			
Y2				0,891			
Y3				0,895			
Y4				0,876			

Based on the outer loading values, there are indicators with values below 0,7, namely indicators A4 and F4. These indicators should be removed to proceed with further testing. Next, the testing will involve the AVE values, which will be explained in the following Table 4.9.

Table 4.9. AVE Values Results

Variable	Average Variance Extracted (AVE)	Description
Accuracy	0,622	Valid
Content	0,817	Valid
Easy Of Use	0,912	Valid
End User Satisfaction	0,786	Valid
Format	0,610	Valid
Price	0,882	Valid
Timeliness	0,773	Valid

Based on the calculation of the AVE values, it is found that all variables have values above 0,5, indicating that all variables meet the criteria and can be considered valid.

4.4.2 Convergent Validity

Discriminant validity testing is conducted to observe that variables have unique characteristics that are not represented by other variables. To determine discriminant validity, one can observe the cross-loading values, which should demonstrate a minimum value of 0,7. The results of the cross loading are displayed in Table 4.10.

Table 4.10. Cross Loading Values Results

Indicator	Accuracy	Content	Easy Of Use	End User Satisfaction	Format	Price	Timeliness
A1	0,929	0,763	0,730	0,820	0,754	0,728	0,689
A2	0,919	0,741	0,720	0,774	0,784	0,733	0,703
A3	0,758	0,547	0,571	0,634	0,625	0,566	0,579
C1	0,759	0,943	0,884	0,890	0,832	0,906	0,812
C2	0,742	0,934	0,877	0,874	0,808	0,915	0,801
C3	0,627	0,910	0,737	0,758	0,691	0,764	0,699
C4	0,689	0,823	0,621	0,718	0,589	0,627	0,627
E1	0,719	0,833	0,945	0,848	0,851	0,949	0,803
E2	0,732	0,814	0,941	0,866	0,850	0,892	0,784
E3	0,749	0,848	0,970	0,883	0,906	0,948	0,833
E4	0,747	0,832	0,965	0,893	0,892	0,954	0,845
F1	0,884	0,780	0,780	0,840	0,872	0,779	0,756
F2	0,725	0,847	0,949	0,883	0,927	0,958	0,850
F4	0,533	0,475	0,653	0,627	0,822	0,630	0,600
P1	0,717	0,793	0,937	0,851	0,868	0,940	0,813
P2	0,748	0,917	0,862	0,863	0,794	0,905	0,781
P3	0,720	0,831	0,939	0,834	0,847	0,949	0,804
P4	0,723	0,829	0,942	0,863	0,921	0,961	0,853
T1	0,776	0,837	0,894	0,873	0,869	0,900	0,868
T2	0,574	0,697	0,725	0,724	0,689	0,738	0,862
T3	0,597	0,687	0,700	0,734	0,699	0,718	0,909
T4	0,613	0,627	0,653	0,708	0,657	0,657	0,879
Y1	0,761	0,792	0,820	0,883	0,806	0,812	0,804
Y2	0,704	0,836	0,826	0,891	0,815	0,814	0,800
Y3	0,760	0,785	0,807	0,895	0,779	0,799	0,758
Y4	0,766	0,779	0,786	0,876	0,773	0,795	0,723

All indicators in the variable have outer loading values greater than 0,7. For example, indicator A1 has an outer loading value of 0,929, which is greater than 0,7, and indicators A2 and A3 have outer loading values of 0,919 and 0,758, respectively, which are above the threshold of 0,7. The same applies to other indicators, which also have values above 0,7. Therefore, the discriminant validity test can be accepted, and all 26 indicators are considered valid.

4.4.3 Reliability

Reliability testing is conducted to assess the consistency, accuracy, and precision of the research instrument for measuring variables. Reliability testing is conducted by considering the values of Cronbach's alpha and composite reliability. This study will report the results of these two criteria, as Cronbach's Alpha measures the lower bound of construct reliability, while composite reliability measures the true value of construct reliability, thereby representing the upper bound (Yusuf & Sartika, 2021). The results of the reliability testing are displayed in Table 4.11.

Table 4.11. Reliability Testing Results

Variable	Cronbach's Alpha	Composite Reliability	Level of reliability
Accuracy	0,780	0,861	High
Content	0,925	0,947	Excellent
Easy Of Use	0,968	0,977	Excellent
End User Satisfaction	0,909	0,936	Excellent
Format	0,776	0,852	High
Price	0,955	0,968	Excellent
Timeliness	0,903	0,932	Excellent

Based on the reliability test results, both Cronbach's alpha and composite reliability tests show values above 0,7, indicating that all variables are reliable and can proceed to the next testing phase.

4.5 Results of The Inner Model Testing

4.5.1 Model Fit

Model fit testing is conducted to assess the adequacy of the model proposed by the researcher. This is to determine whether the model can explain the phenomenon being observed.

Table 4.12. Model Fit Results

Criteria	Model Value	Threshold Value	Description
SRMR	0,082	0,08 – 0,10	Good Fit
NFI	0,677	>0,9	Marginal Fit
Chi-Square	2579,766	>0,05	Good Fit

Based on Table 4.12, model fit evaluation is conducted to test whether a model used in the research is appropriate or not. Based on the model fit test, the results indicate that the research model is considered satisfactory as it meets one of the model fit criteria. The SRMR criterion shows a model value of 0,082, indicating that it meets the threshold value of 0,08 – 0,10. Additionally, the NFI test value of 0,677 can be considered acceptable, but not yet a good fit as the NFI value should ideally be

greater than 0,5. The Chi-Square value is above 0.05, indicating that the model has a good fit. Therefore, this criterion is accepted. A model can be deemed acceptable if it meets at least one of the testing methods (Haryono & Wardoyo, 2012). In model fit testing, there is a Chi-Square value, but it has a drawback, it is sensitive to sample size (Pratiwi & Wahyuni, 2023). Chi-Square should not be the sole measure of overall model fit, as it is sensitive to sample size. When the sample size increases, the Chi-Square value tends to increase as well, which can lead to the rejection of the model (Seno et al., 2022).

4.5.2 Coefficient Of Determination (R^2)

R-squared testing is conducted to assess the extent to which the dependent variable's strength can simultaneously explain the independent variables, or it can be understood as a test to examine the combined effect of the independent variables on the dependent variable.

Table 4.13. Coefficient Of Determination Results

Variable	R Square Adjusted	The level of strength of the relationship
End User Satisfaction	0,916	Strong

Based on Table 4.13, coefficient of Determination (R^2) is a test that assesses how much variance in the endogenous construct can be explained by the exogenous constructs. Based on the R^2 test results, it is found that the simultaneous effect of X1, X2, X3, X4, X5, and X6 on Y1 (End User Satisfaction) is 0,916. Therefore, it can be explained that all exogenous constructs collectively influence the end user satisfaction variable by 0,919 or 91,9%.

4.5.3 Effect Size (F^2)

F-squared testing is conducted to evaluate the partial effects among variables. The results of this test are categorized into small, medium, and high effects.

Table 4.14. Effect Size Results

Variable	Accuracy	Content	Easy Of Use	End User Satisfaction	Format	Price	Timeliness
Accuracy				0,111			
Content				0,238			
Easy Of Use				0,108			
End User Satisfaction							
Format				0,039			
Price				0,042			
Timeliness				0,102			

Based on Table 4.14, this test is conducted to observe the influence of independent variables on the dependent variable. Based on the effect size F2 test results, it is found that there are variables with small effects, namely the format - end user satisfaction, price - end user satisfaction, timeliness - end user satisfaction, easy of use - end user satisfaction, and accuracy - end user satisfaction. Furthermore, there are variables with moderate effects, namely the content - end user satisfaction.

4.5.4 Predictive Relevance (Q²)

Predictive Relevance is used to validate the model's predictive ability. If the Q² value is greater than zero, it indicates that the structural model has relevant predictive power.

Table 4.15. Predictive Relevance Results

Variable	SSO	SSE	Q ² (=1-SSE/SSO)
Accuracy	680.000	680.000	
Content	680.000	680.000	
Easy Of Use	680.000	680.000	
End User Satisfaction	680.000	196.058	0.712
Format	680.000	680.000	
Price	680.000	680.000	
Timeliness	680.000	680.000	

Based on Table 4.15, predictive Relevance is conducted using a blindfolding procedure to validate the predictive ability of the model and indicate how well the resulting observation values fit. The results of the Q² test indicate that the predictive relevance value of all dependent variables is 0,712, which is greater than 0. Therefore, it can be concluded that this study has predictive relevance in predicting the model.

4.5.5 Hypothesis Testing

Hypothesis testing is a decision-making method based on data analysis. In statistics, a result is considered statistically significant if the occurrence is almost unlikely to be due to chance, according to a predetermined probability threshold.

Table 4.16. Hypothesis Results

The Relationship Between Variables	Path Coefficient	T Statistics (O/STDEV)	P Values	Hypothesis
Accuracy -> End User Satisfaction	0,180	3,562	0,000	Accepted
Content -> End User Satisfaction	0,345	5,221	0,000	Accepted
Easy Of Use -> End User Satisfaction	0,490	3,718	0,000	Accepted
Format -> End User Satisfaction	0,164	3,314	0,001	Accepted
Price -> End User Satisfaction	-0,337	2,148	0,032	Accepted
Timeliness -> End User Satisfaction	0,191	4,079	0,000	Accepted

Based on Table 4.16, on the influence of the accuracy variable on end user satisfaction the inner model testing results are obtained, specifically in the path coefficient test, a value of 0,180 was obtained, indicating that the variable has a positive influence on end user satisfaction. Looking at the t-test result of 3,562, which is greater than 1,96, and the p-value of 0,000, which is less than 0,05, it can be said that there is a significant positive relationship, and the hypothesis is accepted. And for content variable, based on the results of the path coefficient test, it is found that the content variable has a value of 0,345, indicating a positive influence on user satisfaction. Furthermore, the t-value obtained is 5,221, which is greater than 1,96, and the p-value is 0,000, which is less than 0,05. Therefore, it can be concluded that the relationship is significantly positive, and the hypothesis is accepted.

On easy of use variable, the data processing results for the path coefficient indicate that the easy of use variable has a path coefficient value of 0,490, suggesting a positive influence on user satisfaction. Furthermore, the t-test yields a value of 3,718, which is greater than 1,96, and the p-value is 0,000, which is less than 0,05, indicating that the easy of use variable has a significant positive influence, and the hypothesis is accepted and for format variable the path coefficient results show a positive value of 0,164, indicating that the format variable has a positive influence on user satisfaction. Furthermore, the t-test yields a value of 3,314, which is greater than 1,96, and the p-value is 0,001, which is less than 0,05. Thus, it can be concluded that the hypothesis is accepted, and the "format" variable significantly affects user satisfaction positively.

Unlike other variables, the price variable yielded a path coefficient test result with a value of -0,337, indicating that the price variable has a negative influence on user satisfaction. The t-test resulted in a value of 2,148, which is greater than 1,96, and the p-value is 0,032, which is less than 0,05. This means that the price variable has a significant negative effect on user satisfaction, and the hypothesis is accepted. And for timeliness variable, the path coefficient test yielded a value of 0,191, indicating that the timeliness variable has a positive influence on user satisfaction. The t-test resulted in a value of 4,079, which is greater than 1,96, and the p-value is 0,000, which is less than 0,05. This means that the timeliness variable has a significant positive effect on user satisfaction, and the hypothesis is accepted.

4.5.6 Final Result of Inner Model Testing

All tests with SMART PLS, including both outer model and inner model tests, are summarized in the following test result diagram. This testing contains all the displayed results.

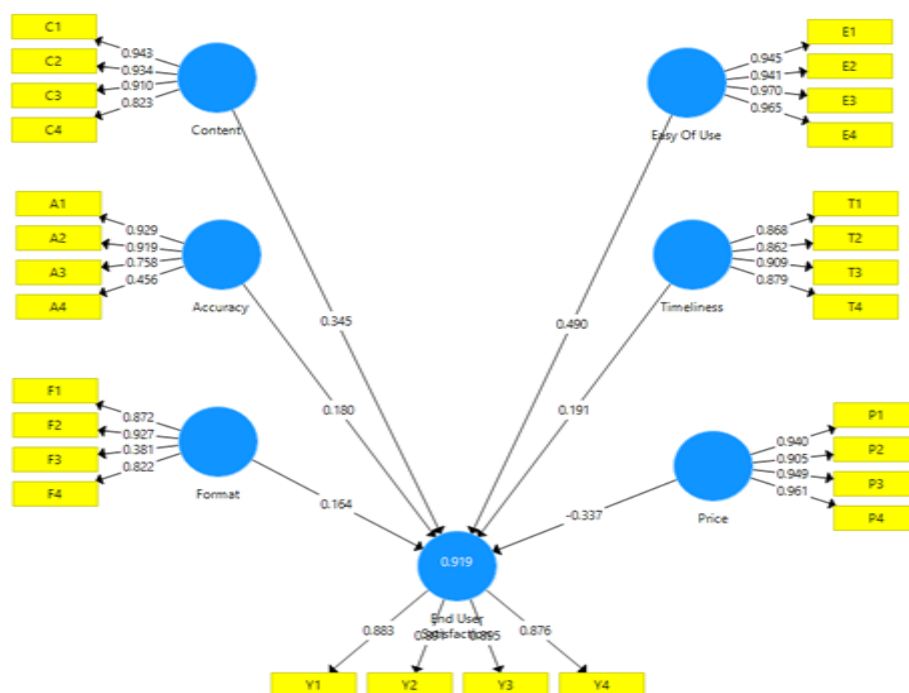


Figure 4.7. Inner Model Results

The proposed research model has undergone a series of inner model analysis stages, namely model fit test, path coefficient analysis, Coefficient of Determination (R²) analysis, Effect Size analysis (F²), Predictive Relevance (Q²) analysis. These testing stages are summarized in the final diagram presented in Figure 4.7.

5 CONCLUSION

Based on the descriptive statistical test conducted, each variable, including content, accuracy, format, ease of use, and timeliness, falls under the category of fairly satisfactory. There were six hypotheses proposed in this study, and all of them were accepted. All five hypotheses showed a significant positive effect, namely content variable on end user satisfaction, accuracy on end user satisfaction, format on end user satisfaction, ease of use on end user satisfaction, and timeliness on end user satisfaction. However, there was a variable that had a significant negative effect, namely price on end user satisfaction.

Based on the effect size f² test results, there is a variable with the largest effect size compared to other variables, namely the influence of content on end user satisfaction with a value of 0,238. Therefore, service providers can maximize the content aspect in ShopeePay because it has the greatest influence on user satisfaction and is also a factor to measure its quality. The common reasons users do not use a digital product are the risks associated with its use and a lack of trust in the services provided (Darmiasih & Setiawan, 2020).

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