

THE IMPACT OF FINANCIAL LITERACY ON THE INTENTION TO USE COMMERCIAL BANK FINTECH SERVICES AMONG GENERATION Z IN HO CHI MINH CITY

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ABSTRACT

This study investigates the key role of financial literacy in shaping the intention to use FinTech services among Generation Z in Ho Chi Minh City. Analyzing data from 406 participants using Structural Equation Modeling (SEM), the study identifies financial literacy as the primary independent driver of intention to use ($\beta = 0.675$). To ensure model robustness and isolate the distinct impact of financial literacy, a comprehensive analytical framework was developed, integrating technological and environmental factors. Specifically, perceptions of usefulness, ease of use, and social impact were used as control variables. Notably, the study reveals a "cognitive stimulus" mechanism in which perceived risk and transaction costs, often considered barriers, act as functional constraints that positively contribute to financial literacy. This suggests that awareness of uncertainty and financial costs encourages Generation Z users to engage in proactive self-learning to mitigate potential risks. The research demonstrates that behavioral intentions fundamentally stem from users' financial capacity, even when controlling for overall technology adoption and social factors. Therefore, commercial banks should prioritize integrated digital financial education over traditional promotional strategies to foster a sustainable and resilient FinTech ecosystem.

Keywords: Financial literacy, FinTech, Generation Z, usage intention, commercial bank.

1. INTRODUCTION

The rapid advancement of digital transformation has fundamentally reshaped the global financial and banking landscape, accelerating the expansion of financial technology (FinTech) services across both developed and emerging economies. In Vietnam, the increasing integration of digital technologies into banking operations has significantly transformed the way financial services are delivered and consumed, particularly through mobile banking applications, digital payment systems, online lending platforms, and other technology-based financial solutions. Within this context, commercial banks are actively investing in FinTech ecosystems to enhance customer experience, improve operational efficiency, and strengthen competitiveness in the digital economy.

Among different user segments, Generation Z has emerged as one of the most strategically important groups in the adoption of digital financial services. As a generation that has grown up alongside digital technology, Generation Z demonstrates high levels of technological adaptability, frequent engagement with online platforms, and strong familiarity with digital environments. However, despite their technological readiness, many young users still face limitations in financial capability, particularly in evaluating financial products,

understanding financial risks, and making informed financial decisions in increasingly complex digital financial environments. Consequently, financial literacy has become an essential factor influencing not only financial decision-making but also the adoption and sustainable use of FinTech services among younger generations.

Existing studies have extensively examined FinTech adoption behavior from technological, behavioral, and digital financial perspectives. Previous research has primarily focused on general FinTech adoption, digital financial literacy, or technology acceptance in broad contexts. Nevertheless, existing studies have paid comparatively less attention to examining the role of financial literacy specifically within the context of commercial bank FinTech services, particularly among Generation Z users in emerging digital banking markets such as Vietnam. Moreover, prior studies have largely emphasized the direct effects of technological perceptions on behavioral intention, while the explanatory role of financial literacy in shaping the relationship between cognitive perceptions and FinTech usage intention remains insufficiently clarified within the banking digitalization context.

To address this gap, the present study investigates the impact of financial literacy on the intention to use commercial bank FinTech services among Generation Z in Ho Chi Minh City. The study integrates the Technology Acceptance Model (TAM) and the Theory of Reasoned Action (TRA) to develop a *comprehensive* analytical framework in which financial literacy is positioned as the central explanatory construct influencing behavioral intention. In addition, cognitive factors including perceived usefulness, perceived ease of use, perceived risk, perceived cost, and social influence are incorporated as control variables to enhance the explanatory power and robustness of the proposed model.

From a theoretical perspective, this study contributes to the existing literature by extending the application of TAM and TRA within the context of commercial bank FinTech services and by providing further empirical evidence regarding the role of financial literacy in digital financial behavior among Generation Z. From a practical perspective, the findings are expected to support commercial banks in developing digital financial education strategies, optimizing FinTech service design, and strengthening customer engagement among younger users in the context of accelerating digital transformation in Vietnam.

2. LITERATURE REVIEW

2.1. Measuring financial literacy

According to [1], a financially literate individual gains certain benefits in terms of attitude and competence, including an understanding of money-management concepts, knowledge of financial institutions, and the ability to manage financial matters effectively. Building upon this foundation, [2] conceptualize financial literacy as a multi-dimensional construct comprising (i) financial knowledge, (ii) financial behavior, and (iii) attitudes toward financial planning. Furthermore, [3] argues that financial literacy includes the ability to recognize and evaluate financial options, thereby supporting individuals in making effective financial decisions in life. Consistent with this view, [4] emphasize the role of financial literacy in planning and responding to economic fluctuations when making financial decisions.

2.2. Importance of financial literacy for Generation Z

Financial literacy is increasingly seen as a fundamental factor in shaping individuals' financial behavior, especially for Generation Z, a group that has grown up in a digital environment and has high access to technology. While this generation has an advantage in using FinTech platforms, a lack of financial knowledge and practical experience can increase risks in decision-making. According to [4], financial literacy not only helps individuals improve their financial management skills but also enhances the quality of decisions related

to saving, investing, and consumption. Furthermore, [5] argues that a high level of financial literacy is positively correlated with access to and use of modern financial services, thereby promoting financial inclusion. In the context of the rapid development of FinTech, financial literacy also acts as a "shield" helping Generation Z identify risks, assess benefits, and use digital financial services more effectively and responsibly. This is especially important as Generation Z is both a potential user group and a vulnerable group if they lack a sufficient foundation of financial knowledge.

2.3. The relationship between financial literacy and FinTech adoption

Financial literacy is considered one of the key factors determining the intention to use FinTech services, particularly in the context of increasingly complex financial products and the rapid integration of digital technologies. According to [1], financial literacy enables individuals to make rational judgments and effective financial decisions, thereby establishing an essential foundation for the adoption of modern financial services. Expanding on this perspective, [4] argues that financial literacy encompasses not only financial knowledge but also the practical ability to apply such knowledge in financial decision-making. In the FinTech context, [6] indicate that individuals with higher levels of financial literacy tend to demonstrate greater confidence and willingness to adopt digital financial services, as they are better able to evaluate potential benefits and risks. Similarly, Recent empirical evidence indicates that financial literacy plays an important role in promoting the use of digital financial services. [7] found that higher levels of financial literacy significantly increase individuals' use of digital finance, including mobile payments, online borrowing, and online financial products. The authors further showed that financial literacy facilitates users' access to financial information, enhances their ability to evaluate the costs, benefits, and risks of digital financial services, and strengthens trust in these services. These findings suggest that financial literacy provides an important cognitive foundation for individuals when evaluating and adopting increasingly complex digital financial services. Consistent with this evidence, the present study finds that financial literacy has a positive and statistically significant effect on Generation Z's behavioral intention to adopt FinTech services.

2.4. Theoretical background

2.4.1. Theory of Reasoned Action (TRA)

The Theory of Reasoned Action proposed by [8] suggests that behavioral intention is influenced by individual attitudes and subjective norms, which in turn determine actual behavior. By explaining the relationship between perception and action, TRA is widely used in research predicting intentions to adopt new financial services.

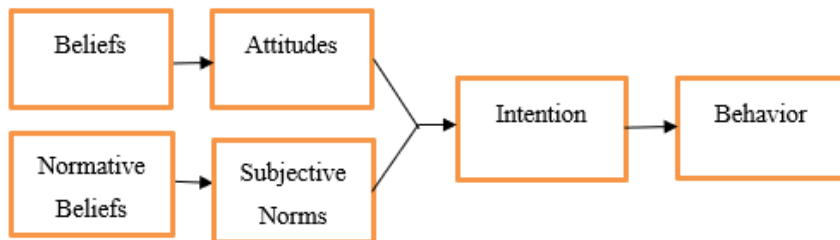


Figure 1. Theory of Reasoned Action Model (TRA) [8]

2.4.2. Theory of Technology Acceptance Model (TAM)

Developed by [9], based on the Theory of Reasoned Action (TRA), TAM explains technology adoption behavior through two core factors: perceived usefulness (PU) and perceived ease of use (PEOU). These two factors influence behavioral intentions and

determine actual usage decisions; therefore, TAM is widely applied in technology adoption research in the fields of digitalization and finance-banking.

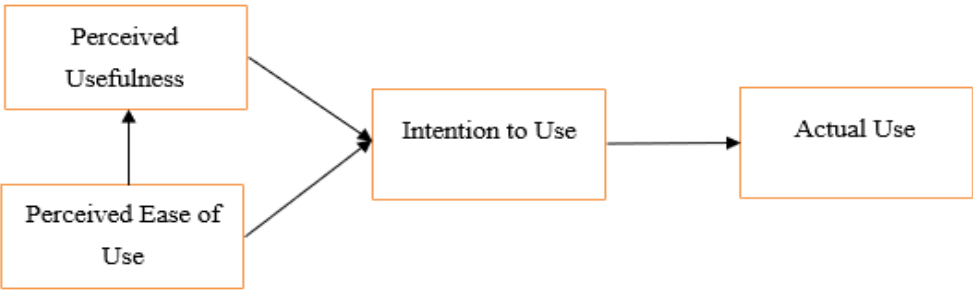


Figure 2. Technology Acceptance Model (TAM) [9]

This study combines TRA theory to explain the role of social pressure and the TAM model to explain perceptions of the usefulness and usability of technology. This integration helps build a comprehensive analytical framework to control technological and environmental factors that may influence FinTech adoption intentions, thereby highlighting the independent and core role of financial literacy in shaping the behavioral intentions of Generation Z.

3. HYPOTHESES DEVELOPMENT AND CONCEPTUAL MODEL

3.1. Perceived ease of use and financial literacy

Perceived ease of use (PEOU) reflects the extent to which a technological system is regarded as comprehensible, convenient, and effortless to operate [9]. In digital financial settings, platforms characterized by intuitive interfaces and simplified transactional procedures may encourage users to interact more confidently with FinTech services. Such accessibility not only facilitates technology acceptance but also enhances individuals' exposure to financial information and digital financial practices. Prior research indicates that technologies perceived as easier to use tend to strengthen user engagement and foster greater financial understanding [10]. In the Vietnamese context, [11] likewise emphasizes that ease of use significantly shapes consumer behavior while contributing to the enhancement of financial capability in digital financial environments. Accordingly, perceived ease of use is expected to positively influence financial literacy among Generation Z users of commercial bank FinTech services.

H1: Perceived ease of use positively affects financial literacy.

3.2. Perceived usefulness and financial literacy

Perceived usefulness (PU), a core construct of the Technology Acceptance Model (TAM), refers to an individual's belief that using a specific technology enhances efficiency and performance [9]. In digital finance, FinTech solutions offering convenience and speed serve as catalysts for deeper user engagement with financial ecosystems. Previous research has consistently identified PU as a critical determinant of FinTech adoption [10], [12].

This study further supports the hypothesis that the utility of FinTech services facilitates increased financial literacy among Generation Z. As users perceive these technologies as helpful tools for their financial well-being, they are more likely to learn about and engage in "learning through practice," thereby enhancing their overall financial knowledge. By interacting with value-driven platforms, Generation Z users transition from passive consumers to active learners, acquiring technical and financial competencies as a direct result of the service's perceived practical benefits.

H2: Perceived usefulness positively affects financial literacy.

3.3. Perceived risk and financial literacy

Perceived risk (PR) encompasses a user's awareness of uncertainty and the potential for adverse outcomes associated with FinTech adoption [13]. In the digital financial landscape, risk perception is primarily driven by concerns over systemic security, data privacy, and transactional ambiguity [14], [15]. Within the Vietnamese financial environment, these anxieties are intensified by prevalent issues such as cyber-fraud and information vulnerability [16].

Paradoxically, a heightened sensitivity to potential risks may serve as a motivational driver for financial self-education. As Generation Z users confront the complexities and inherent uncertainties of online financial environments, they are incentivized to adopt a more rigorous and analytical approach to financial management. This heightened risk awareness encourages individuals to proactively seek reliable financial information, scrutinize service providers, and refine their evaluative frameworks before committing to digital transactions. Consequently, the perception of risk acts as a catalyst for cognitive engagement, ultimately augmenting the user's financial literacy as a defensive mechanism against potential losses.

H3: Perceived risk positively affects financial literacy.

3.4. Perceived cost and financial literacy

Perceived cost refers to users' perceptions of the financial burden associated with adopting and using mobile payment services, which may negatively affect their intention to use such services [17]. In the FinTech sector, users perform a cost-benefit calculus to determine if functional advantages outweigh associated expenses. Evidence indicates that cost-efficiency is a primary driver for transsitioning from traditional banking to FinTech [12], [18], a trend emphasized in the Vietnamese context regarding pricing transparency [11].

For Generation Z, evaluating PC acts as an unintentional mechanism for enhancing financial literacy. Navigating digital platforms to optimize financial value compels these users to engage in comparative analysis and scrutinize complex fee structures. This deliberative process necessitates increased attention to financial details and market dynamics. Consequently, the cognitive effort required to minimize costs incentivizes users to develop a more sophisticated understanding of financial mechanisms, effectively converting cost-evaluation into a pathway for improved financial decision-making.

H4: Perceived cost positively affects financial literacy.

3.5. Social Influence and financial literacy

Social influence (SI) refers to the extent to which individuals perceive that significant others-such as family, peers, and online communities-believe they should adopt a particular service [19]. In the digital age, behavioral intentions toward FinTech are heavily shaped by social interactions, particularly among younger consumers who are highly susceptible to digital trends and peer validation. Within the Vietnamese context, social influence serves as a mechanism to mitigate uncertainty and reinforce user confidence in emerging financial platforms.

For Generation Z, social networks and digital communities function as informal knowledge-sharing hubs. Interactions within these circles facilitate the exchange of practical experiences and service evaluations, which heightens the user's overall financial awareness. Moreover, satisfied users often act as conduits for information diffusion [11], expanding the reach of financial knowledge within digital peer groups. By engaging in these social-technological dialogues, Generation Z users broaden their understanding of digital financial services, effectively leveraging collective intelligence to enhance their individual financial literacy.

H5: Social influence positively affects financial literacy.

3.6. Financial literacy and intention to use FinTech services

Financial literacy (FL) is established as a critical determinant of financial well-being and responsible behavior in digital ecosystems [20]. High levels of FL empower individuals to effectively evaluate financial products, manage risks, and navigate the complexities of modern FinTech services. Empirical evidence suggests that financially literate users possess a superior capacity to appraise the benefits and risks of digital technologies, thereby strengthening their confidence and propensity to adopt such platforms [21] . In the Vietnamese context, financial literacy has been confirmed as a significant driver of both FinTech awareness and usage behavior [6].

Theoretically, this study utilizes the Theory of Reasoned Action (TRA) framework to establish the directional impact from FL to behavioral intention. According to TRA, an individual's "informational foundation" comprising knowledge and beliefs functions as the core cognitive prerequisite for shaping attitudes and subsequent intentions [8]. To address potential endogeneity concerns, the study argues that in the specific domain of FinTech which involves inherent financial risks and technological complexity intrinsic capacity (FL) must be established as a baseline. This allows Generation Z users to assess the utility and security of services before forming a usage intention. Therefore, financial literacy serves as a foundational cognitive asset that transforms understanding into actionable intention within the digital finance landscape.

H6: Financial literacy has a positive and significant effect on behavioral intention toward commercial bank FinTech services.

3.7. Indirect effects through financial literacy

Based on H1-H5 and H6, the study further examines whether cognitive factors indirectly influence behavioral intention through financial literacy. Although financial literacy is positioned as the central explanatory construct of the model, cognitive perceptions may contribute to behavioral intention by strengthening users' financial understanding and financial capability when interacting with commercial bank FinTech services. Accordingly, the study assesses the indirect effects of perceived ease of use, perceived usefulness, perceived risk, perceived cost, and social influence on behavioral intention through financial literacy.

3.8. Conceptual Model

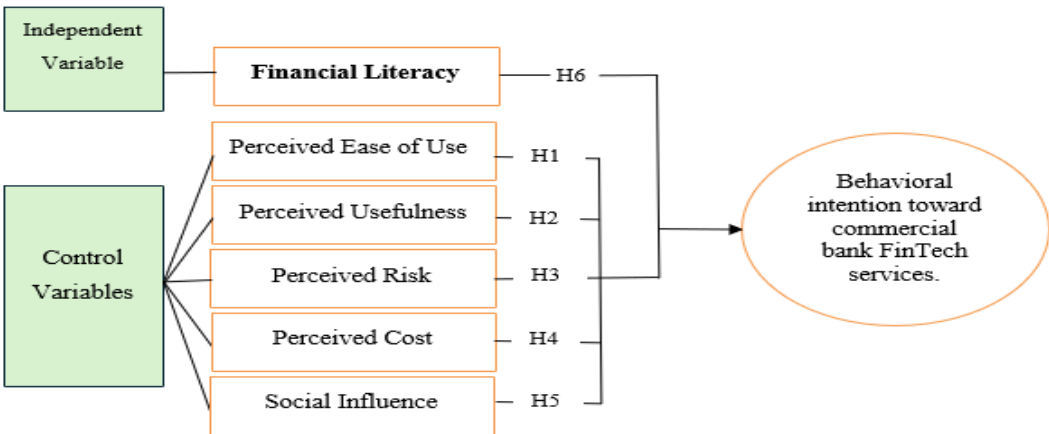


Figure 3. Conceptual Model

Source: Authors' own elaboration

Financial literacy is positioned as the central explanatory construct influencing behavioral intention, while cognitive factors are incorporated as control variables to enhance the explanatory power and robustness of the research model.

4. METHODOLOGY

This study adopts a quantitative research design to examine the impact of financial literacy on behavioral intention toward commercial bank FinTech services among Generation Z in Ho Chi Minh City. Financial literacy is positioned as the central explanatory construct influencing behavioral intention, while perceived usefulness, perceived risk, perceived cost, and social influence are incorporated as control variables to strengthen the explanatory robustness of the proposed model.

Measurement scales were adapted from prior validated studies and refined through expert consultation to ensure consistency with the Vietnamese FinTech context and Generation Z's financial behavior. Data were collected through a structured online survey using a convenience sampling technique. A total of 406 valid responses were retained for analysis, and all constructs were measured using a five-point Likert scale.

Data analysis was conducted using SPSS 26.0 and AMOS 24.0 following a two-step SEM approach. Reliability and validity were assessed through Cronbach's Alpha, Composite Reliability (CR), Average Variance Extracted (AVE), and the Fornell-Larcker criterion. Subsequently, Confirmatory Factor Analysis (CFA) and covariance-based Structural Equation Modeling (CB-SEM) were employed to evaluate model fit and test the proposed hypotheses. In addition, bias-corrected bootstrapping procedures were performed to assess the significance of indirect effects through financial literacy.

5. RESULT

Table 1. Describing variables in the model

Scale	Item	Content	Research overview
(1) Perceived Ease of Use	PEOU1	I find banking FinTech apps easy to learn how to use.	[10], [22]
	PEOU2	FinTech's functions are well-organized and easy to use.	
	PEOU3	FinTech transaction steps are simple and fast.	
	PEOU4	I adapt easily when banks update their FinTech apps.	
	PEOU5	I can use FinTech without needing much support.	
(2) Perceived Usefulness	PU1	FinTech helps me manage my personal finances more effectively.	[10], [12]
	PU2	Using FinTech has made my financial life more convenient.	
	PU3	I find FinTech more convenient than traditional trading.	
	PU4	FinTech allows me to conduct many transactions anytime, anywhere.	
	PU5	FinTech banking helps me save time on transactions and makes payments faster.	
	PR1	I know how to secure my information when using FinTech.	
	PR2	Knowledge of risks influences my decision to use FinTech.	

(3) Perceived Risk	PR3	I have a thorough understanding of FinTech risk mitigation measures.	[13], [18], [23]
	PR4	I weigh the risks before using FinTech.	
	PR5	I believe security is a crucial factor when using FinTech.	
(4) Perceived Cost	PC1	I understand the various fees associated with using banking FinTech services.	[18], [11]
	PC2	I find the FinTech costs reasonable compared to the benefits received.	
	PC3	Cost is a key factor when I choose FinTech.	
	PC4	I am considering choosing low-cost FinTech services.	
	PC5	Information regarding FinTech service fees is clearly provided by the bank.	
(5) Social Influence	SI1	Friends or relatives influence my decision to use FinTech.	[19], [11]
	SI2	The opinions of those around me influence FinTech choices.	
	SI3	I trust FinTech more when many people around me use it.	
	SI4	Information on social media influences my decision to use FinTech.	
	SI5	I trust FinTech more because more people use it.	
(6) Financial Literacy	FL1	I understand basic financial concepts.	[21], [6]
	FL2	I am capable of managing my personal finances effectively.	
	FL3	I am confident in making personal financial decisions.	
	FL4	Financial literacy helps me use FinTech more effectively.	
	FL5	I know how to choose the right financial services.	
(7) Behavioral intention toward commercial bank FinTech services.	BI1	I intend to use FinTech services in the near future.	[8], [9]
	BI2	I intend to use FinTech services more frequently in the near future.	
	BI3	I plan to use more FinTech services in the near future.	
	BI4	I will recommend FinTech services to others in the near future.	

Source: Developed by the authors based on prior studies and the TAM-TRA framework.

A total of 406 valid responses were collected for the analysis. The sample primarily consists of Generation Z respondents in Ho Chi Minh City, with a relatively balanced distribution in terms of gender and demographic characteristics. The majority of respondents are students, reflecting the target population of this study.

Scale Test

Table 2. Sample characteristics

	Frequency	Percentage
Age		
Under 18	32	7.9

From 18 to 20	79	19.5
From 21 to 23	81	20
From 24 to 26	138	34
From 27 to 29	76	18.7
Gender		
Male	176	43.3
Female	230	56.7
Education level		
High school	70	17.2
Undergraduate	293	72.2
Postgraduate	43	10.6
Occupation		
High school student	35	8.6
University student	95	23.4
Hired	225	55.4
Self-employment	51	12.6

Source: Statistical results extracted from SPSS 26.0

Table 2 presents the demographic characteristics of the sample, which consists of 406 respondents from Generation Z in Ho Chi Minh City. The age distribution shows that the largest proportion of participants falls within the 24-26 age group (34%), followed by those aged 21-23 (20%) and 18-20 (19.5%), indicating that the sample is concentrated in the core working-age segment of Generation Z.

In terms of gender, female respondents account for 56.7% of the sample, while males represent 43.3%, suggesting a relatively balanced gender distribution.

Regarding educational attainment, the majority of respondents are undergraduates (72.2%), followed by individuals with high school education (17.2%) and postgraduate qualifications (10.6%). This reflects the characteristics of a young, highly educated population.

With respect to occupation, most respondents are hired employees (55.4%), followed by university students (23.4%), self-employed individuals (12.6%), and high school students (8.6%). These findings indicate that the sample captures both students and early-career individuals, aligning with the study's target population.

Table 3. Cronbach's Alpha test results for official scales

Scale	Item	Cronbach's Alpha	Corrected Item-Total Correlation
Perceived Ease of Use	PEOU1	0.853	0.615
	PEOU2		0.695
	PEOU3		0.686
	PEOU4		0.681
	PEOU5		0.645
Perceived Usefulness	PU1	0.846	0.618
	PU2		0.661

	PU3		0.651
	PU4		0.681
	PU5		0.661
Perceived Risk	PR1	0.845	0.695
	PR2		0.670
	PR3		0.691
	PR4		0.617
	PR5		0.588
Perceived Cost	PC1	0.844	0.651
	PC2		0.642
	PC3		0.660
	PC4		0.642
	PC5		0.652
Social Influence	SI1	0.865	0.651
	SI2		0.695
	SI3		0.725
	SI4		0.660
	SI5		0.699
Financial Literacy	FL1	0.841	0.636
	FL2		0.645
	FL3		0.646
	FL4		0.647
	FL5		0.650
Behavioral intention toward commercial bank FinTech services	BI1	0.812	0.633
	BI2		0.631
	BI3		0.654
	BI4		0.603

Source: Authors' calculation using SPSS 26.0

Table 3 presents the reliability analysis results of all measurement scales. Cronbach's Alpha values range from 0.812 to 0.865, exceeding the recommended threshold of 0.7, thereby indicating satisfactory internal consistency of the constructs. In addition, all Corrected Item-Total Correlation values are higher than 0.5, ranging from 0.588 to 0.725, confirming that all observed variables are adequately correlated with their corresponding constructs. Therefore, all measurement scales satisfy the reliability requirements and are retained for subsequent exploratory and confirmatory factor analyses.

Table 4. Results of Exploratory Factor Analysis

	1	2	3	4	5	6	7
PU2	0.823						
PU4	0.781						
PU3	0.710						
PU5	0.664						

PU1	0.636						
PC3		0.747					
PC2		0.724					
PC1		0.718					
PC5		0.713					
PC4		0.685					
SI3			0.792				
SI1			0.731				
SI5			0.728				
SI4			0.725				
PEOU3				0.745			
PEOU5				0.744			
PEOU2				0.709			
PEOU1				0.686			
PR3					0.755		
PR2					0.721		
PR5					0.710		
PR4					0.643		
BI3						0.810	
BI2						0.680	
BI4						0.677	
BI1						0.673	
FL4							0.729
FL1							0.707
FL2							0.617
FL5							0.616
FL3							0.585
KMO	0.914						
Sig.	0.000						
Harman's single-factor test	28.188						
Total Variance Explained	60.559						

Source: Authors' calculation using SPSS 26.0

The exploratory factor analysis results confirmed the suitability of the data for factor extraction. The Kaiser-Meyer-Olkin (KMO) value reached 0.914, exceeding the recommended threshold of 0.5, while Bartlett's Test of Sphericity was statistically significant (Sig. = 0.000 < 0.05), indicating adequate intercorrelations among the observed variables. To ensure data robustness before testing the structural model, the study performed Harman's single-factor test. The results showed that the first factor explained only 28.188% of the total extracted variance, significantly lower than the 50% threshold. This confirms that Common Method Bias (CMB) is not a serious problem, allowing for further inferential analysis. In addition, the total variance explained reached 60.559%, exceeding the acceptable threshold of 50%, thereby demonstrating that the extracted factors sufficiently explained the variability of the dataset and supported the construct validity of the measurement model.

Table 5. Discriminant validity (Fornell-Larcker criterion)

	CR	AVE	PU	PC	SI	PEOU	PR	BI	FL
PU	0.847	0.526	0.725						
PC	0.844	0.520	0.285	0.721					
SI	0.835	0.559	0.342	0.260	0.747				
PEOU	0.818	0.529	0.321	0.330	0.319	0.727			
PR	0.802	0.504	0.390	0.308	0.314	0.357	0.710		
BI	0.812	0.520	0.471	0.363	0.353	0.468	0.365	0.721	
FL	0.841	0.514	0.648	0.526	0.482	0.590	0.601	0.629	0.717

Source: Authors' calculation using AMOS 24.0

Table 5 presents the assessment of discriminant validity using the Fornell-Larcker criterion. Discriminant validity is established when the square root of AVE for each construct exceeds its correlations with other constructs [24]

The results show that all diagonal values are greater than the corresponding inter-construct correlations, confirming adequate discriminant validity. Although financial literacy (FL) exhibits relatively high correlations with perceived usefulness (PU = 0.648) and behavioral intention (BI = 0.629), these values remain below the square root of its AVE (0.717).

Overall, the findings indicate that all constructs are empirically distinct, and the measurement model satisfies the requirements for subsequent structural equation modeling (SEM) analysis.

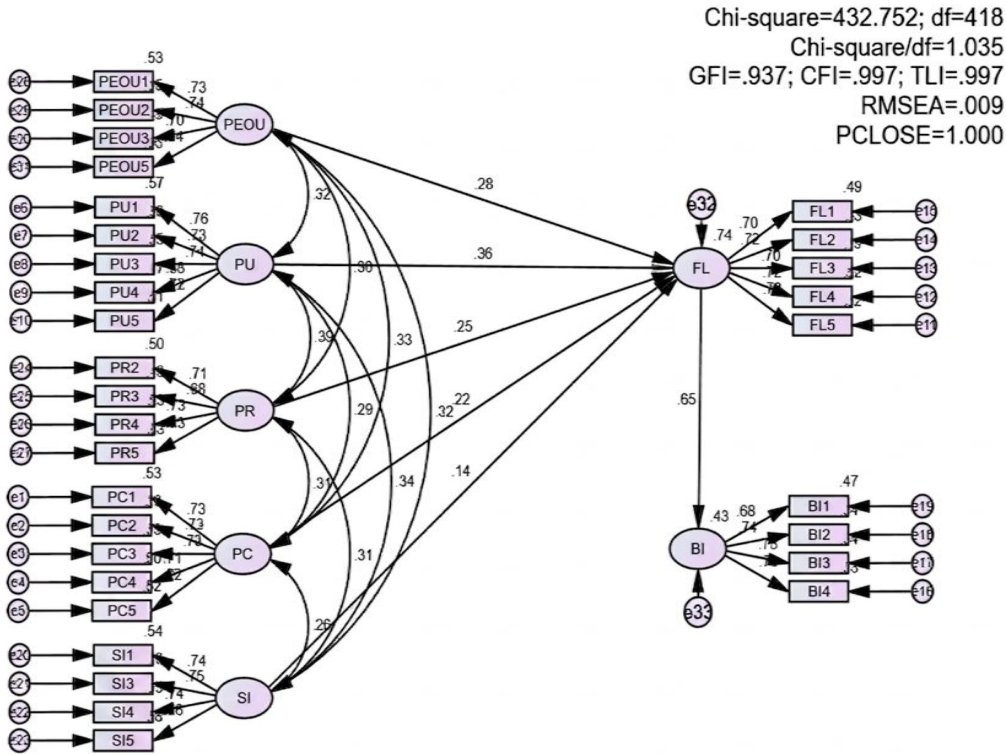


Figure 4. Structural Equation Modeling (SEM)

Source: Authors' calculation using AMOS 24.0

The results of the Structural Equation Modeling (SEM) show that the research model fits the survey data collected. Specifically, the model's fit indicators all meet the acceptance threshold, with Chi-square/df = 1.035 < 2, CFI = 0.997, TLI = 0.997 both greater than 0.9, GFI = 0.937 approaching the threshold of 0.9, and RMSEA = 0.009 < 0.05. At the same time, the PCLOSE index = 1.000 indicates that the model has a very good fit to the research data.

Table 6. Results of Coefficient of Determination (R²) and Effect Size (F²)

ITEM	R ²	F ²
FL	0.741	
BI	0.426	0.835

Source: Authors' calculation using AMOS 24.0

The R-squared results show that the model has good explanatory power. Specifically, the financial literacy (FL) variable reached 0.741, meaning that the control variables explain 74.1% of the variation in the independent variable. At the same time, the dependent variable reached 0.426, indicating that FL explains 42.6% of the variation in BI. The effect size (f²) of Financial Literacy on Intention was calculated at 0.835, indicating a large effect according to Cohen's (1988) guidelines (f² > 0.35).

Table 7. Results of Structural model

	Estimate	S.E	C.R	P	Supported
PEOU → FL	0.283	0.050	5.664	***	Supported
PU → FL	0.344	0.049	7.049	***	Supported
PR → FL	0.235	0.048	4.865	***	Supported
PC → FL	0.207	0.043	4.846	***	Supported
SI → FL	0.131	0.042	3.134	.002	Supported
FL → BI	0.675	0.068	9.866	***	Supported

Source: Authors' calculation using AMOS 24.0

Table 7 presents the structural model estimation results, where all proposed hypotheses achieved statistical significance at the p < 0.05. The model's core findings identify Financial Literacy (FL) as the primary independent variable, exerting the most substantial direct impact on Behavioral Intention (BI) with a standardized coefficient of (β = 0.675; C.R = 9.866).

Concurrently, cognitive factors were integrated into the model as control variables and antecedents to enhance the study's robustness. The results indicate that Perceived Usefulness (PU, β = 0.344) and Perceived Ease of Use (PEOU, β = 0.283) are closely associated with FL. Furthermore, controlling for Perceived Risk (PR, β = 0.235), Perceived Cost (PC, β = 0.207), and Social Influence (SI, β = 0.131) effectively isolated potential confounding effects, thereby confirming the net impact of FL on FinTech adoption intention among Generation Z.

Overall, empirical evidence strongly supports the proposed theoretical framework, positioning FL as the fundamental driver supported by foundational cognitive factors.

Table 8. Standardized Indirect Effects

	Estimate	p value	Supported
PEOU → FL → BI	0.184	0.001	Supported
PU → FL → BI	0.160	0.003	Supported

PR → FL → BI	0.092	0.003	Supported
PC → FL → BI	0.234	0.002	Supported
SI → FL → BI	0.145	0.003	Supported

Source: Authors' calculation using AMOS 24.0

Table 8 illustrates the normalized association effects between cognitive factors and behavioral intention when considering the role of financial knowledge. The results confirm that the association between cognition and ultimate adoption intention remains statistically significant ($p < 0.05$), reinforcing the model's systematic stability.

Regarding effect size, Perceived Cost (PC) showed the strongest combined association with behavioral intention ($\beta = 0.234$), followed by Perceived Ease of Use (PEOU, $\beta = 0.184$) and Perceived Usefulness (PU, $\beta = 0.160$). Social Influence (SI, $\beta = 0.145$) and Perceived Risk (PR, $\beta = 0.092$) also showed consistent, albeit moderate, contributions. These findings suggest that cognitive factors play a crucial role as the environmental and psychological foundation for enhancing users' financial literacy and capabilities. By controlling for these variables, the research results further highlight the indispensable and central role of Financial Literacy (FL) in reinforcing the central role of financial literacy in shaping behavioral intention toward FinTech adoption.

6. DISCUSSION

The empirical results derived from the SEM analysis offer substantive insights into the determinants underlying FinTech adoption intention among Generation Z consumers in Ho Chi Minh City. The findings confirm that Financial Literacy (FL) constitutes the most influential determinant of behavioral intention ($\beta = 0.675$), thereby corroborating prior studies that emphasize the centrality of financial capability in digital financial adoption [6]. Beyond reaffirming previous findings, however, this study advances a more theoretically nuanced interpretation of how FinTech adoption behavior is constructed among digitally oriented consumers. Although Generation Z is conventionally characterized as a technologically adaptive and digitally connected cohort, the results indicate that technological familiarity in itself may be insufficient to generate actual adoption intention. Consistent with [21], the findings reveal that users may exhibit high levels of technological exposure while nonetheless lacking the financial capability requisite for effectively evaluating digital financial services a distinction of considerable theoretical significance, as it challenges the implicit assumption, prevalent in much technology adoption research, that technological readiness naturally translates into adoption behavior. To isolate the net explanatory contribution of financial literacy, this study incorporated perceived usefulness, perceived ease of use, perceived risk, perceived cost, and social influence as control variables rather than positioning them as dominant explanatory constructs of intention. Contrary to the conventional Technology Acceptance Model (TAM) perspective advanced by [8], which conceptualizes perceived usefulness and perceived ease of use as primary direct predictors of behavioral intention, the present findings demonstrate that these perceptions may function more fundamentally as enabling cognitive conditions that reinforce users' financial capability. More significantly, the results suggest a theoretical reorientation in conceptualizing FinTech adoption behavior: whereas extant technology adoption research frequently treats financial literacy as a peripheral demographic characteristic, a moderating variable, or a supplementary individual trait, the present study repositions financial literacy as the central cognitive foundation underlying behavioral intention toward FinTech services. From this vantage point, users do not adopt FinTech services merely because such systems are perceived as useful, convenient, or technologically accessible; rather, adoption intention emerges when these technological

perceptions enhance users' capacity to interpret financial information, evaluate financial consequences, and navigate digital financial environments with greater confidence. This interpretation extends the conventional TAM framework by positing that technological perceptions alone may exert limited explanatory power over behavior unless they contribute to the cultivation of users' financial capability; accordingly, financial literacy should be conceived not merely as an accompanying personal characteristic but as the foundational cognitive condition through which technological perceptions acquire behavioral significance within digital financial contexts. These findings further corroborate the argument advanced by [20] that positive technological perceptions encourage users to engage more actively in acquiring financial knowledge and comprehending digital financial systems, suggesting that perceived usefulness and ease of use may indirectly strengthen behavioral intention by facilitating financial learning processes rather than operating solely through direct motivational pathways. A further theoretically noteworthy finding concerns the positive effects of perceived risk (PR, $\beta = 0.235$) and perceived cost (PC, $\beta = 0.207$) on financial literacy. Whereas traditional technology adoption research typically conceptualizes risk and cost as inhibiting factors, the present findings, situated within the dynamic context of Vietnam's digital financial market, reveal that Generation Z exhibits a form of "paradoxical adaptation": rather than disengaging when confronted with security risks or complex fee structures, these users tend to proactively seek information and enhance their knowledge as a means of self-protection. This pattern reflects a proactive self-education mindset characteristic of young users in the digital era, whereby external pressures are transformed into motivations for developing personal financial capability, and contributes to a growing body of literature suggesting that young digital consumers respond to technological uncertainty through proactive self-learning rather than passive avoidance. Finally, Social Influence (SI) exerted the most modest effect ($\beta = 0.131$), a result indicating that, within the FinTech era, Generation Z's financial competence is formed primarily through direct personal interaction with technology platforms and intrinsic motivation rather than through normative pressure from the surrounding community; direct interaction with FinTech interfaces enables the formation of an immediate feedback loop, through which financial knowledge accumulates via learning-by-doing, thereby affirming that user confidence and competence in the contemporary context are constructed not upon group pressure but upon proven experience—an outcome that underscores the independence and pragmatism characterizing the financial thinking of the younger generation in dynamic urban settings such as Ho Chi Minh City.

7. CONCLUSION AND IMPLICATIONS

This study confirms that Financial Literacy (FL) represents the most influential determinant of FinTech adoption intention among Generation Z in Ho Chi Minh City. The findings contribute to the FinTech adoption literature by emphasizing that financial capability remains a decisive factor underlying behavioral intention even within highly digitalized consumer groups. By positioning financial literacy as the central explanatory construct while incorporating technological perceptions as cognitive control variables, the study offers a broader behavioral-financial perspective for understanding FinTech adoption in emerging digital economies. From a practical perspective, the findings suggest that commercial banks should move beyond interface-oriented FinTech strategies focused solely on usability and convenience. Instead, financial institutions should prioritize comprehensive Digital Financial Education initiatives integrated directly within digital banking ecosystems. Embedding interactive financial learning modules, personalized financial management tools, and transparent risk-communication mechanisms into FinTech platforms may strengthen users' financial capability while simultaneously fostering more sustainable and responsible adoption behavior. In addition, leveraging social media ecosystems and digital influencers to

disseminate financial knowledge may further enhance trust and long-term engagement among younger consumers. As younger consumers increasingly engage with technologically sophisticated but financially complex services, financial literacy may become an essential prerequisite for ensuring not only technology adoption but also responsible and resilient participation in digital financial ecosystems.

Despite these contributions, the study is subject to several limitations. First, although the research focuses on Generation Z users in Ho Chi Minh City, the sample is concentrated primarily among students and young educated individuals. Consequently, the findings may not fully represent the broader Generation Z population with more diverse occupational, socioeconomic, and financial backgrounds, thereby limiting the generalizability of the results. Future studies are therefore encouraged to employ more heterogeneous sampling approaches across different demographic and occupational groups to enhance external validity. Second, the cross-sectional design captures behavioral intention at a single point in time and therefore cannot fully explain the dynamic transition from intention to actual FinTech usage behavior. Future research may adopt longitudinal approaches and comparative regional analyses to examine the stability of the proposed relationships across different contexts and stages of digital financial adoption. Furthermore, qualitative investigations may provide deeper insights into how financial literacy develops through digital financial experiences and why perceived risk and perceived cost appear to stimulate financial learning behavior among younger consumers.

REFERENCES

- [1] S. Schagen and A. Lines, "Financial literacy in adult life: A report to the NatWest Group Charitable Trust," National Foundation for Educational Research, Slough, 1996. <https://www.nfer.ac.uk/media/zrfgqeto/91091.pdf>
- [2] J. Yoong and V. R. d. M. Ferreira, "Improving financial education effectiveness through behavioural economics: OECD key findings and way forward," in *Improving Financial Education Efficiency*, Paris, Organisation for Economic Co-operation and Development, 2013, pp. 19-26. <https://doi.org/10.1787/9789264108219-en>
- [3] C. L. J. Mason and R. M. S. Wilson, "Conceptualising financial literacy," Loughborough University, Loughborough, 2000. <https://hdl.handle.net/2134/2016>
- [4] A. Lusardi, P.-C. Michaud, and O. S. Mitchell, "Optimal financial knowledge and wealth inequality (Pt. 2)," *Journal of Political Economy*, vol. 125, no. 2, pp. 431–447, 2017. <https://doi.org/10.1086/690950>
- [5] A. Grohmann, T. Klühs and L. Menkhoff, "Does financial literacy improve financial inclusion? Cross country evidence," *World Development*, vol. 111, pp. 84-96, 2018. <https://doi.org/10.1016/j.worlddev.2018.06.020>
- [6] P. J. Morgan and L. Q. Trinh, "Fintech and financial literacy in Viet Nam," Asian Development Bank Institute, Tokyo, 2020. <https://hdl.handle.net/10419/238511>
- [7] Y. Yang, Y. Wu and B. Huang, "Digital finance and financial literacy: Evidence from Chinese households," *Journal of Banking & Finance*, vol. 156, 2023. <https://doi.org/10.1016/j.jbankfin.2023.107005>
- [8] M. F. Icek Ajzen, *Understanding Attitudes and Predicting Social Behavior*, Englewood Cliffs, NJ: Prentice-Hall, 1980. <https://archive.org/details/understandingatt00icek>

- [9] F. D. Davis, "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," vol. 13, no. 3, pp. 319-340, 1989. <https://doi.org/10.2307/249008>
- [10] T. Pikkarainen, . K. Pikkarainen, H. Karjaluoto and S. Pahnla, "Consumer Acceptance of Online Banking: An Extension of the Technology Acceptance Model," *Internet Research*, vol. 14, no. 3, pp. 224-235, 2004. <https://doi.org/10.1108/10662240410542652>
- [11] N. N. H. C. Đò Hong Nhung, "The impact of financial literacy on the development of fintech: empirical evidence from Vietnam," *Journal of Science and Technology*, vol. 57, no. 3, pp. 152-158, 2021. <https://scholar.dlu.edu.vn/thuvienso/handle/DLU123456789/147126>
- [12] H. K. D. N. Yeow Pooi Mun, "Millennials' Perception on Mobile Payment Services in Malaysia," *Procedia Computer Science*, vol. 124, pp. 397-404, 2017. <https://doi.org/10.1016/j.procs.2017.12.170>
- [13] H.-S. Ryu, "Understanding Benefit and Risk Framework of Fintech Adoption: Comparison of Early Adopters and Late Adopters," 2018. <https://doi.org/10.24251/HICSS.2018.486>
- [14] L. Wessels and J. Drennan, "An Investigation of Consumer Acceptance of M-Banking," *International Journal of Bank Marketing*, vol. 28, no. 7, pp. 547-568, 2010. <https://doi.org/10.1108/02652321011085194>
- [15] Hsu-Tong Deng; Li-Chiu Chi; Nai-Yung Teng; Tseng-Chung Tang; Chun-Lin Chen, "Influence of Financial Literacy of Teachers on Financial Education Teaching in Elementary Schools," *International Journal of e-Education, e-Business, e-Management and e-Learning*, vol. 3, no. 1, pp. 68-71, 2013. <https://doi.org/10.7763/IJEEEE.2013.V3.195>
- [16] M. B. Nguyen and N. B. Nguyen, "Factors Affecting the Intention to Use E-Wallets," *Journal of Science and Technology on Information and Communications*, vol. 2, no. 1, 2021. <https://jst.iuh.edu.vn/index.php/jst-iuh/article/view/946/394>
- [17] Y. Liu, M. Wang, D. Huang, Q. Huang, H. Yang and Z. Li, "The impact of mobility, risk, and cost on the users' intention to adopt mobile payments," *Information Systems and e-Business Management*, vol. 17, no. 2, p. 319–342, 2019. <https://doi.org/10.1007/s10257-019-00449-0>
- [18] M. M. Islam and M. E. Hossain, "An Investigation of Consumers' Acceptance of Mobile Banking in Bangladesh," 2015. <https://doi.org/10.4018/ijide.2015070102>
- [19] S. F. Yeoh, "Internet Banking Adoption in Kuala Lumpur: An Application of UTAUT Model," *International Journal of Business and Management*, vol. 6, no. 4, pp. 161-167, 2011. <https://doi.org/10.5539/ijbm.v6n4p161>
- [20] G. A. Panos and J. O. Wilson, "Financial Literacy and Responsible Finance in the FinTech Era: Capabilities and Challenges," *The European Journal of Finance*, vol. 26, no. 4-5, pp. 297-301, 2020. <https://doi.org/10.1080/1351847X.2020.1717569>
- [21] E. Z. Milian, M. Spínola and M. M. d. Carvalho, "Fintechs: A literature review and research agenda," *Electronic Commerce Research and Applications*, vol. 34, no. 2, p. 100833, 2019. <https://doi.org/10.1016/j.elerap.2019.100833>
- [22] A. Ruangkanjanases and N. Sirikulprasert, "Predicting Consumer Intention to Adopt Near Field Communication Enabled Mobile Payment in Thailand," *Journal of*

Telecommunication, Electronic and Computer Engineering (JTEC), vol. 10, no. 2-7, pp. 147-152, 2018. <https://jtec.utem.edu.my/jtec/article/view/4443>

- [23] L. T. P. Trinh and H. T. Pham, "The influence of risk and benefit perceptions on young people's use of fintech services in Ha Noi," *Journal of Bank*, no. 04, pp. 23-29, 2023. <https://tapchinganhang.gov.vn/anh-huong-cua-nhan-thuc-ve-rui-ro-va-loi-ich-toi-viec-su-dung-cac-dich-vu-fintech-cua-gioi-tre-tren-dia-ban-thanh-pho-ha-noi-12303.html>
- [24] C. Fornell and D. F. Larcker, "Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics," *Journal of Marketing Research*, vol. 18, no. 3, pp. 382-388, 1981. <https://doi.org/10.2307/3150980>