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Understanding Gen Z's Digital Banking Loyalty: The Role of Switching Costs and Consumption Values

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ABSTRACT

This study employs the Cognitive-Affective-Behavioral model and Consumption Values Theory to investigate the influence of distinct consumption values - functional, social, emotional, epistemic, and monetary - on customer satisfaction and loyalty among Generation Z in Vietnam's digital banking sector. Additionally, the research examines the role of switching costs as both a mediator and moderator in the relationship between customer satisfaction and loyalty. A survey was conducted with 497 Generation Z digital banking users in Vietnam, and the data were analyzed using structural equation modeling (SEM) to test the proposed hypotheses. The results indicate that all components of consumption values significantly affect customer satisfaction, with the exception of social value. Customer satisfaction is found to have a strong correlation with customer loyalty, mediating the relationship between consumption values and loyalty to a certain degree. Furthermore, switching costs were identified as having a dual role, serving both as a partial mediator and moderator in the satisfaction-loyalty relationship. This research contributes to the existing literature by providing a comprehensive analysis of customer loyalty within digital banking, particularly among Generation Z, a vital demographic in emerging markets like Vietnam. The findings offer practical implications for digital banking providers, including the enhancement of functional and emotional values in their services, the provision of financial incentives, and the strategic use of switching costs to boost customer retention.

Keywords: Generation Z, Digital banking, Customer loyalty, Switching costs, Consumption values, Cognitive-Affective-Behavioral model.

Introduction

The rapid development of digital banking services has significantly transformed the banking landscape, shifting customer interactions from traditional physical branches to digital platforms. Digital banking, defined as the delivery of banking services through digital platforms such as mobile applications or internet banking, has become a crucial element of modern financial institutions. This shift is largely driven by advancements in financial technology (fintech), which offer customers enhanced convenience, speed, and accessibility in banking transactions. Recent studies indicate that factors such as social influence, facilitating conditions, and hedonic motivations significantly impact Generation Z's adoption of digital banking services (Supriyadi & Darwanto, 2023). In Vietnam, where digital adoption is on the rise, Generation Z (1997–2012) emerges as a key demographic, demanding technological innovation and security in financial services (Nguyen, 2023).

Customer loyalty in the context of digital banking is critical for financial institutions as it reduces customer churn and encourages advocacy, where satisfied clients recommend services to others (Zhang *et al*., 2023). However, the ease of switching providers in competitive markets like Vietnam poses a challenge. Switching costs - financial, psychological, and operational barriers - play a key role in customer retention (Nguyen *et al*., 2020). Nonetheless,

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research on their impact, particularly among Generation Z, remains limited (Supriyadi & Darwanto, 2023). As digital natives, Generation Z prioritizes innovation, security, and seamless user experiences over traditional banking relationships (Shams *et al*., 2020; Christian *et al*., 2023). Unlike older generations, they readily switch providers if superior technology or services are available (Supriyadi & Darwanto, 2023). Consequently, banks must reconsider retention strategies to align with Generation Z's expectations.

In Vietnam, where Generation Z is emerging as the dominant banking demographic (Tran *et al*., 2023), research on their loyalty remains scarce. Existing studies focus on broader consumer groups, overlooking generational differences (Zouari & Abdelhedi, 2021). Moreover, while the relationship between service quality, satisfaction, and loyalty is well-documented, few studies explore the mediating or moderating role of switching costs among young digital consumers (Nguyen *et al*., 2020). Addressing this gap is essential for understanding Generation Z's banking behavior and the drivers of retention. The study aims to address two significant gaps in the existing literature: the lack of knowledge regarding how switching costs act as a mediator and the under-examination of Generation Z in the context of Vietnam's digital banking industry, particularly as a moderator in the relationship between service quality, customer satisfaction, and loyalty. Research on customer loyalty in digital banking has traditionally emphasized service quality as the primary driver of customer satisfaction, which in turn affects loyalty (Harazneh *et al*., 2020; Nguyen *et al*., 2020). While these factors are crucial, the role of switching costs in moderating or mediating these relationships remains underexplored. Given the ease with which customers can switch between service providers in the digital space, it is vital to understand how switching costs influence the decision-making process of Generation Z consumers. The originality of this research resides in its examination of switching costs and their mediating and moderating effects on the loyalty behaviors of Generation Z customers within Vietnam's digital banking sector. While prior studies have addressed satisfaction and loyalty (Nguyen *et al*., 2020; Duc, 2022), the interplay between switching costs, service quality, and loyalty in digital banking remains inadequately explored, especially among younger consumers. This study aims to fill a significant research gap in an emerging market characterized by rapid digital banking adoption (Zhang *et al*., 2023) by incorporating switching costs into a loyalty model specifically designed for Generation Z. The theoretical framework of this study is grounded in the Cognitive-Affective-Behavioral (CAB) model, which elucidates how perceptions of service quality shape satisfaction and foster loyalty (Zheng *et al*., 2022). In this context, switching costs serve a dual purpose: they mediate the relationship between service quality and satisfaction while also moderating the connection between satisfaction and loyalty. Understanding this dual role is essential for developing effective customer retention strategies in Vietnam's competitive digital banking environment.

Literature Review

Digital Banking

Digital banking, also known as Internet banking, primarily operates through digital platforms, effectively eliminating the need for physical branches and reducing operational costs (Fathima, 2020). The emergence of fintech applications has improved operational efficiency but has also raised concerns regarding security and privacy (Dharamshi, 2019). Despite its increasing importance, customer loyalty in digital banking remains insufficiently explored, particularly within the context of Vietnam (Tosun, 2020). Existing studies have primarily focused on service quality, customer satisfaction, and loyalty; however, value-based factors such as switching costs have not been adequately examined, especially among Generation Z consumers (Nguyen *et al*., 2020; Duc, 2022). Customer loyalty is essential for business growth and market competitiveness; thus, factors influencing the loyalty of Generation Z - such as switching costs - require further investigation (Ahmed *et al*., 2023; Zhang *et al*., 2023). Understanding these determinants is critical for Vietnamese banks aiming to retain customers in an increasingly digital financial landscape.

Generational Theory

Generational Theory posits that individuals within the same cohort share common life experiences, values, and behaviors shaped by the socio-political, technological, and economic environments in which they were raised. Generation Z (1997–2012), as digital natives, places a high priority on security, privacy, and usability in digital banking services (Irwin *et al*., 2023). Research indicates that perceived security plays a significant role in their adoption of digital banking, alongside social influence and habitual use (Supriyadi & Darwanto, 2023). Despite their technological proficiency, concerns over data security remain a significant barrier to adoption (Kurniawan *et al*., 2022; Christian *et al*., 2023).

To effectively retain Generation Z customers, digital banking providers must enhance security, usability, and personalized services. Addressing these priorities will not only increase customer satisfaction and loyalty but will also position banks competitively within the digital financial sector. Understanding the evolving expectations of Generation Z is essential for long-term customer retention and sustained market success.

Cognitive-Affective-Behavioral (C-A-B) Model

The Cognitive-Affective-Behavioral (C-A-B) model, developed by Havlena and Holbrook (1986), provides a structured framework for understanding consumer decision-making. This model posits that consumer behavior evolves through three key stages: cognitive (beliefs and awareness), affective (emotions and attitudes), and behavioral (loyalty and purchase decisions). Cognitive impressions initially shape emotional satisfaction, which in turn influences customer loyalty (Kurniawan *et al*., 2022; Irwin *et al*., 2023). The C-A-B model has been extensively applied across various industries. In the context of digital banking, perceptions of security and convenience significantly impact emotional satisfaction, thereby fostering customer loyalty (Rahardja *et al*., 2023). Similar patterns have been identified in the retail, tourism, and food sectors, where cognitive evaluations play a crucial role in customer retention (Parwati *et al*., 2021; Huang & Chen, 2022; Zheng *et al*., 2022). Building on this framework, we apply the C-A-B model to digital banking, incorporating five consumer values - functional, social, emotional, epistemic, and monetary - as cognitive factors. Satisfaction acts as the affective mediator, linking cognitive perceptions to customer loyalty (the behavioral outcome). This study hypothesizes that consumption values have a direct impact on satisfaction, subsequently enhancing loyalty.

Theory of Consumption Values (TCV)

The Theory of Consumption Values (TCV), articulated by Sheth *et al*. (1991), offers a comprehensive framework for understanding how consumers assess products and services through various value dimensions. Within the realm of digital banking, these values significantly shape customer satisfaction and influence loyalty behaviors, making them essential for financial institutions aiming to improve customer retention.

Functional value pertains to the practical utility of digital banking services, emphasizing efficiency, security, and ease of transactions. Customers expect seamless functionality, with critical factors such as user-friendliness, transaction speed, and security playing pivotal roles in overall satisfaction (Karjaluoto *et al*., 2021). Social value encompasses the perceived social benefits of utilizing digital banking, including peer influence and enhanced status. Research indicates that social interactions and recommendations substantially impact consumer decisions, particularly among younger demographics (Wong *et al*., 2019). However, within digital banking, social value may be less significant compared to functional attributes, warranting further investigation. Emotional value relates to the feelings and experiences elicited by digital banking services. A well-designed, user-centric platform fosters trust, security, and enjoyment, thereby enhancing customer satisfaction (Omigie *et al*., 2017). Positive emotional experiences diminish the likelihood of switching providers, thereby reinforcing long-term loyalty (Rahardja *et al*., 2023). Epistemic value reflects consumers' desire for novelty and innovation, a crucial factor in digital banking adoption. Customers are increasingly seeking advanced features such as AI-driven insights, personalized financial tools, and robust cybersecurity measures (Chauhan *et al*., 2022; Wiharso *et al*., 2022). Financial institutions that consistently innovate their offerings tend to achieve greater customer engagement and satisfaction. Lastly, monetary value denotes the economic advantages of digital banking, including cost savings, reduced fees, and promotional incentives. Financial incentives, such as cashback rewards and fee waivers, enhance customer satisfaction and bolster retention, particularly in competitive banking environments (Windasari *et al*., 2022; Zhang *et al*., 2023).

To encapsulate the cognitive aspect of our study model, we integrate five consumption values - functional, social, emotional, epistemic, and monetary value - derived from the TCV. Accordingly, we propose the following hypotheses based on our literature review of the TCV:

H1: Functional value positively influences customer satisfaction with digital banking services.

H2: Social value positively influences customer satisfaction with digital banking services.

H3: Emotional value positively influences customer satisfaction with digital banking services.

H4: Epistemic value positively influences customer satisfaction with digital banking services.
H5: Monetary value positively influences customer satisfaction with digital banking services.

Satisfaction and Loyalty

Customer satisfaction is defined as the extent to which the actual performance of a service meets or exceeds customer expectations (Raman & Aashish, 2021; Devi *et al*., 2023). In the digital banking sector, where switching providers is relatively easy, satisfaction is pivotal in fostering long-term loyalty (Nguyen *et al*., 2020). Numerous studies have consistently demonstrated that higher service quality - measured by reliability, responsiveness, and empathy - enhances satisfaction, which in turn strengthens loyalty (Nguyen *et al*., 2020; Alanazi *et al*., 2022). Empirical evidence from various markets supports this relationship. For example, research on South African e-banking services confirms that service quality significantly improves satisfaction, leading to greater customer retention (Ahmed *et al*., 2022; Redda, 2023). Similarly, studies conducted in Indonesia indicate that service quality indirectly impacts loyalty through satisfaction, underscoring its mediating role (Supriyanto *et al*., 2021; Tandel *et al*., 2023). Given the competitive nature of digital banking, continuous improvements in service quality remain a strategic imperative for enhancing both satisfaction and loyalty. Based on the reviewed empirical findings, it is proposed that:
H6: Satisfaction significantly impacts loyalty to digital banking service providers.

Customer satisfaction has long been recognized as a crucial element in marketing literature, frequently acting as a mediator between service quality, perceived value, and loyalty. In the digital banking sector, satisfaction plays a critical role in transforming perceived consumption values - such as functional, social, emotional, epistemic, and monetary values - into customer loyalty. Numerous studies have demonstrated that customer satisfaction serves as an essential link between the quality of services provided and customer loyalty in digital banking environments. For instance, Al-Slehat (2021) found that in Jordanian commercial banks, satisfaction mediates the relationship between service quality and customer loyalty, indicating that enhancing service quality, particularly in dimensions such as tangibility and responsiveness, can improve customer satisfaction and lead to higher loyalty. Ali Gill *et al*. (2021) examined the role of e-satisfaction as a mediator between mobile banking application quality factors (including reliability, trust, and application design) and e-loyalty in Pakistan. Their findings revealed that while reliability and trust significantly impact e-loyalty, the design of the mobile application had a negligible effect. The study emphasizes the importance of developing reliable and trustworthy mobile applications to enhance customer satisfaction, which in turn fosters customer loyalty.
Similarly, Shafiya *et al*. (2023) supported these conclusions, demonstrating that reliability and trust in mobile applications significantly affect e-loyalty, with e-satisfaction acting as a key mediator in this relationship. Additionally, Sasono *et al*. (2021) explored how e-satisfaction mediates the relationship between e-service quality and e-loyalty among Internet banking users in Indonesia, showing that higher service quality directly boosts satisfaction, which in turn strengthens customer loyalty. Considering these findings, the following research hypotheses are proposed:
H7: Satisfaction mediates the influence of various consumption values on loyalty towards digital banking service providers.
H7a: Satisfaction mediates the influence of functional value on loyalty.
H7b: Satisfaction mediates the influence of social value on loyalty.
H7c: Satisfaction mediates the influence of emotional value on loyalty.
H7d: Satisfaction mediates the influence of epistemic value on loyalty.
H7e: Satisfaction mediates the influence of monetary value on loyalty.

Switching Costs in Digital Banking: A Mediator or Moderator?

Switching costs (SWCO) play a critical role in shaping the relationship between customer satisfaction and loyalty in digital banking. SWCO refers to the perceived financial, emotional, and psychological costs associated with changing service providers. Recent studies have shown that SWCO functions as both a mediator and a moderator in the satisfaction-loyalty relationship.

As a mediator, switching costs enhance the relationship between customer satisfaction and loyalty by increasing the perceived difficulty of switching to another provider. For instance, Nguyen *et al*. (2020) found that in e-banking services, higher service quality led to increased customer satisfaction, which subsequently heightened switching costs and reinforced customer loyalty. Similarly, Dzulkifli (2021) demonstrated that SWCO mediated the relationship between customer satisfaction and loyalty in mobile data services, indicating that satisfied customers were more likely to remain with a service provider when the costs of switching were elevated.

As a moderator, SWCO can either strengthen or weaken the relationship between satisfaction and loyalty. For example, Bui *et al*. (2022) reported that while higher service quality enhances customer satisfaction and loyalty, SWCO can further amplify this relationship by making it more challenging for customers to switch to another service provider, even if their satisfaction levels are moderate. Additionally, Harazneh *et al*. (2020) highlighted that SWCO exerted a moderating effect on the relationship between service quality and loyalty, with higher SWCO resulting in stronger customer retention despite varying levels of satisfaction.

Empirical evidence from multiple sectors, including telecommunications and retail, supports the dual role of SWCO. For instance, Evanschitzky *et al*. (2022) and Evanschitzky *et al*. (2021) found that SWCO not only moderates the satisfaction-loyalty link but also varies depending on the nature of customer relationships, such as brand attachment and personal connections. These findings suggest that SWCO, whether acting as a mediator or moderator, significantly influences customer retention strategies in the digital banking industry.

Based on the above findings, the following hypotheses are proposed:

H8: Switching costs function as a mediating factor in the relationship between customer satisfaction and loyalty in the digital banking sector.

H9: Switching costs serve as a moderator in the relationship between consumer satisfaction and loyalty, indicating that those who perceive high switching costs experience a weaker relationship between satisfaction and loyalty.

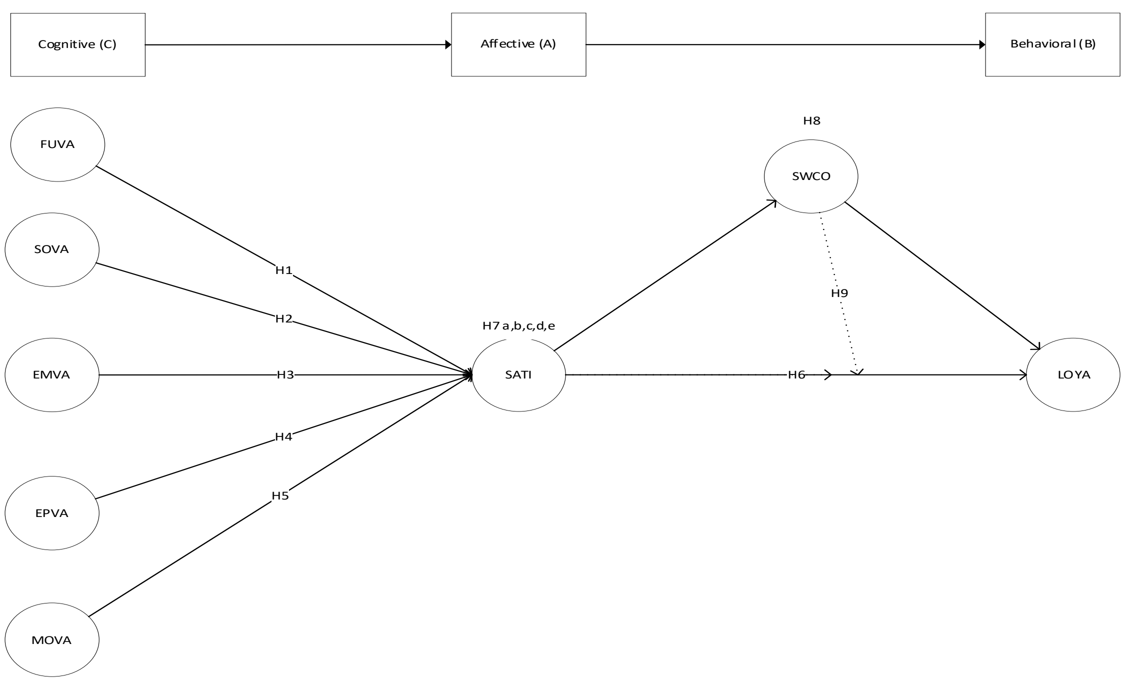

Figure 1. Proposed research model

Materials and Methods

Measures

The survey begins with a brief introduction and includes a filter question to assess participants' familiarity with digital banking services. To ensure the reliability and validity of the survey instruments, we utilized multi-item scales derived from established literature, with minor adjustments in wording to align with the context of our study.

Specifically, we adapted scales from various sources: functional and epistemic value items from Karjaluoto *et al*. (2021); social value from Raman and Aashish (2021) and Omigie *et al*. (2017); monetary value items from Omigie *et al*. (2017) and Pal *et al*. (2021); and emotional value from Wong *et al*. (2019). Satisfaction items were sourced from Raman and Aashish (2021), while six items assessing customer perceptions of SWCO were adapted from Chuah *et al*. (2017). Lastly, loyalty items were adapted from Chuah *et al*. (2017).
All five sections utilized a five-point Likert scale, ranging from strongly disagree (1) to strongly agree (5).

Sample and Data Collection Procedure

This study examines the demographic characteristics of Vietnamese Gen Z digital banking users, focusing on gender, education, occupation, and income. Respondents who do not utilize digital banking were excluded based on a filter question, and incomplete or erroneous responses were eliminated, yielding 497 valid responses (Sarstedt *et al.*, 2021). Recent studies underscore the significance of demographics in the adoption of digital banking. Nepal and Nepal (2023) highlighted the influence of habit, effort expectancy, and a facilitating environment on predicting digital banking uptake across demographic groups in Nepal. Furthermore, research indicates that demographic factors such as gender, income, and education significantly impact digital banking usage. Vietnam's fintech industry benefits from a young, tech-savvy population and increasing internet access, making it essential to understand the demographics of Gen Z to develop tailored digital banking services. Data was collected via Google Forms to obtain a representative sample (Aiche *et al*., 2022; Kunder *et al*., 2022; Natarajan *et al*., 2022).

Table 1. Research sample structure (n = 497)

Category	Sub-category	n	%
Gender	Male	146	29.4
	Female	351	70.6
Education	High school and below	58	11.7
	Vocational training or associate degree	19	3.8
	Undergraduate degree	402	80.9
	Master's or Doctorate	18	3.6
Occupation	Student	287	57.7
	Self-employment	30	6.0
	Working in the private sector	84	16.9
	Working in the public sector	80	16.1
	Other	16	3.2
Income (Million VND)	< 3	151	30.4
	3 - 5	93	18.7
	5 -10	122	24.5
	> 10	131	26.4

Source: synthesized by the authors from survey data.

Table 1 presents the demographic characteristics of the research sample. The majority of respondents are female (70.6%), while males account for 29.4%. This gender distribution may reflect the engagement of female consumers with digital banking services in Vietnam. In terms of education, most participants hold an undergraduate degree (80.9%), followed by those with a high school diploma or lower (11.7%), vocational or associate degrees (3.8%), and master's or doctoral degrees (3.6%).
Regarding occupation, students constitute the largest segment (57.7%), which aligns with the study's focus on Generation Z. Additionally, 16.9% of respondents work in the private sector, 16.1% in the public sector, 6.0% are self-employed, and 3.2% belong to other occupational categories. The income distribution indicates a diverse financial background among respondents, with 30.4% earning below 3 million VND, 18.7% earning between 3 and 5 million

VND, 24.5% earning between 5 and 10 million VND, and 26.4% earning more than 10 million VND. This demographic profile highlights the socio-economic diversity of Generation Z digital banking users in Vietnam and provides a representative sample for analyzing their banking behaviors.

Results and Discussion

Statistical analyses for this study were conducted using Excel software and SmartPLS 4.0. To evaluate the measurement model, the study employed Partial Least Squares Structural Equation Modeling (PLS-SEM), following the guidelines of Sarstedt *et al*. (2021). The assessment of the measurement model was performed through three key criteria: internal consistency reliability, convergent validity, and discriminant validity.

Assessment of the Measurement Model

The internal consistency reliability was evaluated using Cronbach's Alpha (α) and composite reliability (CR). For each construct, the values of α and CR exceeded the minimum threshold of 0.7, ranging from 0.706 to 0.875 **(Table 2)**. This indicates a satisfactory level of internal consistency reliability (Sarstedt *et al*., 2021). Sarstedt *et al*. (2021) assessed convergent validity using the outer loadings and the average variance extracted (AVE). All outer loading values were equal to or greater than 0.7, and the AVE values exceeded 0.5 **(Table 2)**. As a result, the convergent validity of the constructs was confirmed.

Table 2. Outer loadings, Cronbach's Alpha, CR, and AVE

Constructs	No.	χ	α	CR	AVE
Functional Value	FUVA		0.841	0.883	0.558
	FUVA1	0.716			
	FUVA2	0.758			
	FUVA3	0.766			
	FUVA4	0.735			
	FUVA5	0.781			
	FUVA6	0.723			
Social Value	SOVA		0.893	0.921	0.701
	SOVA1	0.8			
	SOVA2	0.866			
	SOVA3	0.875			
	SOVA4	0.837			
	SOVA5	0.805			
Emotional Value	EMVA		0.863	0.902	0.648
	EMVA1	0.801			
	EMVA2	0.847			
	EMVA3	0.855			
	EMVA4	0.81			
	EMVA5	0.706			
Epistemic Value	EPVA		0.778	0.871	0.693
	EPVA1	0.784			
	EPVA2	0.865			
	EPVA3	0.846			
Monetary Value	MOVA		0.813	0.877	0.641
	MOVA1	0.801			

	MOVA2	0.834			
	MOVA3	0.804			
	MOVA4	0.761			
Satisfaction	SATI		0.876	0.915	0.729
	SATI1	0.858			
	SATI2	0.842			
	SATI3	0.851			
	SATI4	0.863			
Loyalty	LOYA		0.863	0.902	0.648
	LOYA1	0.735			
	LOYA2	0.812			
	LOYA3	0.779			
	LOYA4	0.834			
	LOYA5	0.859			
Switching costs	SWCO		0.882	0.911	0.63
	SWCO1	0.761			
	SWCO2	0.821			
	SWCO3	0.8			
	SWCO4	0.767			
	SWCO5	0.801			
	SWCO6	0.81			

Note: Outer loadings (c); Cronbach's alpha (α); Composite reliability (CR); Average variance extracted (AVE).

Discriminant validity was assessed utilizing the Fornell-Larcker criterion, which stipulates that the square root of the Average Variance Extracted (AVE) for each construct must exceed its correlations with other constructs (Sarstedt *et al*., 2021). As presented in **Table 3**, all constructs satisfy this requirement, thereby confirming adequate discriminant validity (Kalidindi *et al*., 2024; Lakshmi *et al*., 2024; Miskhat-Ul-Jannat *et al*., 2024).

Table 3. Discriminant validity assessment using the Fornell-Larcker criterion

	EMVA	**EPVA**	**FUVA**	**LOYA**	**MOVA**	**SATI**	**SOVA**	**SWCO**
EMVA	0.805							
EPVA	0.674	0.832						
FUVA	0.649	0.524	0.747					
LOYA	0.663	0.67	0.562	0.805				
MOVA	0.651	0.644	0.538	0.687	0.8			
SATI	0.73	0.696	0.584	0.755	0.715	0.854		
SOVA	0.582	0.567	0.545	0.588	0.608	0.541	0.837	
SWCO	0.49	0.517	0.423	0.577	0.536	0.514	0.571	0.794

Additionally, common method bias (CMB) was evaluated using the full collinearity variance inflation factor (VIF) test (Kock, 2015). The results demonstrate that all VIF values are below the 3.3 threshold, confirming that CMB is not an issue in this study. With discriminant validity and CMB concerns addressed, the subsequent section will focus on the assessment of the structural model to evaluate the hypothesized relationships.

Assessment of the Structural Model

As shown in **Table 4**, the VIF values for EMVA, EPVA, FUVA, SOVA, MOVA, SATI, LOYA, SWCO, and SWCO x SATI are all below the 3.3 threshold, indicating that the proposed research model can be considered free from CMB.

Table 4. Collinearity variance inflation factors (VIFs) test

	LOYA	MOVA	SATI	SWCO
EMVA			2.600	
EPVA			2.194	
FUVA			1.894	
MOVA			2.217	
SATI	1.413			1
SOVA			1.89	
SWCO	1.477			
SWCO x SATI	1.089			

The hypotheses were evaluated utilizing structural equation modeling (SEM), with the results presented in **Table 5**.

Table 5. Hypothesis testing

Hypothesis	β	SD	T	P values	Results
Direct effects					
H1: FUVA → SATI	0.098	0.039	2.535	0.011	Supported
H2: SOVA → SATI	-0.023	0.037	0.616	0.538	Unsupported
H3: EMVA → SATI	0.306	0.044	6.969	0.000	Supported
H4: EPVA → SATI	0.246	0.047	5.238	0.000	Supported
H5: MOVA → SATI	0.318	0.041	7.692	0.000	Supported
H6: SATI → LOYA	0.607	0.034	17.625	0.000	Supported
Indirect effects					
H7a: FUVA → SATI → LOYA	0.059	0.024	2.456	0.014	Supported
H7b: SOVA → SATI → LOYA	-0.014	0.023	0.617	0.537	Unsupported
H7c: EMVA → SATI → LOYA	0.186	0.027	6.779	0.000	Supported
H7d: EPVA → SATI → LOYA	0.149	0.03	4.971	0.000	Supported
H7e: MOVA → SATI → LOYA	0.193	0.028	6.912	0.000	Supported
H8: SATI → SWCO → LOYA	0.144	0.023	6.342	0.000	Supported
Moderating effects					
H9: SWCO x SATI → LOYA	-0.065	0.025	2.642	0.008	Supported

Note: β (Path coefficient); SD: Standard deviation

The results validate several key hypotheses while rejecting others, providing insight into the factors that influence customer satisfaction and loyalty within the digital banking sector.

Firstly, Hypothesis 1 (H1) posits that functional value positively impacts customer satisfaction with digital banking services. This hypothesis was supported (β = 0.098, p = 0.011), indicating that the utility, efficiency, and security offered by digital banking services are critical in enhancing customer satisfaction. This finding is consistent with previous research, such as Karjaluoto *et al*. (2021), which identified functional attributes like ease of use and transaction speed as significant predictors of satisfaction in digital banking contexts.

Conversely, Hypothesis 2 (H2) suggests that social value positively influences customer satisfaction. However, the data did not support this hypothesis (β = -0.023, p = 0.538). This outcome indicates that, for Generation Z, social factors such as social acceptance or the enhancement of social status through the use of digital banking services do not significantly affect satisfaction. This may reflect a generational shift in priorities, where practical and personal benefits take precedence over social recognition in technology use (Christian *et al*., 2023).

Hypothesis 3 (H3) proposes that emotional value positively influences customer satisfaction, and this hypothesis received strong support (β = 0.306, p = 0.000). This indicates that the emotional benefits associated with using digital banking services - such as feelings of security, comfort, and joy - substantially contribute to higher levels of customer satisfaction. This finding aligns with Wong *et al*. (2019), who highlighted the significance of emotional engagement in cultivating customer satisfaction in digital financial services.

Hypothesis 4 (H4) predicts that epistemic value positively affects customer satisfaction, and the results substantiate this hypothesis (β = 0.246, p = 0.000). This finding demonstrates that Generation Z customers appreciate the innovative and novel features of digital banking services, which enhance their overall satisfaction. Research by Wiharso *et al*. (2022) has similarly underscored the importance of innovation and technological advancement in promoting customer satisfaction in digital banking.

H5 posits that monetary value has a positive influence on customer satisfaction, a hypothesis that is strongly supported by the data (β = 0.318, p = 0.000). Economic benefits such as cost savings, promotional offers, and discounts are identified as key drivers of satisfaction in digital banking, particularly in a competitive market where customers have numerous service options. This finding aligns with the research of Zhang *et al*. (2023), which indicates that financial incentives play a crucial role in enhancing customer satisfaction and loyalty in mobile payment services.

In terms of the relationship between satisfaction and loyalty, H6 is confirmed (β = 0.607, p = 0.000), suggesting that higher levels of customer satisfaction lead to increased loyalty towards digital banking providers. This result is consistent with existing literature, which establishes satisfaction as a significant predictor of loyalty across various service industries, including banking (Nguyen *et al*., 2020; Redda, 2023).

Regarding the mediating role of satisfaction, H7 proposes that satisfaction mediates the relationship between consumption values and loyalty. The sub-hypotheses yield mixed results: H7a (functional value → satisfaction → loyalty) is supported (β = 0.059, p = 0.014), indicating that satisfaction partially mediates the impact of functional value on loyalty. H7b (social value → satisfaction → loyalty) is not supported (β = -0.014, p = 0.537), consistent with previous findings that social value does not significantly affect satisfaction. H7c (emotional value → satisfaction → loyalty) is supported (β = 0.186, p = 0.000), demonstrating that satisfaction mediates the relationship between emotional value and loyalty. H7d (epistemic value → satisfaction → loyalty) is supported (β = 0.149, p = 0.000), indicating that satisfaction mediates the influence of epistemic value on loyalty. Lastly, H7e (monetary value → satisfaction → loyalty) is also supported (β = 0.193, p = 0.000), suggesting that satisfaction mediates the effect of monetary value on loyalty.

The results further confirm the dual role of switching costs in the relationship between satisfaction and loyalty. H8 hypothesizes that switching costs mediate the relationship between satisfaction and loyalty, a hypothesis that is supported (β = 0.144, p = 0.000). Additionally, H9 investigates the moderating role of switching costs (SWCO) in the relationship between satisfaction (SATI) and loyalty (LOYA). The results indicate that the interaction term SWCO x SATI → LOYA has a negative coefficient (β = -0.065, p = 0.008), suggesting that switching costs diminish the effect of satisfaction on loyalty. When switching costs are high, customers may be reluctant to change banks even if their satisfaction is low, resulting in a weakened relationship between satisfaction and loyalty. This implies that banks should prioritize not only increasing switching barriers but also enhancing customer experience to foster sustainable loyalty.

Conclusion

Theoretical Contributions

This study enhances the understanding of customer satisfaction and loyalty in digital banking, particularly among Generation Z in Vietnam. It broadens the application of consumption values theory by examining functional, emotional, epistemic, and monetary values in shaping satisfaction and loyalty. Unlike previous studies that focus on broader demographic groups, this research highlights the distinct preferences of Generation Z, emphasizing innovation, convenience, and financial benefits over social recognition (Karjaluoto *et al*., 2021; Zhang *et al*., 2023).

The findings challenge traditional models by demonstrating that social value does not significantly impact Generation Z's satisfaction, in contrast to older generations who prioritize peer recognition (Supriyadi & Darwanto, 2023). This supports the notion that Generation Z prioritizes functionality and security in digital banking (Nguyen *et al*., 2020; Christian *et al*., 2023). Furthermore, this study refines the service quality-satisfaction-loyalty model by illustrating the dual role of switching costs as both a mediator and moderator (Harazneh *et al*., 2020; Evanschitzky *et al*., 2022). Customers with high switching costs exhibit loyalty even with moderate satisfaction, providing new insights into customer retention within the digital banking sector (Nguyen *et al*., 2020).

Practical Implications

This study offers actionable insights for digital banking managers and marketers, emphasizing strategies to enhance customer satisfaction and loyalty among Generation Z. Banks should prioritize functional, emotional, and epistemic aspects by offering efficient, secure, and innovative services, such as AI-driven financial tools and advanced security features, to meet Generation Z's expectations.

Given the significant impact of monetary value, banks should implement cashback offers, fee reductions, and reward programs to enhance perceived service value and differentiate themselves from competitors. Additionally, leveraging switching costs is crucial for customer retention. Loyalty programs with cumulative rewards and personalized services can deter customers from switching, even in cases of moderate satisfaction. This approach is particularly relevant in highly competitive digital banking markets like Vietnam, where switching providers is seamless. Enhancing digital experiences while reinforcing barriers to switching is essential for long-term customer retention.

Limitations and Directions for Future Research

This study has several limitations that warrant acknowledgment. First, it focuses exclusively on Generation Z in Vietnam, which may limit the generalizability of the findings to other demographic groups or markets. Second, the use of cross-sectional data captures customer perceptions at a single point in time, complicating the assessment of how satisfaction and loyalty evolve. A longitudinal approach could provide deeper insights into these dynamics. Third, while the research model examines five key consumption values, other factors such as service quality, personalization, and customer trust may also significantly influence satisfaction and loyalty.

Future research could extend this study to different markets to explore cross-cultural differences in digital banking behavior. Additionally, longitudinal studies could track changes in customer loyalty as digital banking services evolve. Expanding the research model to include trust, service quality, and personalized experiences would yield a more comprehensive understanding of customer retention in the digital banking sector.

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