

Perceived Ease of Use, Usefulness, and Risk on Actual E-wallet Usage Through Intention Among FISIP Students

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ABSTRACT

The rapid growth of the digital economy has transformed consumer behavior, especially in adopting financial technologies such as e-wallets. This study examines the influence of perceived ease of use, perceived usefulness, and perceived risk on actual e-wallet usage through behavioral intention among students of the Faculty of Social and Political Sciences, Mulawarman University. The Technology Acceptance Model (TAM) is employed as the theoretical foundation, integrating perceived risk as an external variable to explain behavioral variations. A quantitative approach using Structural Equation Modeling–Partial Least Square (SEM–PLS) with SmartPLS 4 was applied. The sample consisted of 100 respondents, determined through Slovin's formula with a 10% margin of error. Data were collected using a structured questionnaire with a five-point Likert scale. The results show that perceived ease of use ($t = 4.744$; $p = 0.000$) and perceived usefulness ($t = 3.392$; $p = 0.001$) significantly and positively affect behavioral intention, while perceived risk ($t = 1.915$; $p = 0.056$) has a negative but insignificant effect. Behavioral intention significantly affects actual use ($t = 5.187$; $p = 0.000$), confirming its mediating role. However, the direct effects of ease, usefulness, and risk on actual use are insignificant. The study reaffirms TAM's relevance and suggests including moderating factors such as trust or digital literacy. Practically, e-wallet providers should improve usability, clarify benefits, and strengthen security to encourage continued use.

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INTRODUCTION

The expansion of the digital economy has significantly transformed consumer behavior, particularly regarding the adoption of financial technologies such as digital wallets (e-wallets). The adoption and utilization of e-wallets are influenced by psychological and perceptual factors, including perceived ease of use, perceived usefulness, and perceived risk, which collectively shape users' behavioral intentions. Consumer behavior reflects the processes involved in obtaining and using products or services, encompassing information search, evaluation of alternatives, and final decision-making driven by physiological, safety, social, esteem, and self-actualization needs. In the digital era, adaptation to technological innovation has become essential, and e-wallets represent a clear example of this behavioral transformation.

An e-wallet is an internet-based application that functions as a virtual form of money, allowing users to conduct transactions without the use of physical cash. It enables payments, fund transfers, and purchases through digital means. According to Bank Indonesia, an e-wallet refers to an electronic service that stores payment instrument data, including digital cash, and serves as a repository for assets that facilitate payments. The increasing adoption of e-wallets aligns with a modern lifestyle emphasizing convenience and efficiency, enabling transactions anytime and anywhere using only a smartphone.

In Indonesia, the use of e-wallets continues to increase. Data from (visa.co.id, 2024) reported that e-wallet usage reached ninety-two percent, while cash usage declined to eighty percent from the previous year's eighty-four percent. Common uses of e-wallets include e-commerce shopping, mobile top-ups, peer-to-peer transfers, bill payments, and online food purchases. Bank Indonesia recorded thirty-eight officially registered e-wallet platforms, with GoPay, OVO, Dana, ShopeePay, and LinkAja being the most widely utilized. This development reflects the growing digital payment ecosystem in Indonesia.

The popularity of e-wallets is particularly evident among younger users, especially university students who are technologically adept and highly engaged in digital transactions. Research conducted by (Ipsos, 2020) indicated that sixty-eight percent of e-wallet users are young individuals with high productivity levels, consistent with findings by (Vernando et al., 2022), which revealed that most users are between nineteen and twenty-two years old. This trend is also visible among students of the Faculty of Social and Political Sciences (FISIP), Mulawarman University, where digital technologies have increasingly become part of daily activities. A preliminary survey conducted on January twenty-first, two thousand twenty-five, involving forty-nine FISIP students, revealed that thirty-two preferred e-wallet payments, while seventeen continued to use cash. Dana was identified as the most widely used platform, followed by GoPay and ShopeePay. Convenience, speed, and efficiency were cited as the main factors driving e-wallet usage, especially for online shopping, food delivery, and transportation payments.

Despite the high level of adoption, financial constraints remain a major limitation for younger users. (Khaira, 2021) found that low income restricts optimal e-wallet use among individuals aged eighteen to twenty-four. Similarly, (Ipsos, 2020) reported that Generation Z's weekly top-up rate was only nineteen percent, significantly lower than the eighty-one percent recorded among millennials. These findings suggest that while students value the convenience and speed of e-wallets, their transaction volumes remain relatively small due to limited financial capacity.

Another factor influencing behavioral intention is perceived risk, which includes concerns regarding data security, system errors, and potential financial losses. The Technology Acceptance Model (TAM), developed by (Davis et al., 1989), has been widely applied to explain such behavioral patterns. The model posits that perceived usefulness and perceived ease of use are the primary determinants of technology acceptance, influencing users' attitudes and intentions toward technology adoption. In the context of e-wallets, both factors enhance the likelihood of continued use, while perceived risk may either weaken or reinforce this relationship.

Previous studies utilizing the TAM framework have produced varied results concerning the effects of perceived ease of use, perceived usefulness, and perceived risk on e-wallet adoption. Some studies confirmed that ease of use and usefulness significantly affect behavioral intention, while others found the relationships to be weak or insignificant. Similarly, the influence of perceived risk remains inconclusive, with some findings indicating a negative effect on intention, whereas others suggest that users tend to overlook risks when convenience dominates. These inconsistencies indicate a theoretical gap in understanding how TAM variables jointly influence behavioral intention and actual usage, particularly among younger users who are both digitally active and risk-aware.

Unlike prior studies that primarily examined working adults or general users, this research focuses on university students, a demographic characterized by high digital literacy but limited financial autonomy. The study offers novelty by revalidating the Technology Acceptance Model within a student-based context in Indonesia, integrating perceived risk as an external variable to test its moderating role in behavioral intention formation, and empirically analyzing both direct and indirect (mediated) effects through Structural Equation Modeling–Partial Least Square (SEM–PLS). Through this framework, the study aims to clarify the behavioral mechanisms linking perceived ease of use, perceived usefulness, and perceived risk to e-wallet adoption and actual usage.

RESEARCH METHODS

A quantitative research strategy was adopted for this work, specifically using Structural Equation Modeling–Partial Least Square (SEM–PLS) and processing the data with SmartPLS version 4. The research design aimed to verify the links between perceived ease of use, perceived usefulness, perceived risk, usage intent, and e-wallet adoption, in line with the

Technology Acceptance Model (TAM).

Measurement Instrument. The data collection tool was a fixed-choice questionnaire that used a Likert scale with five options (ranging from 1, strongly disagree, to 5, strongly agree). All measures were adapted from reliable instruments utilized in similar investigations to ensure the appropriateness and dependability of the material. The operational definitions and measurement items for each construct are presented below.

Table 1. Research Instrument

Variable	Indicator	Item Statement	Source
Perceived Ease of Use (X1)	Easy to learn	Using this e-wallet is easy to learn	(Jogiyanto, 2007)
	Controllable	I can easily control how to use this e-wallet	
	Clear and understandable	The operation of this e-wallet is clear and easy to understand	
	Flexible	This e-wallet is flexible to use anytime and anywhere	
	Easy to become skillful	I quickly become skillful at using this e-wallet	
	Easy to use	Overall, this e-wallet is easy to use	
Perceived Usefulness (X2)	Work more quickly	Using this e-wallet helps me complete payments faster	(Jogiyanto, 2007)
	Useful	This e-wallet is useful in daily transactions	
	Increase productivity	Using this e-wallet increases my productivity in managing payments	
	Enhance effectiveness	This e-wallet makes my transactions more effective	
	Improve job performance	Using this e-wallet improves my performance in financial activities	
	Make job easier	This e-wallet makes my transaction process easier	
Perceived Risk (X3)	Specific risk	I think there is a certain level of risk in using this e-wallet	(Pavlou, 2003)
	Financial loss	I worry about experiencing a financial loss when using this e-wallet	
	Perceived risk	I believe using this e-wallet is risky	
Behavioral Intention (Z)	Willingness to use	I am willing to use this e-wallet regularly	(Priambodo & Prabawani, 2016)
	Always try to use	I always try to use this e-wallet in daily activities	
	Continue to use	I will continue to use this e-wallet in the future	
Actual Use (Y)	Actual usage	I have actually used this e-wallet for transactions	(Rohman et al., 2023)
	Frequency of use	I use this e-wallet frequently in daily life	
	User satisfaction	I am satisfied with the use of this e-wallet	

Sampling and Respondents. The population of 3,671 active students from the Faculty of Social and Political Sciences at Mulawarman University. The sample size of 100 participants

was determined using Slovin's formula with a 10% margin of error, yielding 97.3, rounded up to 100 for model adequacy.

The smallest acceptable sample size must equal at least ten times the greatest quantity of observed variables used in a single measurement concept, making 100 respondents sufficient for model testing. Respondents were selected using simple random sampling to ensure equal representation across departments.

Demographically, respondents were students aged 18 years and above, representing both male and female users who had used at least one e-wallet application such as Dana, GoPay, or ShopeePay.

Data Collection and Ethics. Data acquisition was performed through an online questionnaire delivered via Google Forms between February and March 2025. Participation in the study is confidential. Respondents learned about the research's goals, the secrecy of the information, and their prerogative to pull out whenever they wished. Prior to data collection, ethical clearance for this study was granted by the Ethics Board of the Faculty of Social and Political Sciences, Mulawarman University.

Data Analysis. SmartPLS was utilized to process the data, following these procedures:

1. Outer model testing for convergent validity, discriminant validity (Fornell-Larcker and HTMT criteria), and composite reliability.
2. Inner model testing for R^2 , Q^2 (via PLSpredict), path coefficients, and hypothesis testing using bootstrapping (5,000 subsamples).
3. Goodness-of-fit (GoF) assessment using SRMR, d_{ULS} , d_G , and NFI indices to evaluate model adequacy.

All analyses followed recommended thresholds by (Hair et al., 2021) to ensure validity, reliability, and robustness of the measurement model.

RESULTS & DISCUSSION

Convergent Validity Test. Convergent validity represents the strength of the link among the items that form a construct, ensuring they truly represent the concept being measured. Convergent validity demonstrates the consistency of indicators in measuring the same construct. Validity is considered valid if the factor loading is > 0.70 and the AVE is ≥ 0.50 (Ghozali, 2014; S, 2016).

Table 2. Loading factor and AVE values

Variable	Indicator	Loading Factor	AVE	Information
Perceived Ease of Use	X1.1	0.839	0.755	Valid
	X1.2	0.779		Valid
	X1.3	0.847		Valid
	X1.4	0.801		Valid
	X1.5	0.859		Valid
	X1.5	0.892		Valid
Perceived Usefulness	X2.1	0.758	0.621	Valid
	X2.2	0.826		Valid
	X2.3	0.816		Valid
	X2.4	0.796		Valid
	X2.5	0.808		Valid
	X2.6	0.804		Valid
Perceived Risk	X3.1	0.840	0.643	Valid
	X3.2	0.862		Valid
	X3.3	0.880		Valid
	X3.4	0.899		Valid
Intention to Use	Z.1	0.870	0.716	Valid
	Z.2	0.863		Valid
	Z.3	0.853		Valid
	Z.4	0.875		Valid
	Z.5	0.840		Valid
	Z.6	0.865		Valid
	Z.7	0.878		Valid
	Z.8	0.876		Valid
	Z.9	0.900		Valid
Actual Usage e-wallet	Y.1	0.743	0.757	Valid
	Y.2	0.832		Valid
	Y.3	0.816		Valid
	Y.4	0.744		Valid
	Y.5	0.801		Valid

Source: Processed data (2025)

As indicated by the validity check results in Table 2, every indicator for each variable displays a loading factor score of 0.70 or higher and an AVE value of 0.50 or above. Therefore, it can be determined that the constructs in this investigation satisfy the validity prerequisites and are deemed sound based on the set standards (Ghozali, 2014).

Discriminant Validity. Discriminant validity confirms that each measurement concept is statistically separate from the other concepts within the framework. This was evaluated by employing (1) the Fornell–Larcker Test and (2) the Heterotrait–Monotrait Ratio (HTMT).

Table 3. Fornell–Larcker Criterion

Variable	X1	X2	X3	Z	Y
X1	0.846				
X2	0.583	0.802			
X3	-0.362	-0.226	0.870		
Z	0.675	0.638	-0.373	0.869	
Y	0.617	0.600	-0.357	0.788	0.886

Source: Processed data (2025)

The square root of the AVE for every construct (shown bold on the diagonal) surpasses its correlations with the remaining concepts, thereby validating discriminant validity as per the Fornell–Larcker standard.

Table 4. HTMT Ratio

	X1	X2	X3	Z	Y
X1	–				
X2	0.637	–			
X3	0.379	0.236	–		
Z	0.685	0.686	0.396	–	
Y	0.705	0.683	0.389	0.886	–

Source: Processed data (2025)

All HTMT values are below 0.90, further confirming that each construct is distinct. Thus, the model fulfills the requirements of discriminant validity.

Composite Reliability. Consistency checks were performed to evaluate the dependability of the measurement tool for each variable using composite reliability. A variable is deemed trustworthy if its composite reliability score is 0.70 or higher (Ghozali, 2014). The outcomes of the composite reliability figures for each variable are shown in the table below:

Table 5. Composite Reliability Test

Variable	Composite Reliability	Information
Perceived Ease of Use (X1)	0.983	Reliable
Perceived Usefulness (X2)	0.915	Reliable
Perceived Risk (X3)	0.926	Reliable
Intention to Use (Z)	0.965	Reliable
Actual Usage e-wallet (Y)	0.891	Reliable

Source: Processed data (2025)

As shown in Table 5, all variables demonstrate composite reliability exceeding 0.70: Perceived Simplicity of Operation (0.983), Anticipated Benefit (0.915), Expected Danger (0.926), Intention to Adopt (0.965), and e-wallet's Actual Utilization (0.891). This proves the research tool is dependable and internally consistent for gauging the concepts under investigation.

R-Square

Table 6. R-Square

Variable	Rul of Thumb	R-Square adjusted
Intention to Use	R-Square values 0.67 (Strong), 0.33 (Moderate), dan 0.19 (Weak)	0.550
Actual Usage e-wallet		0.657

Source: Processed data (2025)

The R^2 value for Intention to Use is 0.550, and for Actual Usage is 0.657, indicating that 55% and 65.7% of the variance in these constructs are explained by the model, respectively representing moderate to strong explanatory power (Hair, 2014).

Q²predict. The $Q^2_{predict}$ values were obtained through PLSpredict in SmartPLS, not via manual formula computation. A Q^2 metric exceeding zero suggests that the model has predictive power.

Table 7. PLSpredict LV summary

Endogenous Variable	Q ² Value	Interpretation
Intention to Use (Z)	0.412	Predictive relevance present
Actual Usage (Y)	0.536	Predictive relevance present

Source: Processed data (2025)

Both Q^2 values are positive, confirming that the model has good predictive capability.

Model Fit Validation. After evaluating the outer and inner models, the next step is to test the Goodness of Fit (GoF) to assess the extent to which the model represents the empirical data and is worthy of further analysis (Ghozali, 2021).

Table 8. Model Fit Indices

Parameter	Recommended Threshold	Value	Interpretation
SRMR	< 0.10	0.081	Acceptable fit
d ULS	smaller = better (Wijayanto & Jogiyanto, 2019)	3.049	Acceptable fit
d G	smaller = better (Wijayanto & Jogiyanto, 2019)	4.189	Acceptable fit
NFI	> 0.90 (ideal)	0.585	Weak model fit

Source: Processed data (2025)

The SRMR value indicates acceptable fit (<0.10). Although the NFI value (0.585) is below the ideal threshold, it still indicates a tolerable level of model fit. This limitation suggests that while the structural model captures the main relationships, additional factors outside the current

constructs may influence actual e-wallet usage, so this model is considered quite suitable but still has room for improvement. The model can be said to be fit and worthy of further analysis.

Hypothesis Testing. Testing the hypotheses is carried out to gauge the importance of the links between variables by examining the t-statistic. As per (Ghozali, 2014), a hypothesis is validated if the t-statistic is larger than 1.96 at a 5% level of significance, thereby showing a meaningful relationship.

Table 9. T-Statistic Results

Hyphotesis		T Statistic	P Values	Results
H1	Perceived Ease of Use >> Intention to Use	4.744	0.000	Accepted
H2	Perceived Usefulness >> Intention to Use	3.392	0.001	Accepted
H3	Perceived Risk >> Intention to Use	1.915	0.056	Rejected
H4	Perceived Ease of Use >> Actual Usage e-wallet	0.855	0.393	Rejected
H5	Perceived Usefulness >> Actual Usage e-wallet	1.324	0.186	Rejected
H6	Perceived Risk >> Actual Usage e-wallet	0.804	0.421	Rejected
H7	Intention to Use >> Actual Usage e-wallet	5.187	0.000	Accepted

Source: Processed data (2025)

Mediation Analysis (Bootstrap Indirect Effect Test)

Table 9. Indirect Effects and Mediation Type

Path	Indirect Effect	T-Statistic	P-Value	Mediation Type	VAF (%)
X1 → Z → Y	0.266	3.156	0.002	Partial mediation	75.6%
X2 → Z → Y	0.238	2.793	0.005	Partial mediation	64.3%
X3 → Z → Y	-0.092	1.950	0.051	No mediation	–

Source: Processed data (2025)

The mediation test was conducted using 5.000 bootstrap subsamples. The results show that Intention to Use partially mediates the effects of *Perceived Ease of Use* and *Perceived Usefulness* on *Actual Usage* because both indirect effects are significant ($p < 0.05$) while direct effects remain non-significant (Hair et al., 2021). The Variance Accounted For (VAF) for X1 and X2 exceeds 20%, confirming partial mediation. In contrast, *Perceived Risk* shows no significant mediation effect.

Perceived Ease of Use Positively Influence Intention to Use. The SmartPLS outputs demonstrate a t-statistic of 4.744 (which exceeds 1.96) and a p-value of 0.000, validating a substantial, favorable link between perceived operational simplicity and intention to utilize, with a path coefficient of 0.410. This outcome backs the Technology Acceptance Model (TAM), which maintains that effortlessness and user-friendliness boost the user's drive to embrace the technology. Among university students, this tendency is particularly strong because they are digital natives familiar with mobile applications and online transactions.

Similar findings were reported by (Fazriansyah et al., 2022), showing that intuitive interface design significantly increases user engagement and behavioral intention among young adults. This suggests that for e-wallet developers, maintaining simple navigation, quick loading times, and clear transaction feedback can reinforce users' intention to continue using e-wallet platforms.

Perceived Usefulness Positively Influences Intention to Use. A t-statistic of 3.392 (which exceeds 1.96), a p-value of 0.001, and a path coefficient of 0.366 verify a meaningful, favorable impact of anticipated benefit on intention to utilize. This result aligns with TAM and confirms that perceived performance gains and transactional efficiency directly motivate behavioral intention, consistent with (Afolo & Dewi, 2022), who observed a similar effect in e-wallet adoption. The current study clarifies that within a student population who value practicality and speed usefulness remains a dominant predictor of intention. Practically, this implies that e-wallet providers should continuously enhance their service functions, such as cashback features, automated bill payments, or integration with campus systems, to sustain users' perception of utility.

Perceived Risk Negatively Influences Intention to Use. With a t-statistic of 1.915 (<1.96), a p-value of 0.056, and a path coefficient of -0.142, *perceived risk* exerts a negative but insignificant effect on *intention to use*. Although concerns such as data security and financial loss may reduce users' willingness to adopt e-wallets, these concerns appear to have minimal impact among students. Consistent with (Desita & Dewi, 2022), who found that utilitarian values such as speed and efficiency outweigh perceived risk in determining intention.

Perceived Ease of Use Negatively Influences Actual Usage e-wallet. A t-statistic of 0.855 (which is less than 1.96), a p-value of 0.393, and a path coefficient of 0.088 suggest that perceived operational simplicity holds no meaningful impact on actual usage. While effortlessness encourages the desire to use, it doesn't automatically convert into consistent behavior. This outcome is consistent with TAM's premise that behavioral intention functions as an intermediary between mental assessment and real-world actions (Davis et al., 1989). (Tyas & Darma, 2017) also emphasized that ease of use influences users' initial adoption stage but not continued use.

This result implies that once users have become accustomed to e-wallets, other factors such as satisfaction, habit formation, or external incentives play more decisive roles in sustaining usage. Hence, developers should not only focus on simplifying interfaces but also on maintaining engagement through rewards, notifications, and personalization features.

Perceived Usefulness Positively Influences Actual Usage e-wallet. A t-statistic of 1.324 (<1.96), a p-value was 0.186, with a path coefficient calculated at 0.123 show an insignificant relationship between *perceived usefulness* and actual usage. Although students recognize the benefits of e-wallets, this cognitive appreciation does not always manifest as continuous behavioral engagement. This outcome highlights a "value behavior gap," consistent with

(Palupi, 2015), who found that positive perceptions of usefulness may not guarantee frequent use if situational barriers such as low balance or merchant limitations persist.

From a theoretical standpoint, this finding aligns with the Theory of Planned Behavior (Ajzen & Fishbein, 1975), suggesting that actual behavior is influenced not only by beliefs but also by facilitating conditions. Practically, e-wallet providers should ensure smooth transaction reliability and broader usability across payment contexts to encourage consistent use.

Perceived Risk Negatively Influences Actual Usage e-wallet. A t-statistic of 0.804 (<1.96), a p-value of 0.421 and a path coefficient of -0.055 suggest that perceived risk does not significantly influence the outcome but insignificant effect on actual usage. Although users acknowledge potential risks, they continue to use e-wallets, possibly due to improved system trust and familiarity. This finding aligns with (Syaidatina Aisyah, 2023), who noted that trust and habitual use can override risk concerns in digital financial behavior. This suggests that once users perceive a platform as reliable and secure, risk becomes less relevant in determining real behavior. Therefore, providers should maintain transparency about data protection and reinforce security communication to sustain user trust over time.

Intention to Use Positively Influences Actual Usage e-wallet. The SmartPLS results show a t-statistic of 5.187 (which exceeds 1.96), a p-value of 0.000, and a path coefficient of 0.649, indicating a powerful, affirmative, and substantial influence of intention to utilize on the actual use of the e-wallet. This confirming the TAM assertion that behavioral intention is the primary predictor of actual behavior. Similar findings by (Anggraeni, 2015), behavioral intention is the crucial intermediate factor that connects perception-based beliefs to actual usage behavior. Empirical evidence from this research demonstrated that students with a strong desire tend to utilize e-wallets in excess of three times weekly, indicating a stable adoption pattern. Thus, enhancing intention through marketing, trust-building, and service improvement can effectively drive sustained usage among student populations.

CONCLUSION & SUGGESTION

Conclusion. This study examined the influence of perceived ease of use, usefulness, risk on actual e-wallet usage, with behavioral intention as the intermediary, among students at the Faculty of Social and Political Sciences, Mulawarman University. The SmartPLS analysis revealed that perceived ease of use ($t=4.744$; $p=0.000$) and perceived usefulness ($t=3.392$; $p=0.001$) exerted substantial, positive impacts on intention to use, while perceived risk ($t=1.915$; $p=0.056$) showed an inverse yet statistically negligible influence. Furthermore, none of the three perception-based variables demonstrated a direct significant effect on actual usage. The sole variable with a powerful and significant effect on actual e-wallet usage was intention to use ($t=5.187$; $p=0.000$).

The mediation analysis further revealed that behavioral intention partially mediates the relationships between anticipated simplicity of operation and perceived utility's impact on

actual usage, confirming the Technology Acceptance Model (TAM) assumption that intention serves as a bridge between users' cognitive perceptions and real behavior. This finding demonstrates that positive perceptions alone do not guarantee behavioral consistency, but rather influence adoption through the motivational pathway of intention.

Theoretical Implications. In terms of theory, this investigation augments the TAM framework by validating its applicability among digitally active student populations and confirming the indirect but crucial role of intention in e-wallet adoption. The insignificant effect of perceived risk, despite its negative direction, highlights that trust and digital literacy can weaken perceived risk's influence in high-experience contexts. This suggests that integrating additional variables such as trust, habit, or security assurance may further improve TAM's explanatory power in digital financial behavior research.

Practical Implications. Practically, e-wallet providers and policymakers should focus on strengthening ease of use, usefulness, and trust communication to sustain user engagement.

- a. To improve ease of use, developers can design intuitive navigation, clear transaction feedback, and quick-access features for essential services.
- b. To enhance usefulness, applications should integrate functions like real-time cashback notifications, transaction analytics, and multi-platform payment compatibility that deliver tangible utility.
- c. To mitigate risk perceptions, providers must ensure transparent data protection, use biometric authentication, and actively communicate privacy and security practices.

Such strategies are vital for encouraging continued and frequent e-wallet use among young, tech-oriented users.

Limitations and Future Research. Several constraints must be recognized. First, the study focused solely on students from a single faculty, which may limit generalizability to other demographic or occupational groups. Second, the survey-style design hinders the capacity to deduce cause and effect across different periods. Third, the model did not include external factors such as trust, habit, or promotional influences, which might further explain user behavior. Future research should adopt a longitudinal or comparative multi-site approach, include a more diverse sample, and integrate new constructs such as digital trust, perceived value, or social influence to enhance predictive accuracy. Such expansions will help refine TAM's relevance in the Indonesian fintech ecosystem and guide strategies to increase sustainable e-wallet adoption.

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REFERENCES

Afolo, S. C. M., & Dewi, N. N. S. R. T. (2022). Minat Mahasiswa Akuntansi Untrim Sebagai

Pengguna E-Wallet Dengan Mempertimbangkan Persepsi Kemanfaatan, Persepsi Kemudahan, Dan Persepsi Kepercayaan. *KRISNA: Kumpulan Riset Akuntansi*, 13(2), 267–277.

<https://doi.org/10.22225/kr.13.2.2022.267-277>

Ajzen, I., & Fishbein, M. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*.

Anggraeni, R. (2015). Pengaruh Persepsi Kemudahan Penggunaan dan Persepsi Kegunaan Terhadap Niat Untuk Menggunakan dan Penggunaan Aktual Layanan Jejaring Sosial Berbasis Lokasi (Studi pada Mahasiswa Fakultas Ekonomi dan Bisnis Universitas Brawijaya Malang). *Management and Business Economics Journal*, 45–52.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). Technology acceptance model. *J Manag Sci*, 35(8), 982–1003.

Desita, W., & Dewi, G. A. K. R. S. (2022). Pengaruh Persepsi Kemanfaatan, Persepsi Kemudahan Penggunaan, Persepsi Risiko, Promosi dan Fitur Layanan terhadap Minat Menggunakan Transaksi Non Cash pada Aplikasi Dompot Elektronik (E-Wallet). *Jurnal Akuntansi Profesi*, 13(1), 115–124.

Fazriansyah, F., Sari, N. A., & Mawardi, M. (2022). Apakah persepsi kemudahan penggunaan dan persepsi kegunaan berpengaruh terhadap niat untuk menggunakan dan penggunaan aktual pada aplikasi pembayaran digital? *Jurnal Manajemen*, 14(2), 271–283.

<https://doi.org/10.30872/jmmn.v14i2.11126>

Ghozali, I. (2014). *Structural Equation Modeling: Metode Alternatif dengan Partial Least Squares (PLS) (Edisi 4)* (4th ed.). Badan Penerbit Universitas Diponegoro.

Ghozali, I. (2021). *Partial least squares: konsep, teknik, dan aplikasi menggunakan program SmartPLS 3.2. 9 untuk penelitian empiris*.

Hair, J. F. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. sage.

Hair, J. F., Astrachan, C. B., Moisescu, O. I., Radomir, L., Sarstedt, M., Vaithilingam, S., & Ringle, C. M. (2021). Executing and interpreting applications of PLS-SEM: Updates for family business researchers. *Journal of Family Business Strategy*, 12(3), 100392.

Ipsos. (2020). *Evolusi Industri Dompot Digital*.

https://www.ipsos.com/sites/default/files/ct/news/documents/2020-02/ipsos_media_conferennce_-_e-wallet_-_id_0.pdf

Jogiyanto. (2007). *Sitem Informasi Keperilakuan*. Yogyakarta : Andi, 2007.

Khaira, M. (2021). *Analisis Penyebab Rendahnya Penggunaan Dompot Elektronik (E-Wallet)*.

Palupi, R. (2015). *Penelitian lanjutan dapat melakukan studi jangka panjang untuk melihat perkembangan persepsi dan perilaku penggunaan e-wallet dari waktu ke waktu, serta faktor-faktor yang memengaruhi keberlanjutan penggunaan teknologi ini*.

Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101–134.

Priambodo, S., & Prabawani, B. (2016). PENGARUH PERSEPSI MANFAAT, PERSEPSI KEMUDAHAN PENGGUNAAN, DAN PERSEPSI RISIKO TERHADAP MINAT MENGGUNAKAN LAYANAN UANG ELEKTRONIK (Studi Kasus pada Masyarakat di Kota Semarang). *Jurnal Ilmu Administrasi Bisnis*, 5(2), 127–135.

<https://ejournal3.undip.ac.id/index.php/jiab/article/view/11294>

Rohman, A. N., Mukhsin, M., & Ganika, G. (2023). Technology Acceptance Model in Analyzing

Actual Use of E - Commerce Tokopedia Indonesia. *Jurnal Ekonomi Manajemen Akuntansi Keuangan Bisnis Digital*, 2(1), 25–36.

S, H. (2016). *Metode SEM Untuk Penelitian Manajemen dengan AMOS LISREL PLS*. PT. Intermedia Personalia Utama. https://repository.umy.ac.id/bitstream/handle/123456789/12640/e_bookk%0A_3in1.pdf?sequence=11&isAllowed=y

Syaidatina Aisyah, N. (2023). Pengaruh Manfaat, Kemudahan Penggunaan, dan Risiko yang Dirasakan Terhadap Keputusan Pembelian Aktual pada Aplikasi Bibit. *COMSERVA Indonesian Journal of Community Services and Development*, 2(12), 2942–2951. <https://doi.org/10.59141/comserva.v2i12.709>

Tyas, E. I., & Darma, E. S. (2017). Pengaruh Perceived Usefulness, Perceived Ease of Use, Perceived Enjoyment, dan Actual Usage Terhadap Penerimaan Teknologi Informasi: Studi Empiris Pada Karyawan Bagian Akuntansi dan Keuangan Baitul Maal Wa Tamwil Wilayah Daerah Istimewa Yogyakarta. *Reviu Akuntansi Dan Bisnis Indonesia*, 1(1), 25–35. <https://doi.org/10.18196/rab.010103>

Vernando, R. F., Frederica, D., Theodora, C., Saputera Harefa, V., Sherly, & Theodora, C. (2022). Tingkat Efektifitas Regulasi dan Sistem Keamanan Terhadap Penurunan Keresahan Pengguna E-wallet. *Jurnal Buana Akuntansi*, 7(2), 179–190. <https://doi.org/10.36805/akuntansi.v7i2.2037>

visa.co.id. (2024). *Budaya Cashless Marak di Indonesia Seiring Penggunaan Uang Tunai yang Terus Menurun*. <https://www.visa.co.id/about-visa/newsroom/press-releases/nr-id-240319.html>

Wijayanto, A., & Jogiyanto. (2019). *Konsep dan Aplikasi PLS (Partial Least Square) Untuk Penelitian Empiris*. Fakultas Ekonomi, Universitas Gajah Mada.