

The Influence of Perceived Usefulness, Perceived Ease of Use, and Trust in Dana E-Wallet on Students' Interest in Shopping at MSMEs in Sumbawa Besar

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Abstract: *This study aims to analyze the effect of Perceived Usefulness, Perceived Ease of Use, and Trust on students' purchase intention in using the DANA e-wallet for transactions at micro, small, and medium enterprises (MSMEs) in Sumbawa Besar. This research employed a quantitative approach with a total sample of 190 respondents consisting of university students who are DANA e-wallet users in Sumbawa Besar Regency. The sampling technique used was purposive sampling, with criteria limited to students who had previously used the DANA e-wallet for MSME transactions. The results indicate that Perceived Usefulness and Trust have a positive and significant effect on students' purchase intention, while Perceived Ease of Use shows a positive but not statistically significant effect when tested partially. Simultaneously, Perceived Usefulness, Perceived Ease of Use, and Trust have a significant effect on purchase intention toward MSMEs in Sumbawa Besar. These findings suggest that students' purchase intention is more strongly influenced by perceived functional benefits and trust in the digital payment system rather than by ease of use alone. This condition is consistent with the current phenomenon in Sumbawa Besar, where an increasing number of MSMEs and local merchants have adopted QRIS-based payment systems, making e-wallets such as DANA an integral part of students' daily transaction activities.*

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Introduction

The use of electronic money in Indonesia is increasingly dominating daily life, especially among the younger generation, such as students, who are switching from cash to digital transactions for food payments, online motorcycle taxis, and even pooling their DANA balances (GoodStats Data, 2025). This trend is driven by the adoption of QRIS by small merchants, making e-wallets like DANA the primary choice with over 100 million installations, surpassing OVO and GoPay (Rankia, 2024). In West Nusa Tenggara, internet penetration has reached 70%, while QRIS has been adopted by 368,602 provincial merchants (Bank Indonesia, 2025), including Sumbawa MSMEs active in Car Free Day and the Bale Berdaya program (Mataram Antara News, 2025). Students, as digital natives, actively use DANA for MSME purchases, influenced by perceived usefulness, ease of use, and trust.(Destyana, 2023)(Prawita et al., 2020)(Damayanti, 2019).

The value of electronic money transactions jumped from IDR 42.40 trillion (January 2024) to IDR 63.73 trillion (February 2025), surpassing debit cards (IDR 42.11 trillion) and credit cards (IDR 34.11 trillion) (GoodStats Data, 2025). E-wallets dominated usage with 62%, followed by QRIS (54%), while cash fell to 51%; the number of ATMs also decreased by 2.6% to 96,802 units (DataIndonesia.id, 2023). In Sumbawa, MSMEs accept QRIS for student transactions at CFD/CFN.(Nisa et al., 2025), reflecting a national shift to fast, cashless digital payments. The increase in digital transactions prompted research into students' shopping interest in using DANA in Sumbawa MSMEs, given their contribution to the local economy amidst e-wallet competition and QRIS expansion (Bank Indonesia, 2024). Without understanding factors such as benefits (Nurohmah et al., 2024), convenience(Kafi et al., 2023), and trust, MSMEs are at risk of losing young consumers who dominate 79.5% of internet penetration among 19–24 year olds, thus hampering regional financial inclusion.

This research is novel because it focuses on students from Sumbawa, a non-metropolitan region with high QRIS MSME (Nisa et al., 2025), testing the TAM (perceived usefulness, ease of use) model plus trust on DANA shopping interest, differing from urban studies such as GoPay (Prawita et al., 2020) or Shopee (Destyana, 2022). The integration of local CFD/CFN and Bale Berdaya data (Mataram Antara News, 2025) offers contextual insights into NTB that have not been explored. Although previous studies have demonstrated the influence of usefulness (Prawita et al., 2020)(Nurohmah et al., 2024), ease of use (Destyana, 2022), and trust(Irvania et al., 2022)(Kafi et al., 2023) on general purchasing interest, there has been no specific research on Sumbawa students using DANA for local MSMEs. This gap is particularly significant in the context of regions with developed digital infrastructure, where the combination of variables influencing purchasing interest has not been empirically tested (Faza et al., 2025).

Based on the background that has been explained, the problem formulation in this study includes: (1) the influence of perceived usefulness (perceived benefits) of DANA e-wallet on students' shopping interest in MSMEs in Sumbawa Besar; (2) the influence of perceived ease of use (perceived ease of use) of DANA e-wallet on students' shopping interest

in MSMEs in Sumbawa Besar; (3) the influence of trust (trust) of DANA e-wallet on students' shopping interest in MSMEs in Sumbawa Besar; and (4) the influence of perceived usefulness, perceived ease of use, and trust of DANA e-wallet simultaneously on students' shopping interest in MSMEs in Sumbawa Besar.

Despite the growing body of literature on the Technology Acceptance Model and digital payment adoption, few studies have explored e-wallet usage in rural or semi-urban contexts such as Sumbawa. Most prior research focuses on metropolitan settings, where digital infrastructure and consumer behavior differ significantly. Consequently, empirical evidence regarding how perceived usefulness, ease of use, and trust simultaneously affect students' shopping interest in non-metropolitan MSME environments remains limited. This study fills that gap by empirically examining these relationships within the context of Sumbawa's developing digital ecosystem.

Research Methods

This research was conducted in Sumbawa Besar over a period of approximately four months, starting from September 2025 to January 2026. This research is a survey study with a quantitative approach. This approach aims to obtain numerical data that can be processed statistically to answer the problem formulation and test the research hypothesis. The student population in Sumbawa Besar includes students from various universities, such as the Sumbawa Technology University (UTS), Samawa University (UNSA), Poltekkes, and other universities operating in Sumbawa Regency. This study used a non-probability sampling technique with a purposive sampling method. Non-probability sampling is a sampling technique that does not provide an equal opportunity for each member of the population to be selected as a respondent, so the number of samples was 190 respondents. Data collection was carried out through distributing questionnaires as the main technique. The questionnaire was compiled using a four-point Likert scale and selected one of them by using a tick or checklist. Analyzed through classical assumption tests, as well as multiple linear regression with the help of SPSS software.

Results and Discussion

Classical Assumption Test

1. Normality Test

The results of the data normality test according to the Kolmogorov-Smirnov test are presented in Table 1, namely.

Table 1. Normality Test Results

		Unstandardized Residual
N		190
Normal	Mean	.0000000
Parametersa.b	Standard Deviation	2.66968543
Most Extreme	Absolute	.058
Differences	Positive	.036

	Negative	-.058
Test Statistics		.058
Asymp Sig. (2-tailed)e		.200d
Monte Carlo Sig.		.127
Sig. (2-tailed)e	99% Lower Bound	.119
	Confidence Upper Bound	.136
	Interval	

Based on the results of the Kolomogrov-Smirnov test above, the Sig. is 0.127, which is greater than 0.05. Therefore, the data from the normality test from this study can be said to be normally distributed and the data is suitable for use in multiple linear regression analysis.

2. Heteroscedasticity test results

Table 2. Heteroscedasticity Test Results

<i>Variables</i>	Sig.	Information
<i>Perceived Usefulness</i>	1,000	No Heteroscedasticity
<i>Perceived Ease of Use</i>	1,000	No Heteroscedasticity
<i>Trust</i>	1,000	No Heteroscedasticity

Based on the results of the heteroscedasticity test presented in Table 2, a significance value of 1.000 was obtained for the Perceived Usefulness variable (X1), 1.000 for the Perceived Ease of Use variable (X2), and 1.000 for the Trust variable (X3). All significance values are greater than 0.05, so it can be concluded that there is no significant relationship between the independent variables and the absolute value of the residual. Thus, it can be stated that there is no heteroscedasticity in the regression model used, so that the assumption of homoscedasticity has been met and the regression model is suitable for use in hypothesis testing in the next stage.

3. Multicollinearity Test Results

Table 3. Multicollinearity Test Results

<i>Variables</i>	Collinearity Statistics		Information
	Tolerance	VIF	
<i>Perceived Usefulness</i>	0.330	3,032	No Multicollinearity
<i>Perceived Ease of Use</i>	0.355	2,811	No Multicollinearity
<i>Trust</i>	0.346	2,887	No Multicollinearity

Based on the results of the multicollinearity test presented in Table 3, a Tolerance value of 0.330 and a VIF value of 3.032 were obtained for the Perceived Usefulness variable (X1), a Tolerance value of 0.355 and a VIF value of 2.811 for the Perceived Ease of Use variable (X2), and a Tolerance value of 0.346 and a VIF value of 2.887 for the Trust variable (X3). All independent variables have a Tolerance value greater than 0.10 and a VIF value less than 10. Thus, it can be concluded that there is no multicollinearity between the independent variables in the regression model used. This indicates that each independent variable can explain the dependent variable independently, so that the regression model is suitable for use in hypothesis testing in the next stage.

Multiple Linear Regression Analysis

Table 4. Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients Beta
	B	Std. Error	
(Constant)	8,221	1,718	
1 X1	0.190	0.059	0.248
X2	0.141	0.053	0.195
X3	0.294	0.051	0.430

The multiple linear regression model in this study is formulated as follows: $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$. Based on the Unstandardized Coefficients (B) value, the following regression equation is obtained: Shopping Interest = 8.221 + 0.190X₁ + 0.141X₂ + 0.294X₃. So the conclusion of the analysis results is as follows:

1. Constant (α)

The constant value of 8.221 indicates that if the variables Perceived Usefulness (X₁), Perceived Ease of Use (X₂), and Trust (X₃) are assumed to be zero or constant, then the value of Shopping Interest (Y) is 8.221. This constant value represents the basic level of students' shopping interest when the influence of the three independent variables is not taken into account in the model.

2. The Influence of Perceived Usefulness on Shopping Interest

The results of the regression analysis show that the regression coefficient value of the Perceived Usefulness variable (X₁) is 0.190 and is positive. This indicates that Perceived Usefulness has a positive influence on Shopping Intention. This means that if students' perceived benefits of using the DANA e-wallet increase, then shopping interest at MSMEs in Sumbawa Besar also tends to increase. Perceived benefits such as ease of transactions, time efficiency, and practicality of use encourage students to prefer DANA as a payment method when shopping at MSMEs.

3. The Influence of Perceived Ease of Use on Shopping Interest

The regression coefficient value of the Perceived Ease of Use (X₂) variable is 0.141 and is positive. This indicates that Perceived Ease of Use has a positive influence on Shopping Intention. The meaning of this result is that the easier the DANA application is to understand and use by students, the tendency of shopping interest using the application will also increase. Ease of payment process, simple application display, and ease of transaction access are factors that contribute to increased shopping interest, although the influence is not as strong as other variables.

4. The Influence of Trust on Shopping Interest

The results of the regression analysis show that the regression coefficient value of the Trust variable (X₃) is 0.294 and is positive. This indicates that Trust has a positive influence on Shopping Intention. This means that the higher the level of student trust in the security, reliability, and integrity of the DANA application, the higher their interest in making shopping transactions at MSMEs in Sumbawa Besar. Based on the Standardized Coefficients (Beta) value of 0.430, the Trust variable is the variable that has the most dominant influence compared to other independent variables in shaping student shopping intention.



Hypothesis Testing

1. t-Test Results (Partial)

Table 5. Results of the t-Test (Partial)

t	Sig.
4,786	<0.001
3,223	0.001
2,639	0.173
5,741	<0.001

The degrees of freedom in this study are determined by the formula:

$$t(\alpha/2 ; n - k - 1) = t(0.025 ; 186) = 1.972$$

Based on the results of the t-test, the Perceived Usefulness variable obtained a calculated t-value of 3.223, which is greater than the t-table of 1.972, with a significance value of <0.001 which is smaller than 0.05. This indicates that Perceived Usefulness has a positive and significant effect on Shopping Intention. Thus, the first hypothesis (H1) is accepted. Based on the results of the t-test, the Perceived Ease of Use variable obtained a calculated t-value of 1.366, which is smaller than the t-table of 1.972, with a significance value of 0.173 which is greater than 0.05. This indicates that Perceived Ease of Use has a positive but not significant effect on Shopping Intention. Thus, the second hypothesis (H2) is rejected. Furthermore, based on the t-test results, the Trust variable obtained a calculated t-value of 5.847, which is greater than the t-table of 1.972, with a significance value of <0.001, which is smaller than 0.05. This indicates that Trust has a positive and significant effect on Shopping Intention. Thus, the third hypothesis (H3) is accepted.

2. F Test Results (Simultaneous)

Table 6. F-Test Results (Simultaneous)

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2548,175	3	849,392	117,284	<0.001b
Residual	1347,045	186	7,242		
Total	3895,219	189			

The degrees of freedom in the F test are determined as follows:

$$F(df1, df2, \alpha) = F(3, 186, 0.05) = 2,650$$

Based on the F-test results presented in Table 6, the calculated F-value is 117.284, which is greater than the F-table value of 2.65, and has a significance value of <0.001, which is smaller than 0.05. Thus, H_0 is rejected and H_a is accepted. This indicates that the variables Perceived Usefulness, Perceived Ease of Use, and Trust simultaneously have a significant effect on Shopping Intention using the DANA e-wallet.

Results of the Coefficient of Determination (R²) Test

Table 7. Results of the Determination Coefficient (R²) Test

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.809a	0.654	0.649	2.69113

Based on the results of the Determination Coefficient test presented in Table 7, the R Square value was obtained at 0.654 and the Adjusted R Square value was 0.649. This indicates that 65.4% of the variation in Shopping Intention can be explained by the variables Perceived Usefulness, Perceived Ease of Use, and Trust used in this research model. Meanwhile, the remaining 34.6% is explained by other variables outside the research model that are not discussed in this study.

Discussion

The Influence of Perceived Usefulness on Shopping Interest

Based on the results of the hypothesis testing, the Perceived Usefulness variable was proven to have a positive and significant effect on students' Shopping Intention at MSMEs in Sumbawa Besar. This indicates that students' perceived usefulness in using the DANA application plays a significant role in driving their interest in shopping using the e-wallet. The results of this study are in line with the Technology Acceptance Model (TAM) theory proposed by Davis (1989), which states that perceived usefulness is a primary factor influencing the acceptance and use of a technology. When users perceive that technology provides tangible benefits in their daily activities, their tendency to use the technology will increase. In the context of this study, students will be more interested in using the DANA application if they experience direct benefits such as transaction speed, ease of payment, and efficiency in shopping activities at MSMEs.

The findings of this study are also in line with the results of previous research conducted by (Nurohmah et al., 2024) which states that perceived usefulness has a positive and significant effect on shopping interest on digital platforms. Similar research by (Alexandra & Ramadhan, 2022) as well as (Prawita et al., 2020) This also reinforces the fact that perceived benefits are a dominant factor in increasing consumers' intention to use digital payment services. These consistent results indicate that functional benefits remain the primary reason consumers use financial technology, including the DANA e-wallet. This phenomenon aligns with field conditions in Sumbawa Besar Regency, where most MSMEs have provided the QRIS payment method. The presence of QRIS allows consumers to complete transactions simply by scanning a code without having to wait for change. In this situation, students perceived that using DANA accelerated the transaction process compared to cash payment methods. This reinforces the perceived benefits and encourages increased shopping interest among MSMEs that provide digital payments.

The Influence of Perceived Ease of Use on Shopping Intention

Based on the results of the hypothesis testing, the Perceived Ease of Use variable showed a positive but insignificant effect on students' shopping interest in MSMEs in Sumbawa Besar. This result indicates that although the ease of use of the DANA application has a positive influence, this factor has not been able to be a primary determinant in increasing students' shopping interest statistically. This finding indicates that ease of use is no longer the dominant factor in students' decisions to use e-wallets. In the context of current digital technology developments, students have become accustomed to using various digital-based applications, so the aspect of ease of use is considered a minimum standard that should be possessed by every payment application.

The results of this study align with several previous studies that found that perceived ease of use does not always have a significant effect on purchase intention, particularly

among user groups with high levels of digital literacy.(Prawita et al., 2020)This study shows that ease of use does not have a significant direct impact on repurchase intention, as users prioritize usefulness and trust over technical ease. This confirms that for experienced users, ease of use is no longer a distinguishing factor between applications.

The Influence of Trust on Shopping Interest

Based on the results of the hypothesis testing, the Trust variable was proven to have a positive and significant effect on students' shopping interest in MSMEs in Sumbawa Besar. These results indicate that students' level of trust in the DANA application is a significant factor in driving their decision to shop using e-wallets, especially at local MSMEs. In digital transactions, users cannot directly see the fund transfer process, so trust in the system is the main foundation before individuals are willing to use the payment service. The results of this study are also consistent with previous research conducted by(Kafi et al., 2023);(Irvania et al., 2022), which states that trust has a positive and significant effect on purchase intention on digital platforms. The similarity of these research results indicates that trust is a variable that plays a dominant role in shaping digital transaction intentions, both in e-commerce and e-wallet services.

The Influence of Perceived Usefulness, Perceived Ease of Use, and Trust on Shopping Interest

Based on the results of simultaneous testing using the F-test, the results showed that the variables Perceived Usefulness, Perceived Ease of Use, and Trust together had a positive and significant effect on student shopping interest in MSMEs in Sumbawa Besar. These results indicate that student shopping interest is not formed by a single factor, but rather the result of the interaction of various perceptions held by users towards the DANA e-wallet. This finding is in line with the basic concept of the Technology Acceptance Model (TAM), which states that technology acceptance is influenced by perceptions of benefits and ease of use, which then shape user attitudes and behavioral intentions. In the development of financial technology, the variable of trust is also an important factor that complements the TAM model, especially in the context of digital transactions that involve risks of security and system reliability. The results of this study are also consistent with various previous studies. Research by(Nurohmah et al., 2024)shows that perceived usefulness and perceived ease of use simultaneously influence shopping interest on digital platforms. Research by(Irvania et al., 2022)as well as(Azzahroh, 2025)found that perceived usefulness and trust together significantly influence purchase intention. This similarity of findings indicates that the combination of usefulness, convenience, and trust is a key factor in driving the use of digital payment services.

Conclusion and Recommendation

Based on the research results, Perceived Usefulness and Trust in the DANA e-wallet have a positive and significant influence on students' shopping interest in MSMEs in Sumbawa Besar, while Perceived Ease of Use showed a positive but insignificant effect partially. Simultaneously, these three variables proved influential, indicating that students'

decisions were influenced by a combination of benefits, convenience, and trust in the digital payment system. This phenomenon reflects the dominance of female student respondents with frequent DANA use, middle income levels, and support for local MSMEs through QRIS, making the e-wallet a shopping habit that supports the regional economy. For related parties, DANA providers are advised to strengthen trust through transaction security, system reliability, and data protection; increase benefits such as efficiency and speed; and maintain ease of use, while MSMEs are encouraged to optimize digital payments for practicality. For students, use DANA wisely by understanding its features for security and efficiency. Future researchers can add variables such as perceived risk or promotions, and expand the method and region for broader generalization.

References

- Alexandra, M., & Ramadhan, T. (2022). *Pengaruh Persepsi Kemudahan Dan Persepsi Manfaat Terhadap Minat Beli Pada Konsumen Tokopedia Di Jakarta*. 8(2), 1396–1404.
- Azzahroh, A. (2025). *Pengaruh Perceived Usefulness Of Online Review, Trust, Dan Satisfaction Terhadap Purchase Intention Di E-Commerce*. Universitas Islam Indonesia.
- Damayanti, V. (2019). *Pengaruh Perceived Usefulness Dan Perceived Ease Of Use Terhadap Purchase Intention Melalui Brand Image Sebagai Variabel Intervening Pada Mahasiswa*. 16(2), 99–109.
- Destyana, Y. (2023). *Pengaruh Digital Marketing, Perceived Ease Of Use, Dan Ragam Produk Terhadap Minat Beli Serta Pengaruhnya Pada Keputusan Pembelian Melalui E-Commerce Shopee Di Jabodetabek*. *Jurnal Manajemen Bisnis Dan Kewirausahaan*.
- Faza, A., Fatta, A., Ardianzah, D., Saragih, D. N., Suwardana, M. F., & Afdhal, M. (2025). *Pengaruh Financial Technology Terhadap Preferensi Pembayaran Digital Di Kalangan Mahasiswa*. *Gudang Jurnal Multidisiplin Ilmu*, 3, 64–69.
- Irvania, V. A., Bagus, I., Udayana, N., & Fadhilah, M. (2022). *Pengaruh Perceived Usefulness , Trust Dan Perceived Risk Terhadap Purchase Intention Pengguna Shopee*. 19(1), 622–630.
- Kafi, N. L., Prabowo, H., & Gultom, H. C. (2023). *Analisis Pengaruh Kepercayaan , Presepsi Risiko Dan Keamanan Terhadap Minat Beli Untuk Bertransaksi Secara Online Di Shopee*. 3.
- Nisa, B. H., Ilmi, R., Saindra, & Irawan, F. (2025). *Persepsi Pelaku Umkm Terhadap Penggunaan Qris Sebagai Metode Pembayaran Digital Di Kabupaten Sumbawa : Pendekatan Kualitatif*. *Jurnal Nirta : Studi Inovas*, 5(1), 182–193.
- Nurohmah, A. S., Sitorus, G., & Siagian, A. (2024). *Pengaruh Persepsi Risiko, Persepsi Kemudahan, Dan Persepsi Manfaat Terhadap Minat Belanja Di Bukalapak*. 10(2), 22–31.
- Prawita, D., Lukitaningsih, A., & Welsa, H. (2020). *Analisis Price Discount Dan Perceived Usefulness Terhadap Minat Pembelian Ulang Menggunakan Fintech Melalui Intervening Customers Satisfaction (Studi Kasus Pada Pengguna Aplikasi Gopay Di Kota Yogyakarta)*. 4(2), 147–160.