DETERMINANTS INFLUENCING GEN Z'S DECISION TO USE MOBILE BANKING DISTRIBUTION CHANNEL IN VIETNAM

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ABSTRACT

This study aims to investigate the key factors that influence Gen Z's decision to use mobile banking services provided by commercial banks in Vietnam. In order to do that, we propose a research model in which the dependent variable is "decision to use" and six independent factors are (i) ease of use, (ii) functional diversity, (iii) safety and confidentiality, (iv) risk level, (v) approach attraction, and (vi) social influence. Primary data came from a survey through which 200 valid results were collected. The information is then coded and analyzed via the SPSS 20.0 software. The results reveal that two out of six proposed independent factors have the strongest relationship with the decision of using Gen Z's mobile banking services. Based on the findings, some suggestions are proposed for motivating customers to make decisions to use mobile banking services, which contribute positively to the success of the country's financial inclusion.

Keywords: Mobile banking, Gen Z, Determinants, Banking distribution channels.

INTRODUCTION

As of May 2021, Vietnam has been one of the countries with the huge number of smartphone users in the world (Statista, 2022). Especially in 2020, Vietnam was ranked 9th in the world in terms of smartphone usage rate, with 63.1%, much higher than other countries in the region. Along with the continuous increase in the number of people as well as the rate of smartphone use, 2020 is also a year marking the development of non-cash payment under the support of mobile banking when Vietnam recorded its first case of Covid-19 in early 2020. Vietnam, a potential market with a large population, is also considered an attractive environment with stable political and economic conditions and promising economic growth (Bui *et al.*, 2020). According to the most recent United Nations statistics, there were around 94.2 million people living in Vietnam as of April 2021. In instance, by 2021, the population of Generation Z—the generation that grew up in the digital age—will have surpassed that of Generation Y, sometimes known as the Millennial generation, which was born between the early 1980s and the late 1990s. About one-third of Vietnam's working-age population is expected to be from this

generation (PwC, 2021). As a result, banks need to identify the elements that influence this and offer suitable strategies to keep and grow the number of users in this generation Z.

The main objectives of this research are to find out the determinants that influenced Gen Z's decision to adopt mobile banking services in Vietnam and attempt to investigate how they affect the mobile banking experience of Gen Z. The reason the research team decided to start this study was that, so far, despite the critical role of mobile banking for the youth market in Vietnam, based on the overview research, there has not been any in-depth research that both explores and investigates statistically related to the topic that has been implemented in the Vietnamese context. Hence, we highly recommend that there is a need to conduct research in mobile banking for the youth market like Gen Z, who will be predominant in the labor market for the next few years. The special context of Vietnam may either change the nature and importance of the decision to use mobile banking of Gen Z, so we will use suitable determinants that influence significantly to conduct the research.

The paper is arranged as follows: The literature study will shed some light on mobile banking, mobile banking distribution trends, Gen Z, the factors that influence Gen Z's decision to use mobile banking in Vietnam, and hypothesis formulation. The study approach, analyses, and findings are then presented deeply. Finally, the discussion and findings are presented, along with some of the study's limitations.

Literature Review

Mobile Banking

Mobile banking is viewed as a channel through which consumers interact with a bank through a mobile device, such as a mobile phone or personal digital assistant. In that sense, it can be considered a subset of electronic banking and an extension of online banking with its distinct characteristics (Laukkanen & Pasanen, 2008).

Mobile banking is understood as a modern distribution channel helping customers remotely access banking services using mobile devices connected to wireless telecommunications networks. Clients may check account balances and transaction history, transfer funds, pay bills, trade stock, and manage their financial portfolios. In the most general sense, mobile banking is understood as the use of a mobile device to establish contact with a financial institution—a bank that helps customers give service requests—via a telecommunications network. Barnes and Corbitt (2003) suggest that M-banking is a result of recent developments and innovations in the telecommunications sector, providing a new point of access for customers. Mobile banking is a type of e-commerce in which a bank interacts with its customers through a mobile device and enjoys all the facilities and services offered by the bank through a mobile application. Mobile banking services are being provided through multiple channels such as Short Messaging Service (SMS), Interactive Voice Response (IVR), mobile application, Wireless Application Protocol (WAP), etc. Banks are leveraging mobile innovation to offer their services to customers economically and profitably. The introduction of mobile banking helps the bank's activities to be carried out efficiently, leading to customer satisfaction and loyalty.

Mobile banking is a banking service provided through a mobile phone. Thanks to mobile banking applications installed on mobile phones with Internet connections (GPRS/Wi-F/3G),

customers can easily and conveniently perform online transactions 24/7 with the bank anytime, anywhere, saving both time and costs.

Mobile Banking Trend

Mobile banking is becoming more and more popular, and the number of people that know and use it is increasing. According to the Government's statistical report, as of January 2020, there were 68.17 million people using Internet services in Vietnam; the growth rate of mobile banking has increased by 200%, and now, an average of 30 million people are using the bank's payment system every day (General Statistic Office, 2020). In 2020, according to the State Bank of Vietnam, the number of payment transactions via the Internet will reach nearly 374 million transactions at a value of more than 22.4 million billion Vietnamese dongs "or VND" (up 25.5% in transaction value and 8.3% in quantity over the same period in 2019). Along with that, the number of payment transactions via mobile phones reached nearly 918.8 million transactions with a value of nearly 9.6 million billion VND (up 125.4% in transaction value and 123.9% in quantity over the same period in 2019). Presently, Vietnam has 78 banks implementing internet banking and 49 banks having mobile banking applications.

Z Generation (Gen Z)

Duong *et al.* (2021) stated that the generation of people entering the 20s of the 21st century with the characteristics and living habits of young Centennials (Generation Z), who were born between 1997 and 2012, is still new, still being researched and revealed.

When considering Generation X (those born between 1961 and 1981), the traits of simplicity and economy should come to mind right away. Gen Y, or the Technological and Confident Generation, is defined as those born between 1981 and 1996. Every transition period will be divided into a generation with distinct personality traits and viewpoints based on a temporal gap of around 15 years. There will be notable variations in the ways that each generation group thinks and lives (Nguyen *et al.*, 2019). The 20s of the 21st century have been accepting to Gen Z young people. Nguyen (2020) and Bach *et al.* (2022) show that this generation is a diversified, hyperconnected, transient set of influencers who are the driving force behind businesses across brands, industries, and digital platforms. The best generation for showcasing brands, writing positive content online, and more is Generation Z.

According to Nguyen (2022), Gen Z (those born between 1997-2012) only accounts for 20% of Vietnam's population and still has the least source of income. However, this generation was born and raised in an environment of explosive growth and strong development of digital technologies such as the internet, social networks, and smart devices such as mobile phones, tablets, etc. The awareness and development opportunities of Gen Z are enormous; the power to update information, skills in using technology, and convenient, modern experiences are things that Gen Z has fully approached from a very young age. All learning, making friends, playing, and entertaining activities of this generation are largely dependent on and dominated by modern technologies; they are almost parallel with technology and much different from the world. Generation Y—their parents' generation—was born in the 80s and 90s. According to Shaun (2021) and Gatsi and Appiah (2020), Internet technology and smartphones have always been a part of their lives, with 95% of teenagers in this age group having access to a phone and 45% of teenagers being online continuously.

Hence, Generation Z is considered a generation of potential customers who are not afraid to innovate, dare to change, and are expected by banks in the digital transformation and application of services. Mobile banking is integrated into the system of providing products and services. Exploiting well and taking advantage of the strengths of this generation will be a big step forward for the banking industry in the coming time (Adeniyi *et al.*, 2021). Therefore, Gen Z's behavior of using mobile banking is also similar behavior to other individual customers, but with its particular characteristics in terms of development environment and lifestyle, the choice of Consumption and use of a product of gene Z also have many dominant and influential factors that are significantly different from those of other generations. Then, we decided to select a survey age group belonging to the Generation Z group, which is derived from people born between 1997 and 2012, to conduct the research. As of 2022, this target group is between the ages of 10 and 25 years old. In Vietnam, Gen Z accounts for about 25% of the national labor force, equivalent to about 15 million people (Nguyen, 2022).

Literature reviews have been synthesized and presented in **Table 1**, below:

Table 1. Results of the literature reviews

Sources	Theoretical/Conceptual Framework	Conclusions
Davis, (1989); Shaikh and Karjaluoto (2015); Shaun (2021)	Perceived ease of use: The ease of a particular activity is related to the ease of doing or operations of the technology, thereby reflecting the user's attitude towards the technology. Mobile banking adoption is fragmented, though it commonly relies on the technology acceptance model and its modifications, and Internet technology and smartphones are always a part of Gen Z lives.	The mobile phone's ease of use positively affects Gen Z's intention to use mobile banking distribution channels.
Davis, (1989); Akturan, (2012); Mostafa and Eneizan (2018); Bui *et al.* (2020)	Functional diversity refers to the degree to which an individual believes that the usage of technology will enhance his or her performance. There is a positive influence of usefulness by functional diversity toward the adoption and usage of mobile banking.	Functional diversity positively affects Gen Z's decision to use mobile banking distribution channels.
Yeow *et al.* (2008), Bui *et al.* (2020)	It is the degree to which an individual believes mobile banking is trustworthy and secure; the safety and confidentiality had a positive and significant relationship with the intention to use mobile banking.	The decision to use mobile banking is affected positively by the level of safety and confidentiality of the mobile banking distribution channel.
Kabir, (2013)	There are impacts of factors including privacy risk, social risk, financial risk, and time risk on the decision to use mobile banking.	Risk is one of the key determinants to limit the choice of Gen Z in using the mobile banking distribution channel.

Mostafa and Eneizan (2018); Alghareeb, (2022); Nguyen and Phan (2022)	The participant's perceptions, such as perceived usefulness, perceived risk, social impact, and design aesthetics to attract customers, supported their intention for further adoption of mobile banking.	The attraction and the way that the bank approaches Gen Z will positively affect the decision of Gen Z, and social influence can be found as an important determinant that positively affects Gen Z's decision in using mobile banking.

Source: Compilations by the authors

Theoretical Framework and Research Models
Model of Factors Affecting the Service Use Behavior of Gen Z
Fishbein and Ajzen's Theory of Rational Action (TRA) Model

The theory of Reasoned Action (TRA) model, built by Fishbein and Ajzen in 1975, is designed to forecast behavioral intention, and that intention is determined by "attitudes" and the influence of "subjective norms" surrounding the performance of those behaviors (Fishbein & Ajzen, 1975). This model predicts and explains the propensity to perform behavior by way of consumer behavior-oriented attitudes rather than consumer-oriented product or service attitudes.

Specifically, the theory has shown that determinants influencing human behavior, including:

i. Attitude towards behavior: refers to whether the individual has a positive or negative evaluation of the performance of a behavior. When an individual believes that performing a behavior will bring good results for them, the individual forms positive thoughts and attitudes and performs the behavior. Conversely, if the person thinks that performing the behavior brings bad results, he or she will have a negative attitude about the behavior and refuse to do it.

ii. Subjective Norm: the belief that a significant person or group of people will approve and support a particular behavior

iii. Behavioral Intention: represents "a sign of a person's willingness to perform a behavior" (Ajzen, 1991), which is determined based on the individual's attitude and subjective standards around that behavior; the more positive and stronger it is, the higher the intention to perform the behavior is; (iv) Behavior: an observable physical activity of an individual in a particular context and goal.

Ajzen's Theory of Planned Behavior (TPB) Model

The theory of rational behavior (Ajzen, 1991) is a theory that predicts possible planned behaviors, with the central factor being an individual's intention to perform a given behavior developed from the theory of rational action. This theory is created to overcome the TRA's limitation that human behavior is entirely controlled by reason.

According to TPB, the intention of the behavior is affected by 3 factors:

i. Attitude towards the behavior is an individual's evaluation (which may be favorable or unfavorable) based on the results from performing a behavior.

ii. Normative belief and subjective norm: Normative belief is an individual's belief, or perception of the general norms of society, about what people think that individual should or should not perform that behavior. Subjective norm is the perception and thinking of a

particular individual, influenced by the thoughts and judgments of those who have an important influence on that individual.

iii.   Beliefs about self-control and perceived behavioral control: Control belief is an individual's belief in the ability to control and perform a behavior, including factors that facilitate and hinder the performance of the behavior. Perceived behavioral control is an individual's perception of the advantages or disadvantages of performing a behavior.

Davis' Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM Model) is also developed based on the theory of rational action (TRA) model by Davis (1989) and is widely used to explain user acceptance of new technologies.

TAM shows that the use of technology depends on the perception of (i) perceived usefulness: the degree to which someone believes that using a particular system will improve work efficiency and performance, and (ii) perceived ease of use: The ease of a particular activity is related to the ease of doing or operations of the technology, thereby reflecting the user's attitude towards the technology.

Proposing a Conceptual Framework

Synthesized from theories, models, or inherited from literature from local and international contexts, such as Singh and Srivastava (2020), Yu and Chian-Son (2012), Foon and Fah (2011), Sripalawat and Ngarmyarn (2011), Zhou *et al.* (2010), we proposed employing The TAM model after distilling and selecting the other appropriate determinants to build up the research diagram as in **Figure 1**, below:
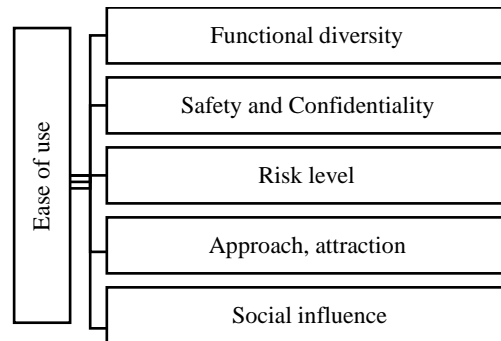

Figure 1. Proposed conceptual framework

The Ease of Use

As mentioned above, Davis (1989) shows that the use of technology depends on the perception of (1) perceived usefulness: the degree to which someone believes that using a particular system will improve work efficiency and performance, and (2) perceived ease of use: The ease of a particular activity is related to the ease of doing or operations of the technology, thereby reflecting the user's attitude towards the technology. Moreover, Shaikh and Karjaluoto (2015) indicate that mobile banking adoption is fragmented, though it commonly relies on the technology acceptance model and its modifications, revealing that compatibility (with lifestyle and device), perceived usefulness, and attitude are the most significant drivers of intentions to

adopt mobile banking services in developed and developing countries. Shaun (2021) said that Internet technology and smartphones are always a part of Gen Z lives; 95% of teens have access to a smartphone, and 45% of teens are online constantly. In line with previous studies, we formulate the following hypothesis:

H1: The mobile phone's ease of use positively affects Gen Z's intention to use mobile banking distribution channels.

Functional Diversity

Bui *et al.* (2020) indicate that "Mobile phones with banking technology are becoming more readily available in Vietnam. Similarly, many financial institutions and mobile phone service providers are teaming up to provide several banking services to customers via mobile phones. However, the number of people who choose to adopt or use such technologies is still relatively low. Therefore, there is a need to assess the acceptance of such technologies to establish factors that hinder or promote customer's intention to use mobile banking". Functional diversity refers to the degree to which an individual believes that the usage of technology will enhance his or her performance (Davis, 1989). Previous research findings have shown the positive influence of the usefulness of functional diversity on the adoption and usage of mobile banking (Akturan, 2012; Mostafa & Eneizan, 2018). Thus, the following hypothesis is proposed:

H2: Functional diversity positively affects Gen Z's decision to use mobile banking distribution channels.

Safety and Confidentiality

This can be understood "as the degree to which an individual believes mobile banking is trustworthy and secure" (Yeow *et al.*, 2008). Bui *et al.* (2020) also indicate through their research that safety and confidentiality had a positive and significant relationship with the intention to use mobile banking. Hence, the following hypothesis is proposed:

H3: The decision to use mobile banking is affected positively by the level of safety and confidentiality of the mobile banking distribution channels.

Risk Level

Kabir (2013) has investigated the determinants and their impact on mobile banking usage in a developing country. The findings show the impacts of factors including privacy risk, social risk, financial risk, and time risk on the decision to use mobile banking. Therefore, we hypothesize that:

H4: Risk is one of the key determinants to limit the choice of Gen Z in using a mobile banking distribution channel.

Methods of Approach, Attraction

In recent research among undergraduate students at Kuwait University about the mobile banking distribution channel adoption, Alghareeb (2022), and Mostafa and Eneizan (2018) revealed that the participant perceptions, such as perceived usefulness, perceived risk, social impact, design aesthetics to attract the customers supported their intention for further adoption of mobile banking. So, we formulate the following hypothesis:

H5: The attraction and the way that the bank approaches Gen Z will positively affect the decision of Gen Z.

H6: Social influence can be found as an important determinant that positively affects Gen Z's decision in using mobile banking.

MATERIALS AND METHODS

After synthesizing theories from domestic and international research papers, the research team has distilled and selected suitable factors to build a conceptual framework **(Figure 1)** on factors affecting affect Gen Z's use of mobile banking.

The survey area is chosen by the research team to include all Gen Z consumers living and working in Vietnam who use mobile banking, as well as some people from various industries and fields, based on their age, education, and income level. Although the research focuses on customers who use mobile banking, the research team has expanded to include individuals who have not used it and will use it to collect data for review, analysis, and suggestions to Vietnamese banks.

This research comprises sampled and received 200 responses in compliance with the research paper, the sample size meeting the standard requirements of Bollen (1998) and Hair *et al.* (1998), which is more than 5 times the number of observed variables (minimum 150).

To measure the attitudes and feelings of survey participants, the observed variables are measured thanks to a Likert scale with the following 5 levels of popularity: (1) Strongly disagree; (2) disagree; (3) normal; (4) agree; and (5) strongly agree. All valid samples are processed by SPSS software to conduct reliability analysis, exploratory factor analysis (EFA), KMO test, correlation analysis, and multivariable regression analysis based on a questionnaire built with 6 independent variables (ease of use, functional diversity, safety, and confidentiality, risk level, approach, attraction, and social impacts) that affect the dependent variable, which is the use of mobile banking by Gen Z. The details are as in **Table 2**.

Table 2. Scale of factors influencing the use of mobile banking by Gen Z

Variables and attributes		Sources
1. Easy to use (EU)		
EU1	Simple and convenient registration and service opening procedures	Davis, (1989); Shaikh & Karjaluoto, (2015); Shaun (2021)
EU2	Quick action time	
EU3	Quickly get used to it and become proficient in using it.	
EU4	Make transactions accurate, and easy.	
2. Functional diversity (FD)		
FD1	Fully supply basic services: bank transfer, payment, card, savings, loan, mobile top-up…	Bui *et al.* (2020)
FD2	Provide extended services such as online savings deposits, investments, train ticket booking, and airline booking.	
FD3	Regularly upgrade and develop new smart transaction authentication	
FD4	Supplement risk warning features when using	

FD5	The application's complementary functions are practical and useful for users.	
3. Safety and confidentiality (SC)		
SC1	High safety and confidentiality.	Yeow *et al.* (2008); Bui *et al.* (2020).
SC2	The bank provides clear and complete instructions and regulations on measures to ensure safety for customers when using.	
SC3	Notify and confirm information after each transaction.	
SC4	Personal information and customer accounts are kept and not disclosed to 3rd parties.	
SC5	Operations of performing services are less troublesome and cause less financial loss.	
4. Risk level (RL)		
RL1	Transferring money to the wrong destination account and the wrong transaction amount.	Kabir, (2013); Al-Jabri & Sohail, (2012)
RL2	The system is regularly maintained and overloaded.	
RL3	Intermediaries associated with mobile banking are easily hacked and reveal customer information.	
RL4	Legal regulations related to mobile banking services.	
RL5	Connection failure and internet loss.	
5. Methods of approach, attraction (MA)		
MA1	Brand, the interface of the app	Akturan & Tezcan (2012)
MA2	Personalization of service use (select account number by phone number; nickname account name of your choice).	
MA3	Add features to attract users (horoscopes, zodiac signs...)	
MA4	Expand affiliate partners to increase incentive programs for customers to use.	
MA5	Various forms of advertising and marketing and catching up with trends	
6. Social impacts (SC)		
SC1	Most people use it, so you need to use it.	Yu, (2012); Danyali, (2018); Singh & Srivastava (2020)
SC2	If friends and relatives recommend using it, you will use it.	
SC3	The impact and spread of news and social networks affect the use	

RESULTS AND DISCUSSION

Survey Sample Characteristics

The sample has 200 respondents; 77 were males (accounting for 38.5%), while the females account for a higher proportion (61.5%) of 123 people. The age group from 19 to 22 years

accounts for the majority (76%), corresponding to 152/200 surveyed people, and about 42/200 people (21%) are from 23-25 years. The respondents in the age group of 15-18 years are in the minority with only 3% of total survey subjects. The majority of the respondents are students and pupils (accounting for 69%), and the rest of the respondents are office workers and other employees, respectively, accounting for a lower proportion, distributed at about 20.5% and 10.5%. For the group with an average income of less than 3 million VND, the highest number is 99/200 people (accounting for 49.5%), the group with income from 3 to 5 million VND (accounting for 19.5%), and 5–10 million VND (accounting for 21.5%), the income level greater than 10 million VND or more is 19 people (equivalent to 9.5%).

Scale Accreditation
The Reliability of the Scale Using Cronbach's Alpha Coefficient
The reliability of the scale is assessed through Cronbach's Alpha coefficient. In the study, using Cronbach's Alpha along with EFA exploratory factor analysis to eliminate inappropriate variables that can generate dummy factors.
The scale in **Table 3** with alpha reliability greater than 0.6 is qualified (the larger the alpha is, the higher the reliability is) (Taber, 2018).

Table 3. Reliability test of independent variables

Variables	Number of measurement items	Cronbach's Alpha
EU	4	0.916
FD	5	0.901
SC	5	0.950
RL	5	0.906
MA	5	0.879
SC	3	0.828

All variables satisfy Cronbach's alpha coefficient greater than 0.7, and total correlations are greater than 0.3, so the variables meet the requirements of reliability. Therefore, no variables are excluded from the scale.

Exploratory Factor Analysis (EFA)
To evaluate the suitability of the exploratory factor analysis method, we employ KMO and Bartlett's test. Then we run the EFA exploratory factor test with a factor loading factor of 0.5; the results are as in **Table 4**.

Table 4. KMO and Bartlett's tests

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.955
Bartlett's Test of Sphericity	Approx. Chi-Square	4,574.358
	Df	276
	Sig.	.000

From **Table 4,** 0.5 < KMO = 0.955 < 1, and the results of Bartlett's Test = 4574, 358 reveal that the factor analysis is suitable with the research data, and the statistical significance level Sig = 000 (lower than the level of 0.05) illustrates that the data used for analysis is appropriate; the observed variables are correlated with each other overall, meeting all the requirements to continue the EFA exploratory factor analysis.

Furthermore, EFA results as presented in **Table 5** indicate that all factor loadings are greater than the cut-off value of 0.5. Based on guidance proposed by Anderson and Gerbing (1988), (p_value) sig = 0.000 < 0.05 shows that the validity of the measurement for the six constructs was confirmed.

Table 5. EFA results for independent variables

Attributes	Components and factor loadings					
	1	2	3	4	5	6
EU1	0.863					
EU2	0.847					
EU3	0.781					
EU4	0.775					
FD1		0.722				
FD2		0.859				
FD3		0.833				
FD4		0.821				
FD5		0.757				
SC1			0.757			
SC2			0.861			
SC3			0.783			
SC4			0.781			
SC5			0.779			
RL1				0.759		
RL2				0.881		
RL3				0.827		
RL4				0.819		
RL5				0.766		
MA1					0.838	
MA2					0.826	
MA3					0.799	
MA4					0.687	

MA5		0.785
SC1			0.876
SC2			0.812
SC3			0.833
DC1	0.889	
DC2	0.853	
DC3	0.848	

Analysis of regression is presented in **Table 6**, below:

Table 6. Regression analysis results

Variables	Unstandardized coefficients		Standardized coefficients	t-value	Sig. (p_value)	VIF	Findings
	B	Std. Error	β				
Constant	-0.594	0.22		-2.69	0.008		
EU	0.224	0.034	0.29	6.629	<0.001*	1.228	Accept H1
FD	0.19	0.031	0.265	6.065	<0.001*	1.225	Accept H2
SC	0.208	0.047	0.216	5.178	<0.001*	1.117	Accept H3
RL	-0.266	0.049	-0.253	-5.409	<0.001*	1.401	Accept H4
MA	0.245	0.045	0.192	4.454	<0.001*	1.197	Accept H5
SC	0.244	0.035	0.153	5.209	<0.001*	1.508	Accept H6

As explained in **Table 6**, the following regression model was tested by using SPSS:

$$DC_i = \beta_0 + \beta_1 EU_i + \beta_2 FD_i + \beta_3 SC_i + \beta_4 RL_i + \beta_5 MA_i + \beta_6 SC_i + \varepsilon \tag{1}$$

Regression results shown in **Table 6** indicate that the variance inflation factor (VIF) indicator for each dependent variable, which assesses how much the variance of an estimated regression coefficient increases if predictors are correlated, is smaller than the recommended cut-off value of 5. Therefore, multicollinearity among independent variables is minor and does not significantly affect the regression results.

In addition, regression results in **Table 6** also reveal that five of the six dimensions of mobile banking service quality have statistically significant positive impacts, and one dimension has a statistically negative impact on overall Gen Z's satisfaction in Vietnam with a confidence interval of 95%. Moreover, the model of these given factors collectively explains the 58.8% variance of banks' information infrastructure (Adjusted $R^2= 0.588$).

H1: The mobile phone's ease of use positively affects Gen Z's intention to use mobile banking distribution channels (t = 6.629, p < 0.001). The result is consistent with and supports the

previous research (Davis, 1989; Shaikh & Karjaluoto, 2015; Shaun, 2021). This implies that Gen Z customers will adopt mobile banking more and more if the ease of use increases.

H2: Functional diversity positively affects but is not significant in Gen Z's decision to use mobile banking distribution channels (t = 6.065, p < 0.001). This hypothesis is supported to be in line with Davis (1989), Mostafa and Eneizan (2018), and Akturan (2012), which shows that the diversity in function of mobile banking will attract Gen Z to adopt mobile banking.

Safety and confidentiality also are found to support H3 (t=5.178, p < 0.001): The decision to use mobile banking is affected positively by the level of safety and confidentiality of the mobile banking distribution channel and is consistent with Yeow *et al.* (2008) and Bui *et al.* (2020).

The risk level is a unique factor that has a negative impact on Gen Z's acquisition of mobile banking. This supports H4 (t = -5.409, p < 0.001*) and is consistent with Kabir (2013) and Al-Jabri and Sohail (2012), who also investigated the negative impact of this factor to limit Gen Z's choice in using mobile banking distribution channels.

The attraction (t = 4.454, p < 0.001*) and the social influence (t = 5.209, p < 0.001*) are in line with previous findings by Alghareeb (2022), who revealed that the participant perceptions, such as perceived usefulness, perceived risk, social impact, and design aesthetics to attract the customers, supported their intention for further adoption of mobile banking. So H5 and H6 are supported.

CONCLUSION

The findings reveal that determinants affecting Gen Z's decision to use mobile banking distribution channels in Vietnam are affected mostly by two important factors: level of risk, approach, and attraction to mobile banking.

The level of risk associated with Gen Z's decision to use mobile banking in Vietnam is seen as a determining factor for adoption. Mobile banking is a product and service that employs information technology and relies on proactive customer action as a key component. In fact, Gen Z is particularly concerned about using the technology platform because incorrect transfer transactions, incorrect amounts, and intermediaries associated with mobile banking are easily stolen and disclosed. Additionally, issues related to loopholes in the legal regulations on this service raise many potential concerns among Gen Z users. Gen Z has had the chance to understand and use technology at a young age; therefore, they are aware of the hazards associated with utilizing mobile banking in life. The critical evaluation of the function and security of information, as well as potential risk that Generation Z pays close attention to, and Vietnamese banks should limit risks by providing the appropriate internal controls in digital environments to maintain the system safely (Mojahed *et al.*, 2021; Tsekhmister *et al.*, 2021; Albhair & Bugis, 2023).

The second factor found by the research team is the approach and attraction of mobile banking. Gen Z, as a generation living in the era of the social network boom, is always attracted by fresh information flows and innovative and unique services. The research shows that this target group prefers to use mobile banking services through attractive and intelligent brands and interfaces. Young people love and create a trend for highly personalized services, expressing their personality and themselves as much as choosing a beautiful account number with personal information. Gen Z target groups always want to try out services that update trends and increase

special attractive features such as horoscopes, zodiac signs, date and time forecasts, etc. The impact factor related to the approach will be a cross-cutting factor according to this target group in using mobile banking in the future. Hence, those are very important suggestions for mobile banking providers in Vietnam to focus on various forms of advertising and marketing to make their mobile banking products and services strong and attractive to Gen Z and especially strengthen IT controls in banks related to mobile banking.

However, this study employed a convenience sampling technique to collect data; hence the findings may not be generalized. Therefore, in future research, data sampling should be extended and more determinants should be investigated to improve our understanding to suggest suitable solutions to the commercial banks of Vietnam.

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