

Factors Affecting the Intention to Adopt Digital Banking Applications in Personal Financial Management: The Case of University Students in Hanoi, Vietnam

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Abstract

Today, with technology advancing rapidly, digital banking apps (DBAs) include features for making payments and keeping track of expenses. In other words, users can see their finances clearly from a general overview to detailed breakdowns of what they spend. This helps manage their money better by keeping an eye on their spending habits and making adjustments as needed. The study aims to evaluate different factors influencing the intention to utilize digital banking apps for managing personal finances. The model and hypotheses are developed based on quantitative research. Data was collected through self- administered close-ended questionnaire from a sample of 416 university students in Hanoi, Vietnam. For analysis purposes, SPSS 20 was used to confirm the validity concerns and determine the proposed relationship among selected variables. The output reveals that Perceived trust has the greatest impact, followed by Hedonic motivation, Personal behavioral control, Attitude, Perceived usefulness and Perceived ease of use while Perceived risk is found to have no impact on intention to use digital banking apps of university students. This study provides a 'snapshot' to the management about the provision of current situation and proposes suggestions to promote the use of digital banking applications and use them effectively for students' personal financial management.

Keywords: Intention, digital banking applications, personal financial management.

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1. Introduction

Managing and tracking monthly expenses are incredibly important as they enable university students to have better control over their spending. However, in some cases, it can be observed that many individuals frequently find themselves in a state of financial scarcity, even though they have sufficient income and assets. It is suggested that because thorough planning before investing is lacking, the majority of university students perform poorly in financial management (Wan, 2020), which leads to the repercussions being seen in high financial debts among students (Lea, Webley, & Walker, 1995; Lunt & Livingstone, 1992; Ranyard & Craig, 1995a; Walker, 1996). It would seem that young adults' financial well-being is a big worry around the world, particularly for those in higher education, where money management has become a serious issue (Knight et al, 2000).

In today's rapidly advancing technological landscape, digital banking applications (Timo, MoMo, TNEX, Mint, etc.) are being developed, integrating both payment and expense tracking functionalities. This integration allows users to have a comprehensive view of their financial situation, ranging from an overview to detailed breakdowns of their expenses. Consequently, it aids in tracking and adjusting personal financial management behaviors appropriately. In ever developing technology era, digital banking applications or Fintech bring benefits to people either in money transferring or personal financial managing and supervising (Elsabeh et al., 2016); as such they know how to approach these modern banking

applications, to assess their results in the ability to have an insight into their money. Using digital banking apps and comparing financial services online are essential for managing your money and making wise judgments (Bagwell at al., 2014,). Similarly, French et al. (2020) examined the effectiveness of personal finance mobile apps to increase low-income people's financial capabilities. Additionally, banks have made significant investments in the capability of m-banking apps to offer value-added self-services activities to them via mobile devices, mostly smartphones. More mobile users have accessed m-banking app services thanks to new means of doing financial transactions that have emerged, particularly during the COVID-19 pandemic (Saprikis et al., 2022). The Financial Services Authority (OJK) claims that digital banking services allow the bank's current and potential customers to communicate, create accounts, make banking transactions, and use electronic trading platforms and financial consulting services (Angrgraeni et al., 2021). More and more individuals are incorporating mobile banking into their daily lives. They can use it for payments and transactions, account inquiries, investments, credit card integration, and other things (Zhou et al., 2020).

There are numerous studies on factors influencing consumers' intention to use financial management apps. Barczak, Ellen & Pilling (1997); Rila, Raditha & Noor (2021); S.Ananda, Sonal & Anis, 2020). However, this



topic is still relatively new in Vietnam and has not received much attention in the literature. Moreover, the majority of prior research publications focused on consumers as their study subjects, whereas the research group's subjects were students. This aspect is considered a novel focal point of this research.

Considering the aforementioned arguments, the research group decided to investigate the topic of "Factors affecting the intention to adopt digital banking applications in personal financial management: the case of university students in Hanoi" The goal of this study is to investigate how the factors impact the decision to use digital banking applications for financial management. It is anticipated that the research findings would partially mirror the current situation of digital banking app usage and offer suggestions to advance the development of the system, which will have numerous financial advantages for consumers.

2. Literature Review

Accounting for the foreign studies about characteristics of DBAs that can affect the attitude towards the adoption of users, Marakarkandy et al. (2017) suggested that good image, banks initiative, internet usage efficacious may be important. Ananda, Devesh & Lawati (2020) included 'good image' in the factor 'site features'. In addition, Zhou et al. (2021) pointed out that those dimensions including interface design, system quality, security assurance, and service quality were of great importance with regard to customer loyalty to mobile banking. In terms of the perceptions influencing customers' attitude towards the use of digital banking apps, Mouakket (2009) with the utilization of the Technology Acceptance Model (TAM), and Structural Equation Modeling (SEM), looked into factors including security concerns. The 'security concerns' was also included in the study by Fortes & Rita (2016), Akturan & Tezcan (2012), Poromatikul et al. (2019), Tiwari et al (2021), Bekhit (2022), Saprikis, Avlogiaris, & Katarachia (2022) with a more general name 'perceived risk'. Chang (2006) focused on providing insight into whether Korean customers' perceptions of time value have an impact on their decision to embrace online banking. Sharma & Srikrishna (2014), Hanafizadeh et al. (2014) also included most factors aforementioned in their study with the addition of 2 other ones: social influence and perceived ease of use. There is a coincidence in the study of Veríssimo (2016), Kumar et al. (2017), Poromatikul et al (2019), Leon (2019), Tiwari et al (2021) with Sharma & Srikrishna (2014) when they also concluded that the combination of factors, including high perceived usefulness, ease of use and trust

and a low perceived risk had a positive impact on the customers' attitude. Gharaibeh & Arshad (2018) and Anggraeni, Hapsari & Muslim (2021) added to the existing factors the element of hedonic motivation with the positive impact on customers' decision. Additionally, the level of expectation confirmation is looked into by Poromatikul et al (2019) whose initiative was supported by Bitrián, Buil & Catalán (2021) in examining the fulfillment of gamifying functions in DBAs for users' desires for competence and autonomy. There is a table of other different studies examining aforementioned factors including perceived ease of use, risk, trust, usefulness, hedonic motivation, social influence and performance expectancy. Considering demographic variables impact on the relationship between suggested factors and behavioral intention to use DBAs, in Marakarkandy et al. (2017) and Ananda, Devesh & Lawati (2020)'s research, four demographic dimensions—gender, age, income, and education—were used. In examining dimensions affecting financial management, Cude et al. (2006) with data collected from students in Louisiana State University (LSU) and University of Georgia (UGA) suggested that parental roles and financial literacy were of great importance. This finding was supported by Huang (2022) when he found a variety of matters and deficit in college pupil's financial management and detected some reasons behind their situations, which are lack of right notion of money related administration beneath online environment, so-called Internet Finance (ITFIN) and lack of knowledge in choosing proper internet monetary management items. In another study, Palmer et al. (2010) pointed out that lack of awareness about spending habits and managing finance may have a negative impact on people's financial management. Those aforementioned findings were agreed by Falahati & Paim (2011) and Wiharno (2018), Falahati & Paim (2011) and Montazemi (2015) also emphasized the positive role of financial socialization. Additionally, Chuah & Kamaruddin Singh (2020) stated that financial self-efficacy also had a favorable influence on financial behavior among university students. There is a table of other different studies examining aforementioned factors including financial knowledge, self-efficacy, money attitude and financial socialization. In Servon & Kaestner (2008), Qamar, Khemta & Jamil, 2016), Prihartono & Asandhimitra (2018), Kaur (2021), Siska (2022)'s study, they included some demographic factors like age, gender, income and education to see their impact on financial management behavior. The association between attitude and financial literacy in personal financial management behavior is positively moderated by financial knowledge. In their findings, income has a positive correlation with financial behavior but learning in higher education has no impact on how people handle their finances.

In terms of domestic studies about factors having impact on the intentions of using DBAs, Domestic researchers find common ground with foreign researchers when having 2 groups of elements: site features and customers' perception. Some site features mentioned in the study of Nguyen Thi Binh Minh et al (2021) are: the quality of the information, the effectiveness of the support system, and the level of service quality. Some perceived factors in Do Ngoc Bich & Do Thi Hai Ninh (2020)'s research include compatibility, perceived trust,



perceived usefulness, perceived ease of use and social influence. Besides, they added 2 other dimensions: perceived convenience and perceived reputation. In the findings, they pointed out an indirect positive impact of the aforementioned ones on the intention to adopt the Electronic wallet of Generation Z. Additionally, in Le Hoang Ba Huyen et al (2020)'s research results, Compatibility, perceived trust and ease of use had favorable influence. Among 4 factors in the study of Nguyen Thi Ngan & Bui Huy Khoi (2020), there are 2 new ones which are social norm, and banking services innovation included. Dang Thuy Linh et al. (2021) added to the existing elements some more variables: Attitude, Subjective norms, Perceived behavioral control, Financial literacy, Personal incentives. In conclusion, those factors had a positive correlation with customers' intention to use DBAs. Investigating

those determinants with impact on financial management, Nguyen Thi Ngoc Mien & Tran Phuong Thao (2015) demonstrated the role of financial knowledge with moderating effect on the connection between financial attitude and financial management conduct practice of Vietnamese youngsters. The conclusion about financial knowledge was also agreed by Le Long Hau, Nguyen Le Trang Anh & Le Tan Nghiem (2019) while they also used some demographic factors like gender, year of education, working a part-time job, together with independent ones: financial consultation in their analysis. The results showed that while there was no disparity in expenditures management abilities amongst students with different majors and academic years, there is a difference in savings management skills. Beside years of education and majors, Nguyen Thi Phuong Thao & Nguyen Thi Bich Ngoc (2022) also examined the influence of financial condition, residing area on Tay Nguyen University (TU)'s students' knowledge of personal finance.

3. Research Model & Hypothesis

Based on previous international and domestic studies, the authors selected seven factors influencing the intention to adopt digital banking applications in personal financial management. These are (1) Attitude, (2) Perceived ease of use, (3) Perceived usefulness, (4) Perceived Trust, (5) Perceived Risk, (6) Personal Behavioral Control, (7) Hedonic motivation. In addition to these factors above, the authors also examine the effect of demographic factors, including Gender, Monthly budget, Major, Purpose.

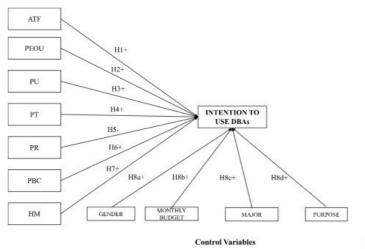


Figure 1. Proposed research model

There are seven main hypotheses about the independent factors and four hypotheses for controlled factors

- H1: Attitude has a positive relationship with the intention to use digital banking applications in personal financial management.
- **H2:** Perceived ease of use has a positive relationship with the intention to use digital banking applications in personal financial management.
- **H3:** Perceived usefulness has a positive relationship with the intention to use digital banking applications in personal financial management.
- **H4:** Perceived trust has a positive relationship with the intention to use digital banking applications in personal financial management.
- **H5:** Perceived risk has a negative relationship with the intention to use digital banking applications in personal financial management.
- **H6:** Hedonic motivation has a positive relationship with the intention to use digital banking applications in personal financial management.
- **H7:** Personal behavioral control has a positive relationship with the intention to use digital banking applications in personal financial management.



H8a: Gender has a positive relationship with the intention to use digital banking applications in personal financial management.

H8b: Monthly budget has a positive relationship with the intention to use digital banking applications in personal financial management.

H8c: Major has a positive relationship with the intention to use digital banking applications in personal financial management.

H8d: Purpose has a positive relationship with the intention to use digital banking applications in personal financial management.

4. Research methodology

4.1 Qualitative method

In-depth interviews: A group of 15 students at university in Hanoi were interviewed. The purpose is to elicit detailed information of their opinions and attitudes about the factors in the research models. This is of great importance for the authors to add new factors and adjust the scales in the research model.

4.2 Quantitative research

Questionnaire development

To examine the developed hypotheses from the literature review, the authors developed the questionnaire with three main parts: (i) demographic information of the sample, (ii) questions measuring the independent variables and (iii) questions measuring dependent variables.

Data collection and sample

The population of this study was university students in Hanoi. Data were collected by online surveys via Google Form, which was distributed via Facebook as this is the leading active social media platform among internet users in Vietnam (Ella, 2020). The authors conducted a survey of 430 observations, resulting in 422 completed questionnaires (reaching 98.1%). After cleaning, 416 questionnaires were retained for analysis.

Data analysis procedure

In this study, Intention to use DBAs is the independent variable, seven dependent variables include Attitude, Perceived ease of use, Perceived usefulness, Perceived Trust, Perceived Risk, Personal Behavioral Control, Hedonic motivation. Data is analyzed using SPSS20. Descriptive statistics are generated to gain an overall idea of the sample. Cronbach's Alpha is employed to measure the reliability of the scale. Exploratory factor analysis (EFA) is based on reshaping the structure of the scale, examining the convergent validity and the discriminant validity. Confirmatory Factor Analysis (CFA) is used to assess the fit between observed data and the expected model. Multiple linear regression analyses are performed to calculate the total variance in students' intention that can be explained by the seven factors. One-way ANOVA is applied to examine the effect of demographic factors.

5. Research result and discussion

5.1 Preliminary analysis

The research group conducted the survey among university students in Hanoi city. The percentage for male, female and other-gender responders are 22.1%, 77.4%, 0.5%, respectively. Regarding the major, students with economic majors represent the highest percentage at 49.5%, and the lowest proportion is 1.4% of students majoring in education. In terms of frequency, most students use DBAs daily (47,6%). 29.3% just use DBAs a few times a week. The smallest proportion is 2.9%, indicating students who have never used DBAs. The number of students with monthly budget from 2 to 4 million dong is the highest with 41.3% individuals, followed by students having less than 2 million dong per month (38.9%). The figure for students with budget of 4-6 million dong and more than 6 million dong is lower: 12.5%, 7.2% respectively. In total number of respondents, 33.3% students use DBAs for "transfer fund". It is also the most common purpose followed by 30.3% of "make payments" and 20.3% of "check account balance" and 14.2% of "manage accounts".

5.2 Evaluate the scale using Cronbach's Alpha reliability coefficient

Overall, the research uses 07 independent scales. After analyzing, the results show that except for variable ATF2" "I follow a careful financial budget" with the corrected item-total correlation 0.286 (<0.3), the corrected item-total correlation coefficients of other variables all are greater than 0.3 and the Cronbach's alpha of the scales all are greater than 0.6. Therefore, ATF2 is excluded, all others passed the tests of reliability.



Table 1. Summary of the results of the scale reliability analysis

| Factors | Number of variables | Cronbach's Alpha coefficient |
|-----------------------------|---------------------|------------------------------|
| Attitude towards finance | 3 | 0.608 |
| Perceived ease of use | 3 | 0.699 |
| Perceived usefulness | 3 | 0.770 |
| Perceived trust | 4 | 0.771 |
| Perceived risk | 3 | 0.752 |
| Personal behavioral control | 4 | 0.846 |
| Hedonic motivation | 4 | 0.792 |

5.3 Analysis of the scale validity

The original research model has 7 groups of elements affecting intention to use DBAs among university students in Hanoi, Vietnam. There are 25 variables included in the Exploratory Factor Analysis.

Table 2. KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of | .804 | |
|-------------------------------|--------------------|----------|
| Bartlett's Test of Sphericity | Approx. Chi-Square | 3401.246 |
| | df | 253 |
| | Sig. | .000 |

Table 2 shows that the KMO coefficient is 0.804 > 0.5; Sig. for Bartlett's test is 0.000 < 0.05 so the EFA method is suitable. Factor analysis's results are mentioned in table 3 below.

Table 3 shows that 23 observed variables of the scales converge on 7 main factors with a total explained variance of 67.027%. This indicates that the 7 factor groups mentioned above account for 67.027% of the variation in the 23 observed variables.

Table 3. Total Variance Explained

| | Initial Eigen | ıvalues | | Extraction Sums of Squared Loadings | | | |
|-----------|---------------|---------------|--------------|-------------------------------------|---------------|--------------|--|
| Component | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | |
| 1 | 5.604 | 24.366 | 24.366 | 5.604 | 24.366 | 24.366 | |
| 2 | 2.175 | 9.458 | 33.824 | 2.175 | 9.458 | 33.824 | |
| 3 | 2.096 | 9.112 | 42.935 | 2.096 | 9.112 | 42.935 | |
| 4 | 1.715 | 7.458 | 50.393 | 1.715 | 7.458 | 50.393 | |
| 5 | 1.512 | 6.574 | 56.967 | 1.512 | 6.574 | 56.967 | |
| 6 | 1.213 | 5.273 | 62.240 | 1.213 | 5.273 | 62.240 | |
| 7 | 1.101 | 4.787 | 67.027 | 1.101 | 4.787 | 67.027 | |

Next, the research group continues to perform EFA technique for the observable variables of the dependent element- intention to use DBAs.

Table 4. KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of | .668 | | | |
|-------------------------------|--|------|--|--|
| Bartlett's Test of Sphericity | rtlett's Test of Sphericity Approx. Chi-Square | | | |
| | df | 3 | | |
| | Sig. | .000 | | |

BarleSTM's test results (BarleSTM's Test of Sphericity) in KMO and BarleSTM's test with sig=0.00 (<0.05) and KMO=0.668>0.5 both meet the requirements.

Table 5. Total Variance Explained

| | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|--|
| Component | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | |
| 1 | 1.907 | 63.582 | 63.582 | 1.907 | 63.582 | 63.582 | |
| 2 | .610 | 20.336 | 83.918 | | | | |
| 3 | .482 | 16.082 | 100.000 | | | | |

Acording to the findings, observed variables of intention to use DBAs of one main factor with the total variance explained of 63.582 % which exceeds 50%, indicating that the extracted factor accounts for 63.582% of the variation in the observed variables



5.4 Correlation analysis

Table 6. Correlations

| | | ATF | PEOU | PT | PR | PBC | HM | PU | IT |
|----------|------------------------------------|-------------|----------|-------|------|--------|--------|--------|--------|
| ATF | Pearson Correlation | 1 | .201** | | 035 | | .277** | .307** | .458** |
| | Sig. (2-tailed) | | .000 | | .474 | | | | .000 |
| | N | 416 | 416 | 416 | 416 | 416 | 416 | 416 | 416 |
| PEOU | Pearson Correlation | .201** | 1 | 021 | .065 | .097* | 044 | .073 | .158** |
| | Sig. (2-tailed) | .000 | | 668 | .187 | .047 | .368 | .135 | .001 |
| | N | 416 | | 416 | 416 | | | | 416 |
| PT | Pearson Correlation | .374** | .021 | 1 | .002 | .548** | .452** | .368** | .583** |
| | Sig. (2-tailed) | .000 | .668 | | .968 | | | .000 | .000 |
| | N | 416 | 416 | 416 | 416 | 416 | 416 | 416 | 416 |
| PR | Pearson Correlation | 035 | .065 | .002 | 1 | .022 | .008 | 101* | 079 |
| | Sig. (2-tailed) | .474 | .187 | .968 | | .655 | .868 | | .109 |
| | N | 416 | 416 | 416 | 416 | 416 | | | 416 |
| PBC | Pearson Correlation | .360** | .097* | .548* | .022 | 1 | .460** | .306** | .542** |
| | Sig. (2-tailed) | .000 | .047 | .000 | .655 | | .000 | | .000 |
| | N | 416 | | 416 | 416 | | | | 416 |
| HM | Pearson Correlation | .277** | 044 | .452* | .008 | .460** | 1 | .335** | .528** |
| | Sig. (2-tailed) | .000 | .368 | .000 | .868 | .000 | | .000 | .000 |
| | N | 416 | | 416 | 416 | | | | 416 |
| PU | Pearson Correlation | .307** | .073 | .368* | 101* | .306** | .335** | 1 | .434** |
| | Sig. (2-tailed) | .000 | | .000 | .039 | | | | .000 |
| | N | 416 | 416 | 416 | 416 | | | | 416 |
| IT | Pearson Correlation | .458** | .158** | .583 | 079 | .542** | .528** | .434** | 1 |
| | Sig. (2-tailed) | .000 | .001 | .000 | .109 | | .000 | | |
| <u> </u> | N | 416 | 416 | 416 | 416 | 416 | 416 | 416 | 416 |
| **. Corr | relation is significant at the 0.0 | 1 level (2- | tailed). | • | • | | • | • | • |

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Table 6 shows that the Pearson correlation sig between the independent variables ATF, PEOU, PU, PT, PBC, HM and the dependent variable IT are all at 0.000 < 0.05, only PR has sig= 0.109 > 0.05. That shows that the 6 independent variables ATF, PEOU, PU, PT, PBC, HM are correlated with the dependent variable IT.

- The correlation coefficients of 6 independent variables "Perceived trust", "Personal behavior control", "Hedonic motivation", "Attitude", "Perceived usefulness", "Perceived ease of use", and the dependent variable "Intention" at the 0.01 level are 0.583, 0.542, 0.528, 0.458, 0.434, 0.158 which indicate a strong positive correlation between these independent variables and dependent one.
- Among them, the correlation between PT and IT is the strongest with r = 0.583, between PEOU and IT is the weakest with r = 0.158.
- The independent variables are relatively weakly correlated with each other, so it is assumed that multicollinearity might not occur.

5.5 Regression

The model summary demonstrates that the initial model showes an R-square value of 0.521 and an adjusted R Square value of 0.528. The adjusted R square= 0.521 shows that the independent variables "Attitude towards finance", "Perceived ease of use", "Perceived usefulness", "Perceived trust", "Hedonic motivation", "Personal behavioral control" explain 52.1% of the difference of the dependent variable "Intention".

Table 7. Model Summary

| Tubic 7. Mida | ici Summai y | | | | |
|---------------|--------------|----------|------------|-------------------|---------------|
| | | | Adjusted R | Std. Error of the | Durbin-Watson |
| Model | R | R Square | Square | Estimate | |
| 1 | .727a | .528 | .521 | .51556 | 1.994 |



Table 8. Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics | |
|-------|---|--------------------------------|------------|------------------------------|------|--------|-------------------------|------|
| | | В | Std. Error | Beta | t | Sig. | Tolerance | VIF |
| 1 | 1 | Constant | 401 | .222 | | -1.804 | .072 | |
| | | ATF | .181 | .042 | .166 | 4.298 | .000 | .769 |
| | | PEOU | .110 | .038 | .101 | 2.893 | .004 | .939 |
| | | PT | .278 | .047 | .261 | 5.968 | .000 | .603 |
| | | PBC | .177 | .044 | .174 | 4.027 | .000 | .618 |
| | | HM | .241 | .041 | .239 | 5.887 | .000 | .698 |
| | | PU | .164 | .043 | .146 | 3.847 | .000 | .800 |

Because the regression coefficients of the 6 independent variables all have positive signs, the 6 independent variables have a positive impact on the dependent variable. The variable "Perceived trust" has the strongest impact on "intention" to use DBAs while "perceived ease of use" has least impact.

After evaluating all the factors, a regression with analytical model is written in the form:

 $IT = 0.166*ATF + 0.101*PEOU + 0.261*PT + 0.174*PBC + 0.239*HM + 0.146*PU + \mu$

5.6 Analysis of differences in intention to use DBAs according to demographics

According to Levene's Test results, the research group examined the extent of effect of controlled factors, in which 'gender', 'monthly budget', 'majors' have positive influence on the intention to use DBAs for personal finance management while 'purpose' has no relationship with the overall variable.

6. Discussion

Based on the objectives of research, the aim of this study is to investigate the relationship of the factors of different levels (attitude, perceived ease of use, perceived usefulness, perceived trust, hedonic motivation, personal behavioral control, and demographic factors such as gender, monthly budget, and major) with intention of using Digital banking applications to manage personal money. Also, these factors were found to have positively influence on the intention to use digital banking apps. Among them, hedonic motivation, perceived trust, personal behavioral control, and attitude had the greatest impact, indicating a reliance on subjective perceptions. Therefore, the findings of this study in some way provide support for previous research (Howard and Sheth (1969), Dowling et al. (2009), Falahati and Pain (2011), Tak and Panwar (2017). On the other hand, the findings of this study indicated that perceived risk could dampen enthusiasm for app adoption, highlighting the importance of addressing security and functionality concerns. Gender, monthly budget, major, and other control variables also significantly influence intention to use digital banking apps. Consequently, based on the study outcomes, increasing the quality of these factors can result in increasing the intention of using digitals banking applications. Therefore, to increase the knowledge sharing behavior in the banking system, it is important for managers to find an appropriate method. In general, the outcomes of the present study will assist the banks of these organizations to be able to find out the weak points and strong points of their organizations in providing the best environment to users and apply improvements wherever it is necessary in order to increase the overall behavior.

7. Recommendations

From the analysis findings, the author recommends some solutions to be applied at the present time as follows:

For Commercial Banks, they should improve system, information, and service quality of digital banking apps to enhance user satisfaction. Moreover, it could be necessary to prioritize account security and customer information protection measures. Apart from that, they could organize presentations at universities to attract potential employees and promote digital banking apps, and enhance user experience through simple interfaces, speed, and personalized solutions.

For Policy-makers, it is of great importance to review and update policies to support digital banking adoption and effectiveness. They need to establish a Regulatory Framework tailored to digital banking apps. Policy-makers should implement educational programs to empower individuals in financial management. They should facilitate partnerships for innovative feature development and monitoring of financial education programs.

For Individuals, Parents and schools should raise awareness about personal finance management among students. Individuals should actively seek out financial management methods and consult certified advisors. They need to participate in education and awareness campaigns and seek recommendations from peers for informed decision-making.



8. Conclusion

The research on "Factors affecting the intention to adopt digital banking applications in personal financial management: the case of university students in Hanoi "revealed several significant findings. Firstly, the study organized and explained concepts related to digital banking apps and factors influencing their adoption. The research developed theoretical models based on existing frameworks, such as C-TAM-TPB and UTAUT2, to analyze the relationships between app quality factors and user behavior. Through measurement methods, the study confirmed the positive influence of factors like attitude, perceived trust, perceived ease of use, perceived usefulness, personal behavioral control, and hedonic motivation on app adoption intention. Moreover, the study highlighted the critical role of app quality and interface in shaping users' intentions, with variations observed across different demographic groups.

However, the research also acknowledged limitations, such as the narrow scope of the study, predominantly female participants, and the use of convenience sampling. Despite these limitations, the study provided valuable insights and proposed future research directions. Suggestions included broadening participant demographics, exploring other age groups, and utilizing different research methods to enhance accuracy and generalizability. Overall, the research contributes to understanding the factors influencing digital banking app adoption among university students and provides valuable implications for app developers and policymakers in improving app usability and promoting financial management among young adults.

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