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Factors Influencing the Intention to Use E-Wallet Services among University Students in the Mekong Delta, Vietnam

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ABSTRACT: The rapid development of financial technology has accelerated the trend toward cashless payments, in which e-wallets have emerged as a popular choice among young users. However, university students in the Mekong Delta—a region characterized by relatively low urbanization and limited technological infrastructure—have not been sufficiently studied. This research aims to identify the factors that influence students' intention to use e-wallet services in this context. Based on the Technology Acceptance Model (TAM), the Theory of Planned Behavior (TPB), and the Trust–Risk framework, the proposed model integrates seven constructs: perceived usefulness (PU), perceived ease of use (PEU), trust (TR), perceived risk (PR), social influence (SI), attitude (ATT), and behavioral intention (BI). Data were collected from 370 students with prior experience using e-wallets and analyzed using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The results reveal that PU and PEU positively affect ATT; ATT, TR, and SI directly influence BI; while PR has a negative effect on BI. The model explains 52% of the variance in BI and 44.5% of the variance in ATT, with measurement indices demonstrating reliability and validity. These findings extend the TAM framework by incorporating trust, risk, and social influence, offering theoretical insights into digital financial behavior in less urbanized contexts. From a practical perspective, the study provides strategic implications for service providers, educational institutions, and policymakers to foster students' adoption of e-wallets, thereby contributing to the broader digital transformation process.

KEYWORDS: Behavioral intention, e-wallet, Mekong Delta, digital financial services, university students.
JEL Codes: G40;G41

1. INTRODUCTION

The rapid development of financial technology (Fintech) in the digital era has significantly transformed the way individuals conduct financial transactions, particularly among young people - a group that is generally more adaptable to technology and closely engaged with digital platforms. Among various digital payment methods, e-wallets have emerged as a convenient, fast, and secure option, enabling users to easily perform daily financial activities such as bill payments, tuition fees, money transfers, and online shopping. In Vietnam, the trend toward cashless payments has been expanding rapidly. According to Decision No. 1813/QĐ-TTg dated October 28, 2021, issued by the Prime Minister, the promotion of cashless payments during the period 2021–2025 is considered a national strategic objective. This initiative aims to strengthen financial inclusion, enhance economic transparency, and lay the foundation for a sustainable digital economy. Within this context, the e-wallet market has become a highly competitive sector, with providers such as MoMo, ZaloPay, ViettelPay, and ShopeePay constantly innovating and investing in order to attract users - particularly university students, a segment of young, dynamic, and tech-savvy customers (Nguyen et al., 2024).

Currently, the Mekong Delta region has approximately 160,000 university students (Tuoi Tre Newspaper, 2025), who are regarded as having strong potential to access digital financial services. Despite their relatively high level of digital literacy, their behavior toward e-wallet adoption is influenced by multiple factors. Prior studies have identified several critical determinants affecting students' intention to use e-wallets, including perceived usefulness and ease of use (Davis, 1989), trust in the service, perceived

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risks concerning privacy and financial security (Vasudevan et al., 2023), as well as social influence from peers, family, and the student community (Ajzen, 2005; Nur & Noah, 2023).

Moreover, attitudes toward e-wallet usage - emphasized in prominent behavioral models such as the Theory of Planned Behavior (TPB) (Ajzen, 1991) and the Technology Acceptance Model (TAM) (Davis, 1989) - play a crucial mediating role in shaping actual behavioral intention. When students hold a positive attitude, they are more likely to adopt and continue using the service (Akter et al., 2023; Nguyen & Vo, 2021). However, most previous research has focused on major urban centers such as Hanoi, Ho Chi Minh City, and Can Tho, while the Mekong Delta - with its unique socio-economic and technological characteristics - has received limited scholarly attention.

Therefore, this study, entitled *"Factors Influencing the Intention to Use E-Wallet Services Among University Students in the Mekong Delta,"* seeks to explore the main factors that affect students' behavioral intention to use e-wallets in a region with low urbanization, distinct cultural conditions, and limited technological infrastructure. The findings are expected to contribute both theoretically and practically to service providers, educational institutions, and policymakers in fostering greater e-wallet adoption among students, thereby supporting the broader process of digital transformation in the economy.

2. LITERATURE REVIEW

2.1. Theoretical background

2.1.1. Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), proposed by Davis (1989), has long been regarded as a classical foundation in the study of technology adoption behavior. At its core, TAM emphasizes two principal constructs: Perceived Usefulness (PU) and Perceived Ease of Use (PEU). PU reflects the degree to which an individual believes that adopting a technology will enhance performance in work or study, while PEU measures the extent to which the technology can be used effortlessly without requiring significant effort. These two factors not only directly influence Attitude (ATT) but also indirectly affect Behavioral Intention (BI), which eventually leads to actual usage behavior.

The advantages of TAM are its generalizability and wide applicability. With various domains - from online education and e-commerce to digital banking services - TAM has proven to be a reliable theoretical framework for predicting behavior. The model also benefits from its simplicity and ease of validation, allowing researchers to design survey instruments and test hypotheses with clarity.

However, TAM exhibits limitations when it fails to sufficiently account for socio-cultural contexts or psychological variables such as Trust (TR) and Perceived Risk (PR). Particularly in digital financial services, where concerns about security and data privacy are critical, relying solely on PU and PEU is insufficient to fully explain user behavior. Consequently, scholars such as Venkatesh & Davis (2000) and, more recently, Akter et al. (2023) have recommended extending TAM by incorporating additional constructs that better capture real-world behavioral dynamics.

2.1.2. Theory of Planned Behavior (TPB)

Ajzen (1991) developed the Theory of Planned Behavior (TPB) as an extension of the earlier Theory of Reasoned Action (TRA). According to TPB, human behavior is primarily guided by Behavioral Intention (BI), which is shaped by three fundamental factors:

- **Attitude toward the behavior (ATT):** the degree to which an individual evaluates the favorable or unfavorable behavior.
- **Subjective Norm (SN):** the perceived social pressure from significant others such as peers, family, and the community.
- **Perceived Behavioral Control (PBC):** the extent to which an individual believes they have the resources and opportunities necessary to perform the behavior.

These three elements combine to form BI, which in turn leads to actual behavior. In the context of technology adoption, TPB serves as an effective tool for explaining how individuals balance expected benefits, social pressure, and self-efficacy when deciding whether to embrace a new technology.

For students - who are often strongly influenced by their social environment - TPB becomes particularly relevant. For instance, when classmates or instructors encourage the use of e-wallets, students are more likely to be influenced and adjust their behavior. However, recent applications of TPB tend to equate subjective norms with Social Influence (SI). This approach risks oversimplifying the model and blurring the boundaries between constructs (Ajzen, 2005; Nur & Noah, 2023). Therefore, it is essential to clearly distinguish between SN within TPB and SI in extended models to avoid conceptual overlap.

2.1.3. Trust - Risk Model

In online financial services, Trust (TR) and Perceived Risk (PR) are central factors that determine whether users accept or reject the service. According to Esawe (2022) and Vasudevan et al. (2023), when users have confidence in the reliability, transparency, and security of a system, they are more likely to continue using it. Conversely, concerns about fraud, data breaches, or technical failures significantly reduce behavioral intention.

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In the student context - a group with moderate digital knowledge yet highly susceptible to media influence - risk perception becomes especially critical. Many students may worry about losing money, stealing personal information, or lacking the skills to handle unexpected issues. At the same time, trust can be strengthened through positive user experiences, peer influence, and clear security policies provided by service providers. These factors represent gaps that TAM and TPB alone cannot fully capture, thereby making the integration of the Trust–Risk Model into the research framework both necessary and valuable for achieving a more comprehensive understanding.

2.1.4. Social Influence and Cultural Context

Although Social Influence (SI) was initially conceptualized in TPB under the construct of subjective norm, many studies in technology adoption have treated SI as a separate variable for measurement. This distinction arises from the reality that social influence is not limited to pressures from significant others but also extends to media exposure, community norms, and cultural trends.

Venkatesh et al. (2003) pointed out that in highly collectivist societies such as Vietnam, social influence often plays a stronger role than purely economic benefits. Particularly in the student environment, the adoption of e-wallets is not only motivated by personal convenience but also serves as a means of social integration, signaling modernity and alignment with technological trends.

Recent research in Southeast Asia also supports this perspective. Kustono et al. (2020) demonstrated that e-wallet adoption in Indonesia is strongly influenced by peer groups and community factors. Similarly, Nur & Noah (2023) confirmed that SI significantly affects BI in digital payment behavior. Thus, incorporating SI and cultural context into the research model is necessary to reflect the practical realities in Vietnam in general and in the Mekong Delta in particular.

2.1.5. Applications in International and Vietnamese Research

Empirical evidence from both domestic and international studies highlights the applicability and generalizability of these models. In Vietnam, Bui (2021) applied PLS-SEM to analyze students' intention to use e-wallets in Can Tho City. The findings confirmed that PU, trust, and SI were the strongest predictors of behavior. Meanwhile, Nguyen & Vo (2021) found that, in addition to PEU, factors such as security and brand reputation also played important roles.

At the international level, Akter et al. (2023) conducted a study among students in Bangladesh, revealing that the combination of TAM and the Trust–Risk Model effectively explained the intention to continue using e-wallets. This reinforced the stability and generalizability of the integrated model across different contexts. Furthermore, studies in India, China, and Indonesia have also emphasized that trust, risk, and SI are indispensable constructs in research on digital financial behavior.

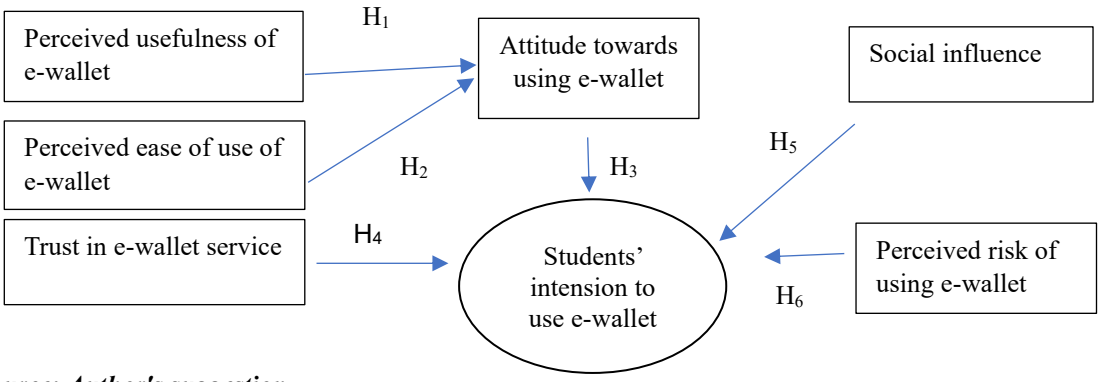
In summary, empirical findings from both Vietnam and abroad provide solid theoretical support for the current research in the Mekong Delta. The region's unique characteristics - low urbanization, limited technological infrastructure, and strong community-based cultural influence - underscore the necessity and appropriateness of adopting an integrated model that combines TAM, TPB, the Trust–Risk Model, and Social Influence.

2.2. Proposed research model

Proposed Model:

Based on the aforementioned theoretical foundations, group discussions, and consultations with experts, the author proposes the following research model:

Figure 1. Proposed Research Model



Source: Author's suggestion

Research Hypotheses:

H1: Perceived Usefulness (PU) has a positive effect on Attitude toward e-wallet usage (ATT).

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H2: Perceived Ease of Use (PEU) has a positive effect on Attitude toward e-wallet usage (ATT).
H3: Attitude toward e-wallet usage (ATT) has a positive effect on Behavioral Intention (BI).
H4: Trust in the service (TR) has a positive effect on Behavioral Intention (BI).
H5: Social Influence (SI) has a positive effect on Behavioral Intention (BI).
H6: Perceived Risk (PR) has a negative effect on Behavioral Intention (BI).

3. RESEARCH SUBJECTS AND METHODS

3.1. Research Subjects

The subjects of this study comprise university students that currently enrolled in higher education institutions located in the Mekong Delta, specifically those who already have experience using e-wallet services. This demographic group is characterized by a young-age profile and a high degree of engagement with technology, making them an appropriate target for investigating behavioral factors related to digital financial services.

3.2. Research Design

The study uses a quantitative research design, utilizing a structured questionnaire as the primary instrument for data collection. The questionnaire was developed based on previously validated measurement scales, adapted from prior studies, supplemented by group discussions, and refined through expert consultation to ensure contextual relevance. A five-point Likert scale (ranging from 1 – Strongly Disagree to 5 – Strongly Agree) was employed to measure seven constructs, with a total of 24 observed indicators.

3.3. Sampling Method and Data Collection

A convenience sampling method was employed in this study. A total of 370 valid responses were collected from students who had prior experience using e-wallets, during the period from July to August 2025. Only respondents with actual usage experience were included in the final analysis to ensure data relevance and accuracy.

In the study, 125 questionnaires were distributed directly in classrooms and university campuses to facilitate interaction with respondents and minimize completion errors. The remaining 245 questionnaires were disseminated through an online platform (Google Forms), which expanded the scope of participation and enhanced accessibility for students across various provinces and cities in the region.

The combination of both offline and online data collection approaches not only increased the sample size but also improved the diversity of the dataset. Nevertheless, given the inherent limitations of convenience sampling, the findings may not fully represent the characteristics of the entire student population in the Mekong Delta. Future studies may consider adopting stratified or random sampling techniques to enhance the generalizability of research outcomes.

3.4. Data Analysis

The collected data were analyzed using descriptive statistical methods, alongside reliability testing via Cronbach's Alpha coefficients. Exploratory Factor Analysis (EFA) was conducted to assess the validity of measurement constructs. Subsequently, the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique was applied to examine the relationships among the variables and to test the proposed research hypotheses. PLS-SEM is particularly suitable for analyzing complex models involving multiple latent constructs and observed variables, and it demonstrates robustness even when sample sizes are moderate. Data processing and analysis were conducted using SmartPLS 4 software.

4. RESEARCH RESULTS

4.1. Research Sample

As presented in Table 1, among the 370 respondents, 213 respondents (57.5%) were female, while 157 respondents (42.5%) were male. The largest age group was students between 20 and 22 years old, accounting for 51.5% of the sample. This was followed by students aged 18 to 19 (27.5%), those aged 23 to 24 (17.3%), and finally students aged 25 and over (3.7%). Regarding experience with e-wallet usage, 48.5% of respondents reported using e-wallet services from one to two years, 37.5% from three to four years, 8% for more than four years, and 6% for less than one year.

Table 1. Demographic Profile of the Respondents

Variables	Frequency	Percentage (%)
Gender		
Male	157	42.5%
Female	213	57.5%

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Age		
18 to 19	102	27.5%
20 to 22	191	51.5%
23 to 24	64	17.3%
> 25	14	3.7%
Experience of using E-Wallet (in year)		
< 1	22	6.0%
1 to 2	179	48.5%
3 to 4	139	37.5%
> 4	30	8.0%

Source: Author's survey

4.2. Measurement Model

The analysis results indicate that the measurement model demonstrates strong reliability and satisfactory convergent validity, meeting the rigorous standards of the PLS-SEM approach. Specifically, the following indices reached the acceptable thresholds:

- Cronbach's Alpha and Composite Reliability (CR): Cronbach's Alpha coefficients of measurement constructs ranged from 0.793 to 0.840, while Composite Reliability (CR) values were between 0.866 and 0.904. Both indices exceed the recommended threshold of 0.70, confirming the high internal consistency of the measurement scales.

- Factor Loadings: Most observed indicators achieved factor loading values greater than 0.70, which is considered ideal and strongly recommended in PLS-SEM. Although some indicators reported loadings in the range of 0.60–0.70, they were retained because of their theoretical and content relevance.

- Average Variance Extracted (AVE): The AVE values ranged from 0.618 to 0.758, all surpassing the suggested threshold of 0.50. This indicates that the latent constructs explain more than 50% of the variance in their observed indicators, thereby confirming the convergent validity of the model.

In summary, the adequacy of these indices provides strong evidence that the measurement scales employed in this study exhibit high reliability and are appropriate for assessing the proposed constructs.

Table 2. Assessment of Convergent Validity

Construct	Item	Factor loading	Cronbach's alpha	CR	AVE
PU	PU1	0.810	0.818	0.824	0.648
	PU2	0.836			
	PU3	0.826			
	PU4	0.744			
PEU	PEU1	0.798	0.778	0.794	0.598
	PEU2	0.798			
	PEU3	0.797			
	PEU4	0.695			
TR	TR1	0.782	0.842	0.845	0.612
	TR2	0.786			
	TR3	0.785			
	TR4	0.772			
	TR5	0.784			
SI	SI1	0.818	0.791	0.799	0.704
	SI2	0.850			
	SI3	0.849			

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PR	PR1	0.730	0.814	0.892	0.633
	PR2	0.817			
	PR3	0.772			
	PR4	0.856			
ATT	ATT1	0.859	0.820	0.821	0.736
	ATT2	0.853			
	ATT3	0.862			
BI	BI1	0.859	0.840	0.842	0.758
	BI2	0.853			
	BI3	0.862			

Source: The outcomes of Smart PLS 4

The discriminant validity of the measurement constructs was assessed using the Heterotrait–Monotrait Ratio (HTMT). According to the guidelines of Henseler et al. (2015), the recommended threshold for HTMT is less than or equal to 0.85 in order to confirm discriminant validity. Table 3 shows that the HTMT coefficients among the latent variable pairs range from 0.127 to 0.775. All of these values are substantially lower than the 0.85 threshold. This result indicates that the construct pairs in the model are clearly distinct, with no significant issues of measurement overlap. Therefore, the requirement of discriminant validity for the model has been satisfied.

Table 3. Discriminant Validity using HTML Criterion

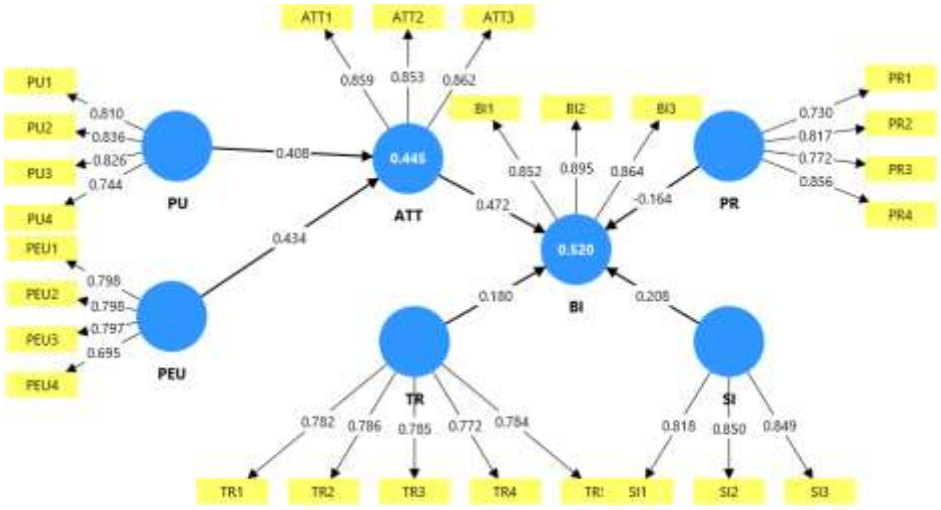
Constructs	ATT	BI	PEU	PR	PU	SI	TR
ATT							
BI	0.775						
PEU	0.657	0.510					
PR	0.305	0.403	0.166				
PU	0.631	0.594	0.314	0.266			
SI	0.504	0.549	0.249	0.217	0.392		
TR	0.286	0.404	0.188	0.200	0.228	0.127	

Source: The outcomes of Smart PLS 4

4.3. Structural Model

The results of the structural model analysis using the PLS-SEM method provide strong empirical evidence that the model demonstrates good fit, explanatory power, and high reliability. This is reflected in the consistency of the key statistical indices (Table 5).

Figure 2. Structural Model



Source: The outcomes of Smart PLS 4

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Model Explanatory Power (R^2):

The model explains 52.0% of the variance in Behavioral Intention (BI), which is considered an impressive figure in social science research. This value indicates that the selected constructs possess strong predictive ability regarding students' behavioral intention. Similarly, the model accounts for 44.5% of the variance in Attitude (ATT), demonstrating that the antecedent factors exert a significant influence on attitude formation.

Effect Size of Variables (f^2):

The f^2 coefficients reveal that Attitude (ATT) exerts the strongest impact on Behavioral Intention (BI) ($f^2 = 0.356$), while Perceived Ease of Use (PEU) ($f^2 = 0.317$) and Perceived Usefulness (PU) ($f^2 = 0.281$) have substantial effects on Attitude (ATT). These findings reinforce foundational theories such as TAM and TPB, while highlighting the central role of attitude in predicting behavioral intention.

Absence of Multicollinearity (VIF):

All Variance Inflation Factor (VIF) values for the independent variables are very low, ranging from 1.069 to 1.304 and the values are well below the commonly accepted thresholds (3.3 or 5). This result ensures that there is no serious multicollinearity among the explanatory variables, thereby enhancing the stability and reliability of the estimated regression coefficients.

Model Fit:

The analysis results indicate that the Standardized Root Mean Square Residual (SRMR) index of the saturated model is 0.058, and that of the estimated model is 0.068, both of which are lower than the accepted threshold of 0.08. This demonstrates that the proposed research model achieves a good level of model fit. Other indices, such as d_ULS, d_G, and NFI (approximately 0.75), are also within acceptable ranges in the PLS-SEM context, further reinforcing the reliability of the model (Table 4).

Table 4. Model Fit

	Saturated model	Estimated model
SRMR	0.058	0.068
d_ULS	1.182	1.627
d_G	0.486	0.508
Chi-square	1110.633	1107.120
NFI	0.752	0.753

Source: The outcomes of Smart PLS 4

In summary, the combination of satisfactory R^2 values, meaningful effect sizes (f^2), acceptable model fit indices, and low VIF values strongly confirms that the structural model of this study is theoretically robust, well-fitted, and highly applicable in practice.

Table 5. Path Coefficient Analysis

Hypothesis	Relationship	Std Beta	Std Error	*t*-value	*p*-values	R^2	f^2	VIF
H_1	PU -> ATT	0.408	0.043	9.439	0.000	0.445	0.281	1.069
H_2	PEU -> ATT	0.434	0.043	10.183	0.000		0.317	1.069
H_3	ATT -> BI	0.472	0.055	8.606	0.000	0.520	0.356	1.304
H_4	TR -> BI	0.180	0.038	4.750	0.000		0.063	1.075
H_5	SI -> BI	0.208	0.043	4.880	0.000		0.074	1.210
H_6	PR -> BI	-0.164	0.041	3.977	0.000		0.051	1.103

Source: The outcomes of Smart PLS 4

5. DISCUSSION

The analysis results of the structural equation model via PLS-SEM have furnished distinct empirical evidence regarding the synergistic role of technological factors (Perceived Usefulness - PU, Perceived Ease of Use - PEU), psycho-social factors (Trust - TR, Social Influence - SI, Perceived Risk - PR), and attitude in the formation of students' behavioral intention (BI) to use e-wallets within the Mekong Delta region. The model accounts for 52% of the variance in BI and 44.5% of the variance in attitude (ATT), demonstrating a robust predictive power. These findings not only bolster the theoretical underpinnings of classical models like TAM (Davis, 1989) and TPB (Ajzen, 1991) but also broaden the application scope of the integrated Trust–Risk model within a less urbanized setting such as the Mekong Delta.

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Firstly, Perceived Usefulness (PU) is proven to be a factor that positively influences Attitude (ATT), with a path coefficient of $\beta = 0.408$ ($t = 9.439$; $p < 0.001$). This finding is congruent with the core assertion of the TAM model, which posits that users will cultivate a positive attitude if they recognize that a technology yields practical benefits. For students in the Mekong Delta, PU becomes especially significant as e-wallets facilitate the payment of tuition, living expenses, online shopping, and access to online educational services, particularly where the traditional banking infrastructure lacks complete coverage. This research outcome is also consistent with studies by Bui (2021) in Can Tho and Akter et al. (2023) in Bangladesh, confirming PU as a pivotal predictor for e-wallet acceptance.

Secondly, Perceived Ease of Use (PEU) has the most substantial and significant effect on ATT ($\beta = 0.434$; $t = 10.183$; $p < 0.001$). This result has further support to the theoretical foundation of TAM (Davis, 1989), which suggests that simplicity, intuitiveness, and a low requirement for technical skills will encourage users' readiness to adopt a technology. Within the context of Mekong Delta students, who have inconsistent levels of technology access due to fintech infrastructure constraints, the factor of ease of use assumes an even more critical role. This outcome aligns with the research of Nguyen & Vo (2021), where user-friendliness and operational simplicity are regarded as essential preconditions for promoting the use of digital financial technologies.

Thirdly, Trust (TR) is affirmed to have a positive effect on BI ($\beta = 0.180$; $t = 4.750$; $p < 0.001$). This result is consistent with the framework of the Trust–Risk model (Esawe, 2022; Vasudevan et al., 2023), wherein confidence in the system's reliability, transparency, and security serves as a foundational element for driving usage behavior. However, the magnitude of TR's influence in this study is lower compared to findings from research in Can Tho (Bui, 2021), indicating that students across numerous provinces in the Mekong Delta still have a sense of caution toward using e-wallets. This hesitation may arise from limitations in technological infrastructure, disparities in digital skills, and anxieties concerning the risks of online financial fraud.

Fourthly, Perceived Risk (PR) exerts a significant negative impact on BI ($\beta = -0.164$; $t = 3.977$; $p < 0.001$). This outcome supports studies by Featherman & Pavlou (2003) and Vasudevan et al. (2023), which underscore that apprehensions regarding data insecurity, personal information leakage, or technical failures constitute major impediments to the behavioral acceptance of financial technology. In the Mekong Delta context, this factor can become more important due to variations in students awareness and experience in adopting new technologies. This demands that e-wallet service providers must devise measures to elevate public awareness, such as conducting user training, providing transparent information, and reinforcing security solutions (e.g., two-factor authentication, fraud alerts).

Fifthly, Social Influence (SI) demonstrates a significant and positive role in relation to BI ($\beta = 0.208$; $t = 4.880$; $p < 0.001$). This finding aligns with the reasoning behind subjective norms within the TPB framework (Ajzen, 1991) and with international evidence (Nur & Noah, 2023; Kustono et al., 2020). In a highly communal cultural setting like the Mekong Delta, the behavior of using e-wallets is not merely personal convenience but also reflects a need for social integration and for keeping up with the trends set by friends and the broader student community.

Finally, a particularly noteworthy finding is that ATT has a strongly direct effect on BI ($\beta = 0.472$; $t = 8.606$; $p < 0.001$) while concurrently serving a critical mediating function among the variables PU, PEU, TR, PR, SI, and BI. This reinforces the primary hypotheses of TAM and TPB, which contend that attitude is the intermediate link connecting perception, trust, risk, and social influence to actual behavior. For Mekong Delta students - a group that is both capable of accessing technology and strongly affected by social factors - the cultivation of a positive attitude is of paramount importance in encouraging the intention and behavior of e-wallet usage.

Thus, the study has substantiated that the e-wallet usage behavior of students in the Mekong Delta stems from the multidimensional interplay of technological factors (PU, PEU), psycho-social factors (TR, PR, SI), and the mediating attitude (ATT). This outcome both validates the robustness of foundational international theories (TAM, TPB, Trust–Risk Model) and contributes empirical evidence from a local context characterized by low urbanization and underdeveloped fintech infrastructure. Consequently, it extends the generalizability and theoretical applicability to such specific environments.

Implications

This research yields several crucial implications for theory, practice, and policy:

(1) Theoretical Implications

The results bolster the relevance of the extended Technology Acceptance Model (TAM) for elucidating the e-wallet usage behavior of students in a less urbanized area such as the Mekong Delta. In addition to the two classic constructs of Perceived Usefulness (PU) and Perceived Ease of Use (PEU), the study highlights the escalating significance of Trust (TR), Perceived Risk (PR), and Social Influence (SI) in shaping attitude and behavioral intention. The integration of TAM, TPB, and the Trust–Risk model has forged a more holistic research framework, adding empirical evidence to the theoretical repository on digital financial behavior within developing economies.

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(2) Managerial Implications

The findings suggest that providers of e-wallets should execute a comprehensive strategy designed to boost the level of acceptance among the student population. The priorities include: (i) optimizing the user interface and experience to elevate ease of use; (ii) integrating a variety of features linked to daily necessities, such as paying tuition, online shopping, and peer-to-peer money transfers; (iii) fortifying trust through security transparency and enhanced customer service; (iv) mitigating perceived risks by raising digital safety awareness, disseminating fraud prevention skills, and applying multi-layer authentication; and (v) capitalizing on social influence through peer-to-peer communication campaigns and student community-based promotional programs to generate a positive normative effect.

(3) Policy Implications

This research underscores the necessity of advancing financial inclusion for youth, especially students. Administrative agencies like People's Committees of provinces, branches of the state bank, social organizations, and universities should coordinate to: (i) integrate electronic payment systems into on-campus services; (ii) roll out digital skills training and financial education programs; and (iii) invest in upgrading the technological infrastructure on university campuses and in rural locales. Such endeavors will contribute to enabling students to access digital financial transactions and to utilize e-wallets more effectively.

In summation, the study affirms that the adoption of e-wallets by students is molded by the interaction of technological, psycho-social, and attitudinal factors. Fostering a positive attitude by simplifying the user experience, building trust, minimizing risk, and reinforcing social influence stands as the core strategy for expanding e-wallet acceptance in a context of limited urbanization.

6. CONCLUSION

This study focused on exploring the factors influencing students' intention to use e-wallets in the Mekong Delta region—a young population with relatively good technological literacy but still facing significant limitations in digital financial infrastructure and access to traditional banking services. The PLS-SEM analysis results provide a comprehensive picture of e-wallet adoption behavior within this specific context.

Specifically, perceived usefulness (PU) and perceived ease of use (PEU) were found to have positive effects on attitude (ATT), thereby reaffirming the central role of technological factors in shaping favorable perceptions of e-wallets. At the same time, attitude not only exerted a direct effect but also served as an important mediating variable linking antecedents to behavioral intention (BI). In addition, trust (TR) and social influence (SI) both had positive direct effects on BI, while perceived risk (PR) exhibited a negative effect, becoming a significant barrier. The research model explained 52% of the variance in BI and 44.5% of the variance in ATT, demonstrating strong predictive power and the suitability of the integrated theoretical framework.

From a theoretical perspective, the study extends the traditional TAM by integrating additional variables such as TR, PR, and SI—factors not fully captured in classical behavioral models. Furthermore, the study clarifies the mediating role of ATT, thus providing valuable empirical evidence for explaining digital financial behavior in less urbanized contexts with limited technological infrastructure. This constitutes an important contribution, filling a research gap that remains underexplored in developing economies.

From a practical perspective, the findings offer important implications for various stakeholders. E-wallet providers should focus on enhancing usefulness and simplifying interface design, while simultaneously investing in security measures to strengthen trust and reduce perceived risks. Educational institutions may integrate electronic payment systems into campus services, thereby encouraging frequent student usage. Meanwhile, policymakers should formulate strategies to promote financial inclusion among students, including investing in technological infrastructure, disseminating digital skills, and strengthening awareness campaigns.

However, the study is not without limitations. The use of convenience sampling and the focus solely on the Mekong Delta restrict the generalizability of the findings to all Vietnamese students. Future studies should adopt probability sampling methods and expand the survey to different regions to improve reliability. In addition, further research should incorporate other factors such as service costs, promotional policies, or government support, in order to provide a more comprehensive understanding of e-wallet adoption and continued usage behavior.

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