





“Gender impact on customer satisfaction and loyalty in Vietnam’s FinTech-enabled banking services”

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GENDER IMPACT ON CUSTOMER SATISFACTION AND LOYALTY IN VIETNAM'S FINTECH-ENABLED BANKING SERVICES

Abstract

Vietnam's FinTech-enabled lending market has expanded rapidly, yet concerns regarding trust, service quality, and regulatory legitimacy persist. Understanding gender-based differences in customer experiences is therefore important for sustainable sector development. This study examines the influence of gender on the satisfaction-loyalty mechanism in Vietnam's FinTech personal lending context. A structured survey conducted between September 2023 and September 2024 produced 952 valid responses (47.3% male; 52.7% female) from active borrowers across the country's three major regions. Measurement instruments, adapted from validated scales, demonstrated strong reliability (Cronbach's alpha > 0.78) and validity (CR > 0.81; AVE > 0.51). Data were analyzed using covariance-based Structural Equation Modeling (CB-SEM) and multi-group analysis. The model achieved a satisfactory fit (CFI = 0.916; TLI = 0.904; RMSEA = 0.059). Six of seven hypotheses were supported: perceived usefulness ($\beta = 0.181$, $p < 0.001$), trust ($\beta = 0.132$, $p < 0.001$), service quality ($\beta = 0.173$, $p < 0.001$), social influence ($\beta = 0.070$, $p = 0.019$), and hedonic motivation ($\beta = 0.082$, $p < 0.001$) enhanced satisfaction, which strongly predicted loyalty ($\beta = 0.514$, $p < 0.001$). Ease of use showed no significant effect ($\beta = 0.052$, $p = 0.159$). Multi-group analysis revealed gender asymmetries: perceived usefulness and hedonic motivation were decisive for men, whereas trust, service quality, and social influence were more influential for women. These findings highlight the need for gender-sensitive strategies to strengthen loyalty and support inclusive growth in Vietnam's regulated FinTech lending sector.

Keywords

FinTech, digital lending, banking, satisfaction, gender

JEL Classification

G21, D12, M10, M30

INTRODUCTION

Vietnam's FinTech industry has grown rapidly in recent years, becoming one of Southeast Asia's most dynamic digital financial markets. Driven by high smartphone penetration and increasing consumer openness to technology-enabled financial services, FinTech lending has reshaped access to credit and expanded opportunities for financial inclusion. Despite this progress, the sector continues to face significant constraints. Prominent peer-to-peer lending scandals have weakened institutional trust and raised public concerns regarding the legitimacy, transparency, and safety of digital lending platforms. At the same time, persistent disparities in digital literacy and technology access between urban and rural populations threaten the inclusive potential of FinTech innovations.

These developments highlight a broader scientific problem concerning the determinants of sustainable engagement with digital lending services. Understanding how trust, perceived reliability, and user experience interact with Vietnam's cultural, regulatory, and institutional conditions remains essential for fostering responsible FinTech development. Within this context, gender differences constitute a crucial

yet understudied dimension. International evidence shows that men and women may vary in their financial risk tolerance, technology perceptions, and expectations of service quality. However, empirical research on how gendered experiences shape satisfaction and loyalty in Vietnam's evolving digital credit market is notably limited.

Addressing this gap is vital to ensuring that FinTech lending contributes to equitable, resilient, and socially inclusive financial systems. The central challenge lies in clarifying the mechanisms through which gender-specific perceptions – particularly related to trust, service quality, and user interaction – shape long-term consumer confidence and continued engagement in a sector still navigating regulatory uncertainty.

1. LITERATURE REVIEW AND RESEARCH MODEL

1.1. Literature review

The adoption of digital financial services has been widely examined through the Technology Acceptance Model (TAM) (Davis, 1989) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2012). These frameworks emphasize utilitarian determinants, particularly perceived usefulness (PU) and perceived ease of use (PEOU). PU, reflecting the extent to which individuals believe that technology enhances task performance, has consistently been identified as a central predictor of adoption and satisfaction across mobile banking and FinTech services (Alalwan et al., 2016; Zhou, 2012). In Vietnam's FinTech lending market, PU is especially salient given the widespread diffusion of smartphones and the efficiency benefits offered by digital platforms. By contrast, the influence of PEOU tends to diminish in post-adoption contexts as users gain experience with digital interfaces (Venkatesh et al., 2003). This attenuation suggests that cognitive factors alone may be insufficient to explain sustained satisfaction and loyalty in technology-enabled banking services.

Recent scholarship has extended adoption models to incorporate relational and experiential constructs that capture post-adoption dynamics. Trust has emerged as a pivotal driver of satisfaction in emerging markets, particularly where regulatory systems remain underdeveloped and high-profile scandals have weakened consumer confidence (McKnight & Chervany, 2001; SBV, 2024). Service quality, derived from the SERVQUAL framework

(Parasuraman et al., 1988), reinforces perceptions of platform legitimacy by enhancing reliability, responsiveness, and transparency (Nguyen et al., 2020). Hedonic motivation, reflecting the intrinsic enjoyment associated with interactive and gamified features, has been shown to strengthen engagement, especially among younger and more digitally literate users (Ryu, 2018). Social influence is also significant in collectivist societies such as Vietnam, where peer recommendations and community norms strongly shape consumer attitudes and retention (Tran & Corner, 2016; Hofstede Insights, 2024).

Vietnam's FinTech lending market, valued at approximately USD 1.5 billion in 2023, exemplifies rapid digitalization coupled with structural challenges. Peer-to-peer lending scandals have eroded institutional trust, underscoring the importance of trust and service quality as substitutes for regulatory credibility (Cao et al., 2021; SBV, 2024). Unlike developed financial centers with well-established regulatory frameworks, Vietnam's evolving institutional context places greater weight on consumer perceptions of legitimacy. Parallel to these developments, gender differences in FinTech behavior have emerged as an important yet underexplored area. Existing evidence suggests that men tend to prioritize functional and hedonic dimensions, whereas women place greater emphasis on trust, service quality, and social reassurance (Palamidovska-Sterjadovska et al., 2025; Hurani & Abdel-Haq, 2025). Cultural expectations and gaps in financial literacy may further intensify these variations within Vietnam's digital credit ecosystem.

The reviewed literature reveals several critical gaps. First, post-adoption behaviors – particularly customer satisfaction and loyalty – remain insufficiently examined in Vietnam's FinTech sector, de-

spite their importance for platform sustainability and competitiveness. Second, dominant theoretical models, largely developed in Western contexts, inadequately capture Vietnam's collectivist culture and regulatory uncertainties. Third, gender-based heterogeneity in post-adoption pathways has not been systematically investigated, even though international studies indicate substantial divergences.

This study addresses these gaps by proposing an integrated framework incorporating perceived usefulness, trust, service quality, hedonic motivation, and social influence to explain satisfaction and loyalty in Vietnam's FinTech-enabled banking services. It further examines gender-based heterogeneity using covariance-based structural equation modeling, contributing new theoretical insights and practical implications for the development of resilient and inclusive FinTech ecosystems.

1.2. The research model and hypothesis development

The research model integrates constructs from the Technology Acceptance Model (TAM), SERVQUAL, and the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) to capture the cognitive, relational, and socio-cultural dimensions of user experience in Vietnam's FinTech personal lending sector. This integrative approach addresses theoretical gaps by incorporating contextual factors – such as Vietnam's collectivist culture and evolving regulatory environment – and by examining gender differences as potential moderators of key relationships.

From TAM (Davis, 1989), Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are included as foundational determinants of Customer Satisfaction (SAT). PU reflects the extent to which users perceive FinTech lending platforms as improving efficiency and decision-making, which is particularly relevant in a rapidly digitizing country with high smartphone penetration. PEOU captures perceived simplicity and user-friendliness, especially important given varying levels of digital literacy across urban and rural regions. However, TAM's cognitive emphasis alone is insufficient in financial services contexts where relational factors strongly influence user evaluations.

Thus, the model incorporates Service Quality (SERVQ) from SERVQUAL (Parasuraman et al., 1988) and Trust in Technology (TRUST) (McKnight & Chervany, 2001; Zhou, 2012). Service quality – encompassing reliability, transparency, and responsiveness – is critical in Vietnam, where past P2P lending scandals have weakened confidence. TRUST captures users' confidence in platform security and integrity, a key concern in a regulatory environment still under development.

From UTAUT2, Social Influence (SOCIAL) and Hedonic Motivation (HEMO) are included to reflect Vietnam's collectivist culture and increasing digital engagement. SOCIAL is expected to be especially salient for female users who may rely more on social reassurance, while HEMO captures intrinsic enjoyment derived from platform interaction. Other UTAUT2 constructs, such as Price Value and Habit, were excluded to maintain parsimony.

To reflect Vietnam's institutional realities, the model incorporates Regulatory Awareness (RA) as a context-specific construct, capturing users' perceptions of regulatory legitimacy. RA is expected to reinforce SERVQ and TRUST, particularly in a market facing regulatory uncertainty.

Customer Satisfaction (SAT) and Customer Loyalty (CLOY) serve as key outcome variables, representing overall evaluative judgments and behavioral intentions – critical indicators for long-term platform sustainability.

H₁: Perceived Usefulness (PU) positively affects Customer Satisfaction (SAT).

PU, a core TAM construct, reflects the belief that FinTech lending enhances financial decision-making efficiency (Davis, 1989). In Vietnam, where rapid digitalization and smartphone penetration drive demand for accessible credit (Hyperlead, 2022), PU includes faster loan processing and improved credit access. Studies in digital banking confirm PU as a primary driver of adoption and post-adoption satisfaction (Alalwan et al., 2016). Gender differences suggest men, with higher risk tolerance, may prioritize utilitarian benefits (Nguyen & Tran, 2025). Thus, higher PU is expected to boost SAT among users seeking efficient financial solutions.

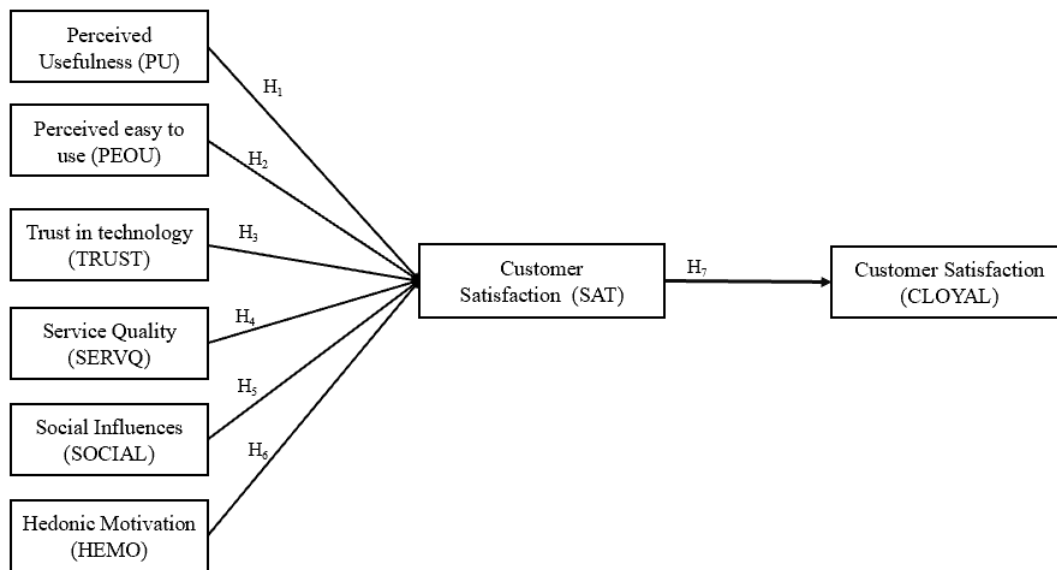


Figure 1. Research model

H₂: Perceived Ease of Use (PEOU) positively influences Customer Satisfaction (SAT).

PEOU captures the perceived simplicity of using FinTech platforms (Davis, 1989). Intuitive interfaces and simplified KYC processes reduce abandonment, especially for rural users with lower digital literacy (Alalwan et al., 2018). While PEOU often influences SAT indirectly through PU, direct effects are also supported in post-adoption contexts (Venkatesh et al., 2003). In Vietnam, PEOU’s impact may be weaker among tech-savvy urban users. Nevertheless, accessible interfaces are expected to enhance SAT across user groups.

H₃: Trust in Technology (TRUST) positively affects Customer Satisfaction (SAT).

TRUST, adapted from McKnight and Chervany (2001), reflects confidence in FinTech platforms’ security and reliability. In Vietnam, where P2P lending scandals have heightened risk perceptions (SBV, 2024), TRUST mitigates concerns about data privacy and fraud through secure authentication and transparent credit scoring. Empirical studies confirm TRUST as a direct antecedent of SAT (Gefen et al., 2003). Women, often more risk-averse, may prioritize TRUST (Nguyen & Tran, 2025). Thus, higher TRUST is expected to increase SAT.

H₄: Service Quality (SERVQ) positively impacts Customer Satisfaction (SAT).

Based on SERVQUAL (Parasuraman et al., 1988), SERVQ encompasses reliability, responsiveness, and transparency. Consistent uptime, prompt dispute resolution, and clear fee structures signal Sony competence. In Vietnam’s FinTech context, where regulatory gaps fuel skepticism, SERVQ reassures users, particularly women who value responsive support. Research highlights SERVQ as a key SAT driver (Rahi & Ghani, 2019). High SERVQ is expected to elevate SAT by fostering perceptions of reliability.

H₅: Social Influence (SOCIAL) positively influences Customer Satisfaction (SAT).

SOCIAL, from UTAUT2 (Venkatesh et al., 2012), captures the impact of peer and community endorsements. Vietnam’s collectivist culture (Hofstede, 2024) amplifies SOCIAL’s role in legitimizing FinTech adoption, especially among women influenced by social cohesion norms. Studies in collectivist markets confirm SOCIAL’s validation effect on SAT (Liébana-Cabanillas et al., 2018). Stronger social endorsements are expected to enhance SAT.

H₆: Hedonic Motivation (HEMO) positively affects Customer Satisfaction (SAT).

HEMO, also from UTAUT2, reflects enjoyment from engaging FinTech features like gamified repayment tracking (Venkatesh et al., 2012). In Vietnam, where digital novelty is pronounced, especially in rural areas, HEMO fosters emotional attachment. Studies confirm hedonic value boosts SAT (Alalwan, 2020), particularly among younger users. Pleasurable experiences are expected to strengthen SAT.

H₇: Customer Satisfaction (SAT) positively influences Customer Loyalty (LOY).

The satisfaction-loyalty link is well-established (Oliver & Burke, 1999). SAT drives LOY behaviors like repeat usage and positive word-of-mouth, critical for FinTech sustainability (Reinartz & Kumar, 2000). Higher SAT is expected to foster stronger LOY. This framework addresses Vietnam's FinTech landscape, where regulatory uncertainty heightens the importance of TRUST and SERVQ, while SOCIAL and HEMO align with cultural and digital trends. Unlike TAM's focus on utilitarian benefits, this model incorporates relational and socio-affective factors, addressing gaps in prior research.

2. METHODOLOGY AND RESEARCH DESIGN

This study employed a quantitative, theory-confirmation design to examine the determinants of customer satisfaction (SAT) and customer loyalty (LOY) in Vietnam's FinTech personal lending market, with particular focus on gender-based differences. Covariance-Based Structural Equation Modeling (CB-SEM) was used to validate theoretically grounded relationships among six latent constructs – perceived usefulness (PU), perceived ease of use (PEOU), trust in technology (TRUST), service quality (SERVQ), social influence (SOCIAL), and hedonic motivation (HEMO) – which are identified in the literature as key drivers of FinTech-related satisfaction and loyalty.

Data were collected between September 2023 and September 2024 using a mixed-mode survey design that combined online questionnaires (Google Forms) with paper-based surveys. This approach ensured accessibility for both urban and rural participants and reduced sampling bias linked

Table 1. Summary of research hypotheses

Hypothesis	Independent Variable	Dependent Variable	Theoretical Foundation	Supporting Studies	Expected Relationship
<i>H₁</i>	Perceived Usefulness (PU)	Customer Satisfaction (SAT)	Technology Acceptance Model (Davis, 1989)	Alalwan et al. (2016); Martins et al. (2014)	PU → SAT (+): When users perceive higher usefulness, satisfaction increases
<i>H₂</i>	Perceived Ease of Use (PEOU)	Customer Satisfaction (SAT)	Technology Acceptance Model (Davis, 1989)	Venkatesh et al. (2003); Alalwan et al. (2018)	PEOU → SAT (+): Ease of use reduces frustration and enhances satisfaction
<i>H₃</i>	Trust in Technology (TRUST)	Customer Satisfaction (SAT)	Trust in Technology (McKnight & Chervany, 2001)	Zhou (2012); Oliveira et al. (2014)	TRUST → SAT (+): Confidence in security and integrity enhances satisfaction
<i>H₄</i>	Service Quality (SERVQ)	Customer Satisfaction (SAT)	SERVQUAL (Parasuraman et al., 1988)	Rahi & Ghani (2019)	SERVQ → SAT (+): Higher service quality improves overall satisfaction
<i>H₅</i>	Social Influence (SOCIAL)	Customer Satisfaction (SAT)	UTAUT2 (Venkatesh et al., 2012)	Hofstede (2024); Liébana-Cabanillas et al. (2018)	SOCIAL → SAT (+): Social endorsement strengthens satisfaction
<i>H₆</i>	Hedonic Motivation (HEMO)	Customer Satisfaction (SAT)	UTAUT2 (Venkatesh et al., 2012)	Alalwan (2020); Kim et al. (2018)	HEMO → SAT (+): Enjoyable and engaging features enhance satisfaction
<i>H₇</i>	Customer Satisfaction (SAT)	Customer Loyalty (CLOY)	Satisfaction–Loyalty Paradigm (Oliver & Burke, 1999)	Kumar and Reinartz (2016); Thongpapanl and Ashraf (2011)	SAT → CLOY (+): Satisfied customers are more likely to remain loyal

to digital literacy. Respondents were required to be at least 18 years old and to have used FinTech personal lending services within the previous 12 months.

The questionnaire was adapted from validated international scales and underwent a translation-back-translation process to ensure semantic equivalence. Content validity was confirmed through review by a panel of academics and industry practitioners. A pilot test involving 30 active FinTech users was conducted to refine clarity, wording, and item comprehensibility.

The study complied with institutional ethical standards. Informed consent was obtained from all participants, anonymity and confidentiality were strictly maintained, and data were stored securely. The research protocol received ethical approval from ThuyLoi University, ensuring compliance with national and journal requirements for studies involving human respondents.

Data were processed using SPSS 22.0 and AMOS 22.0. Descriptive statistics summarized demographic characteristics and key variable distributions. Reliability was assessed using Cronbach's alpha, with ≥ 0.60 considered acceptable and ≥ 0.80 indicating high reliability. Exploratory Factor Analysis (EFA) confirmed dimensionality (factor loadings ≥ 0.50 ; KMO ≥ 0.50 ; Bartlett's test $p < 0.05$). Confirmatory Factor Analysis (CFA) validated the measurement model using standard fit indices (CFI, GFI, TLI ≥ 0.90 ; RMSEA < 0.08). Structural Equation Modeling (SEM) tested hypothesized relationships, and multi-group SEM examined gender-based differences across structural paths.

A stratified purposive sampling strategy was employed to secure balanced representation across gender and Vietnam's three geographic regions (North, Central, South). After removing incomplete or inconsistent responses, 952 valid cases were retained for analysis. The descriptive statistics (Appendix B) reflect a sample well suited for analyzing gendered patterns of FinTech use. Of 952 respondents, 46.3% were male, and 53.7% were female. Urban (52.5%) and rural (47.5%) representation was nearly equal, aligning with financial inclusion benchmarks of the State Bank of

Vietnam (SBV, 2024). Over half the respondents (51.3%) had used FinTech lending for more than 12 months, providing adequate experience to evaluate post-adoption factors. Key constructs measured on 5-point Likert scales exhibited favorable mean values (3.42-3.90) and acceptable variability (SD = 0.79-1.06), supporting the suitability of the data for CB-SEM analysis.

3. RESULTS

The reliability analysis of the measurement scales, assessed through Cronbach's Alpha, indicated that all constructs achieved values above the 0.7 threshold (Table 2). Items with corrected item-total correlations below 0.3 were removed, while the remaining items were retained for subsequent factor analysis.

Exploratory Factor Analysis (EFA) was then conducted using the principal axis factoring method with Promax rotation. Items that failed to meet the required factor loading criteria were gradually eliminated. The final results showed a KMO value of 0.855 (> 0.5), with the total variance explained exceeding 61%. Bartlett's test of sphericity was statistically significant ($p < 0.001$), confirming the suitability of the data for factor analysis.

In the next stage, the measurement model was further validated through Confirmatory Factor Analysis (CFA). The results demonstrated that all constructs achieved composite reliability (CR) values greater than 0.7 and average variance extracted (AVE) values above 0.5, thereby confirming convergent validity (Table 2). Furthermore, the standardized factor loadings of all observed variables were greater than 0.5, indicating that the measurement scales exhibited adequate convergent validity.

On the other hand, the analysis results indicate that the Maximum Shared Variance (MSV) is lower than the Average Variance Extracted (AVE) (Table 3). In addition, the square root values of AVE on the diagonal are greater than the corresponding inter-construct correlations in the rows and columns (Table 3). Therefore, according to the criteria of Fornell and Larcker (1981), the measurement scales satisfy the requirement of discriminant validity.

Table 2. Composite reliability and convergent validity of constructs

Variable	Cronbach's Alpha	CR	AVE	MSV
SAT	0.819	0.879	0.709	0.279
TRUST	0.884	0.868	0.572	0.208
PU	0.893	0.895	0.633	0.167
PEOU	0.885	0.865	0.616	0.074
SERVQ	0.837	0.810	0.519	0.201
SOCIAL	0.874	0.878	0.646	0.054
CLOY	0.846	0.870	0.627	0.279
HEMO	0.778	0.837	0.633	0.059

Table 3. Fornell and Larcker criterion evaluation

MaxR	SAT	TRUST	PU	PEOU	SERVQ	SOCIAL	CLOY	HEMO
0.904	0.842	–	–	–	–	–	–	–
0.898	0.328	0.757	–	–	–	–	–	–
0.914	0.356	0.409	0.796	–	–	–	–	–
0.870	0.184	0.272	0.212	0.785	–	–	–	–
0.836	0.289	0.381	0.325	0.182	0.720	–	–	–
0.921	0.146	0.183	0.113	0.198	0.063	0.804	–	–
0.875	0.528	0.456	0.373	0.251	0.448	0.233	0.792	–
0.867	0.220	0.225	0.176	0.138	0.173	0.062	0.243	0.796

Taken together, the results of reliability and validity assessments (Cronbach's Alpha, EFA, CFA, convergent and discriminant validity) confirm that the measurement model is robust, thereby providing a solid foundation for subsequent Structural Equation Modeling (SEM) analysis.

The CFA and SEM results (Table 4) indicate that the proposed model demonstrates a satisfactory level of fit, confirming its robustness in explaining customer behavior in the FinTech context. Although the GFI value (0.892) fell slightly below the conventional 0.90 threshold, it exceeded the acceptable minimum of 0.80, indicating adequate model performance (Baumgartner & Homburg, 1996; Doll et al., 1994). Collectively, the reported fit indices provide a sound basis for subsequent hypothesis testing.

Analysis of the structural model (Table 5) shows that six of the seven hypotheses were supported,

while one was rejected. Trust, perceived usefulness (PU), service quality (SERVQ), social influence (SOCIAL), and hedonic motivation (HEMO) all exerted significant indirect effects on customer loyalty through satisfaction. These findings are consistent with prior research emphasizing the mediating role of satisfaction in shaping continuance intention and loyalty in digital service environments (Bhattacharjee, 2001; Wang et al., 2006). The results further underscore the central importance of trust and perceived value in sustaining long-term relationships with digital financial platforms.

In contrast, perceived ease of use (PEOU) did not significantly influence satisfaction. This diverges from the original TAM (Davis, 1989), in which PEOU is a core antecedent of user attitudes and adoption. However, the finding aligns with extensions of TAM and UTAUT (Venkatesh et al., 2003),

Table 4. Model fit evaluation results

Source: Compiled based on the author's calculations.

Criterion	Results of CFA analysis		Results of SEM analysis	
	CFA result	Evaluation	SEM results	Evaluation
CMIN/df \leq 5	4.014	Satisfied	4.354	Satisfied
CFI \geq 0.90	0.925	Satisfied	0.916	Satisfied
TLI \geq 0.90	0.914	Satisfied	0.904	Satisfied
GFI \geq 0.90 (\geq 0.80 acceptable)	0.900	Satisfied	0.892	Acceptable
RMSEA \leq 0.08	0.056	Satisfied	0.059	Satisfied

Table 5. Structural path coefficients and hypothesis testing results

Structural paths	Estimate	S.E.	C.R.	P	Label
SAT ← TRUST	.132	.036	3.695	***	Supported
SAT ← PU	.181	.031	5.902	***	Supported
SAT ← PEOU	.052	.037	1.410	.159	Not Supported
SAT ← SERVQ	.173	.046	3.793	***	Supported
SAT ← SOCIAL	.070	.030	2.345	.019	Supported
SAT ← HEMO	.082	.023	3.499	***	Supported
CLOY ← SAT	.514	.033	15.671	***	Supported

Note: *** < 0.000.

which suggest that ease of use becomes less salient as users gain experience. In this study, many respondents reported using FinTech lending applications for over a year – often daily – indicating substantial familiarity. For such experienced users, functional and relational value (e.g., trust, service quality) outweigh usability concerns. This pattern suggests that in post-adoption stages, satisfaction and loyalty are shaped less by usability and more by habit formation, perceived usefulness, and relational assurance.

These findings contribute to the growing literature on FinTech adoption by demonstrating a post-adoption shift in determinant factors. While PEOU may be influential in initial adoption, its impact diminishes over time in favor of trust, social embeddedness, and service quality – an especially relevant insight for Vietnam’s rapidly digitalizing financial landscape.

The multi-group analysis compared an unconstrained (variant) model with a constrained (invariant) model (Table 6). A chi-square difference test, adjusted for degrees of freedom, yielded a p-value of 0.00012 (< 0.05), leading to the rejection of the null hypothesis (H_0). The unconstrained model was therefore retained, indicating statistically significant differences between male ($n = 441$) and female ($n = 511$) FinTech users.

For male respondents, Hedonic Motivation (HOMO) emerged as the strongest predictor of satisfaction ($\beta = 0.193$, $p < 0.001$), indicating that enjoyment, entertainment, and gamified interactions are central to their evaluations. Perceived Usefulness ($\beta = 0.212$, $p < 0.001$) also had a significant positive effect. Trust, service quality, perceived ease of use, and social influence did not reach significance, suggesting that male users rely

more on functional and affective value rather than relational or contextual cues.

Among female respondents, the determinants of satisfaction were broader and more relationally oriented. Trust ($\beta = 0.165$, $p = 0.001$), Perceived Usefulness ($\beta = 0.159$, $p < 0.001$), Service Quality ($\beta = 0.225$, $p < 0.001$), and Social Influence ($\beta = 0.087$, $p = 0.037$) all emerged as significant predictors. Hedonic Motivation was not significant ($\beta = 0.002$, $p = 0.939$), suggesting that female users prioritize trust, platform credibility, service reliability, and social validation over enjoyment.

Across both groups, the impact of satisfaction on loyalty was strong and highly significant (male: $\beta = 0.638$, $p < 0.001$; female: $\beta = 0.433$, $p < 0.001$). The stronger effect among males indicates that once satisfied, male users are more likely than females to form enduring loyalty relationships.

These findings reveal that while Perceived Usefulness is a universal driver of satisfaction, the relative importance of other determinants differs by gender.

- Male users respond strongly to hedonic and functional value.
- Female users place greater emphasis on trust, service quality, and social influence.

These insights highlight the need for gender-sensitive strategies in FinTech design and marketing:

- Gamification and engaging user experiences may appeal more to male users.
- Reliable service delivery, strong trust-building mechanisms, and leveraging social networks may be more effective for female users.

Table 6. Multi-group analysis of structural paths by gender

Structure paths	Group: MALE					Group: FEMALE				
	Estimate	S.E.	C.R.	P	Label	Estimate	S.E.	C.R.	P	Label
SAT ← TRUST	.073	.050	1.478	.139	Not supported	.165	.050	3.289	.001	Supported
SAT ← PU	.212	.045	4.762	***	Supported	.159	.042	3.772	***	Supported
SAT ← PEOU	.026	.051	.502	.616	Not supported	.086	.052	1.666	.096	Not supported
SAT ← SERVQ	.106	.065	1.628	.104	Not supported	.225	.062	3.616	***	Supported
SAT ← SOCIAL	.066	.041	1.629	.103	Not supported	.087	.042	2.089	.037	Supported
SAT ← HEMO	.193	.037	5.261	***	Supported	.002	.031	.077	.939	Not supported
CLOY ← SAT	.638	.054	11.896	***	Supported	.433	.041	10.441	***	Supported

Note: *** < 0.000.

4. DISCUSSION

The SEM results provide nuanced insights into the factors driving satisfaction and loyalty in Vietnam's FinTech lending market. Perceived usefulness, trust, service quality, social influence, and hedonic motivation all emerged as significant determinants of satisfaction, indicating that user evaluations extend beyond functional efficiency to encompass relational and experiential considerations. This shift mirrors trends observed in other rapidly digitalizing financial markets, where satisfaction increasingly mediates long-term engagement (Bhattacharjee, 2001; Wang et al., 2006). In Vietnam, where FinTech applications are widely integrated into daily financial activities, these findings underscore the importance of value-added services and credible platform operations.

The non-significant effect of perceived ease of use stands in contrast to early TAM literature (Davis, 1989) but aligns with research illustrating that usability becomes less influential once users gain familiarity with digital platforms (Venkatesh et al., 2003). Given the high proportion of experienced users in this study, ease of use appears to function as a baseline expectation – consistent with Herzberg's hygiene factor logic – rather than a driver of satisfaction. This pattern parallels Ryu's (2018) findings in South Korea's mature FinTech sector, suggesting that as digital ecosystems evolve, users prioritize performance-related attributes over interface simplicity.

Trust and service quality played particularly crucial roles, reflecting Vietnam's regulatory

context characterized by evolving oversight and recent P2P lending controversies (SBV, 2024). These results extend Zhou's (2012) work by demonstrating how trust functions not only as a technological assurance but also as a substitute for institutional credibility in emerging markets. Service quality's strong effect resonates with SERVQUAL-based studies emphasizing reliability and transparency (Nguyen et al., 2020), highlighting the need for FinTech providers to emulate traditional banks' dependability to build long-term confidence.

The significance of social influence reinforces the role of collectivist cultural norms in shaping financial decision-making. Peer endorsements and community networks have been shown to affect both adoption and continuance in Southeast Asia (Tran & Corner, 2016), and this study confirms their relevance in loyalty formation. Hedonic motivation's positive influence reflects the growing appeal of gamified interfaces, particularly among younger users, consistent with engagement-focused FinTech literature (Ryu, 2018).

Gender-based differences further enrich these findings. While men responded more strongly to usefulness and enjoyment, women placed greater emphasis on trust, service quality, and social validation – patterns consistent with research on gendered risk preferences and relational decision-making (Palamidovska-Sterjadovska et al., 2025). These divergent pathways suggest the need for differentiated engagement strategies that reflect the heterogeneity of user motivations across gender groups.

CONCLUSION

This study investigated how technological, relational, cultural, and gender-specific factors shape customer satisfaction and loyalty in Vietnam's FinTech lending market. Using covariance-based Structural Equation Modeling, the results demonstrate that perceived usefulness, trust, service quality, social influence, and hedonic motivation significantly enhance satisfaction, which in turn strongly predicts loyalty. By contrast, perceived ease of use was not significant, reflecting a digitally mature user base for whom usability is an expected standard rather than a determinant of post-adoption evaluations. Multi-group analysis revealed meaningful gender differences: women relied more on trust, service quality, and social validation, whereas men responded more strongly to usefulness and hedonic engagement. Satisfaction had a stronger effect on loyalty among men, indicating distinct retention pathways across gender groups.

These findings lead to several important conclusions. First, in an environment marked by evolving regulations and prior P2P lending failures, trust and service quality act as institutional substitutes, reinforcing their central role in users' evaluations of FinTech platforms. This extends traditional acceptance theories by highlighting the influence of relational and cultural dynamics in emerging markets. Second, the identified gender differences suggest that FinTech providers and banks integrating digital services should implement differentiated engagement strategies, prioritizing reliability and reassurance for female users, and interactivity or gamification for male users. Third, the results underscore the need for enhanced regulatory clarity from the State Bank of Vietnam to strengthen platform legitimacy and advance financial inclusion goals.

Future research should employ longitudinal designs to track evolving perceptions, explore the moderating roles of financial literacy and perceived risk, and conduct cross-country comparisons to refine understanding of FinTech behavior within Southeast Asia's diverse institutional and cultural environments.

AUTHOR CONTRIBUTIONS

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APPENDIX A

Table A1. Measurement scales and constructs

Construct	Code	Survey Item	Source
Perceived Ease of Use (PEOU)	PEOU1-PEOU5	Using this FinTech service is easy for me; Learning to use it is simple; It is user-friendly; It requires little effort; Navigating the app is intuitive	Davis (1989); Venkatesh et al. (2003)
Perceived Usefulness (PU)	PU1-PU5	It enhances my credit management; It helps me make faster financial decisions; It increases efficiency; It is useful in daily life; I rely on it for important tasks	Davis (1989)
Service Quality (SERVQ)	SERVQ1-SERVQ5	The service is reliable; The response time is fast; The support is helpful; The interface is clear; The service is secure	Parasuraman et al. (1988)
Trust in Technology (TRUST)	TRUST1-TRUST5	I trust this platform to protect my data; It is honest in its operations; I feel safe using it; I believe it is technically reliable; I trust its automated features	McKnight and Chervany (2002); Zhou (2012)
Social Influence (SOCIAL)	SOCIAL1-SOCIAL4	People around me encourage me to use it; I see many using this platform; My peers trust it; It is a common choice among my friends	Venkatesh et al. (2003)
Hedonic Motivation (HEMO)	HEMO1-HEMO3	Using it is enjoyable; I find it entertaining; It gives me pleasure	Alalwan (2020)
Customer Satisfaction (SAT)	SAT1-SAT3	I am satisfied with this FinTech service; It meets my expectations; It performs well overall	Oliver (1999)
Customer Loyalty (CLOYAL)	CL1-CL4	I intend to continue using it; I will recommend it to others; I rarely consider switching; I consider myself a loyal user	Kumar and Reinartz (2016)

APPENDIX B

Table B1. Descriptive statistics of demographic characteristics and key variables

Variable		Frequency	Percentage (%)	Mean	Standard Deviation
Gender	Male	441	46.3	–	–
	Female	511	53.7	–	–
Age	18-25	136	14.3	–	–
	25-35	258	27.1	–	–
	35-45	249	26.2	–	–
	45-55	188	19.7	–	–
	Over 55	121	12.7	–	–
	Region	Rural	452	47.5	–
	Urban	500	52.5	–	–
Time of FinTech Use:	<12 months	464	48.7	–	–
Time of FinTech Use	≥12 months	488	51.3	–	–
Perceived Usefulness (PU)		–	–	3.74	0.99
Perceived Ease of Use (PEOU)		–	–	3.9	0.84
Trust (TRUST)		–	–	3.85	0.86
Service Quality (SERVQ)		–	–	3.61	0.86
Social Influence (SOCIAL)		–	–	3.79	0.82
Hedonic Motivation (HOMOA)		–	–	3.42	1.06
Customer Satisfaction (CSATIS)		–	–	3.74	0.79
Customer Loyalty (CLOY)		–	–	3.72	0.81